#### **ATTACHMENT E**

Applications for Wireless Telecommunications Bureau Radio Service Authorization for Nineteen (19) Locations in Montana (FCC Form 601) (filed March 14, 2013)

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:37:40 File Number: 0005688046

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code: MG	1a) Existing Radio Service Code:	pasilo saraon cominate
Ger	neral Information		
2)	MD - Modification RM - I	Renewal Only Renewal/Modification Renewal/Modification WD - Withdrawal of Application Cancellation of License  AU - Administrative Update WD - Withdrawal of Application EX - Requests for RL - Registered I	r Extension of Time
3a)		<u>D</u> evelopmental License, De <u>m</u> onstration License, or a <u>S</u> pecial Temporary code and attach the required exhibit as described in the instructions. Otherwise	( <b>N</b> ) <u>D M S N</u> /A
3b)		Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. anation of situations considered to be an emergency.	( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amoon file with the FCC.	endment or Withdrawal, enter the file number of the pending application currently	File Number <b>0005688046</b>
5)	License, or Administrative Upd	ification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate late, enter the call sign of the existing FCC license. ed Location/Link, enter the FCC call sign assigned to the geographic license.	Call Sign
6)	If this application is for a Ne authorization expiration date (the	ew, Amendment, Renewal Only, or Renewal/Modification, enter the requested his item is optional).	MM DD
7)	applicable radio service rules f	defined in §1.929 of the Commission's rules when read in conjunction with the found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only applications. See the instructions for applicability and full text of §1.929).	( <b>N</b> ) <u>Y</u> es <u>N</u> o
8)	Are attachments being filed with	n this application?	(γ) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exemptions		'
9)	Is the applicant exempt from FCC	application fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10	) Is the applicant exempt from FC	C regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11		request for a Waiver of the Commission's rule(s)? ding rule number(s) and explaining circumstances.	(Y) <u>Y</u> es <u>N</u> o
11	b) If 11a is 'Y', enter the number	r of rule section(s) being waived.	Number of Rule Section(s): 2
12		ters requested in this filing covered by grandfathered privileges, previously nally integrated with an existing station?	( <b>N</b> ) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I						<u> </u>	
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	Latino		male			
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filling is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filling is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Allen Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u>N</u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u><b>Y</b></u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u> <b>N</b></u> о
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant Section 310(b)(4) of the Communications Act.	to		

Basic Qualification Questions

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?

51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of

#### Aeronautical Advisory Station (Unicom) Certification

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership

53a) Will the requested facilities be used to provide multichannel video programming service?

() Yes No

53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest
(as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules

or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### Broadband Radio Service and Educational Broadband Service (Part 27)

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes of the Commission's Rules?

Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( )Yes No

Note: If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Administrativ						for public burden estimate
1) Is this app	lication b	peing filed as part of a	pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Ite	m 1 is 'Yes', enter the	pack identifica	tion number (required if the p	ack identification number ha	as already been assigned by the
2b) Pack Nam	ne:					
3) Type of Operation (refer to instructions) Check One Only: ( X )Permanent Fixed Point to Point ( )Multiple Address System (MAS) ( )Temporary Fixed/Mobile ( )Digital Electronic Message Service (DEMS)  4) Station Class: FXO  5) DEMS only: SMSA:  ( )18 GHz Low Power ( )38 GHz						5) DEMS only: SMSA:
along with major actio	all minor n was gr	Modification or Ameno anted by the Commiss	dment requests ion, produce a	, or Amendment of a currentle filed since you applied for a cumulative effect that would	new authorization or since t	he last for a major filing?
7) Has freque	ency coor	dination been complet	ed for this app	ication?		( <b>γ</b> ) <u>Y</u> es/ <u>N</u> o
Frequency C	oordina	tor Information				
	8 throug	h 11 if not self-coordir				
8) Frequence Coordination N		Name	9) of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date
Broadcast Au	uxiliary	Only				
If there is an associated Parent Station, provide:    Station						
If there is no associated parent station, applicant certifies that it is a Broadcast Network Entity and completes Item 13.						
Control Point	t (Techr	ical Point of Contac	t)			
14) Action A/M Street Address, City or Town, County/Borough/Parish, Sta				16) Telephone Number		

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 1				
3) Location Description:	4) Area of Operation Code:		5) Location Name:			
T Transmit Location			LEWISTOWN			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM		NAD83		
47-04-29.8	( N ) <u>N</u> or <u>S</u>	109-24-34.4		( <b>w</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	her Location Description:	1				
0.2 km NW of Marcella & NE Hobson St Int	ersection					
10) City:	11) State:		12) County/Borough/Parish:			
Lewistown	MT		FERGUS			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wit Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)			
(a in antenna structure example).	('b' in antenna stru		('c' in antenna structure exar	nple):		
1219.2	12.2		12.2			
	12.2		12.2			
16) Support Structure Type:						
LTOWER 17) Radius (km):						
17) Radius (Kiii).						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner)	) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?	(	<u>) Y</u> es <u>N</u> o		
24) Description (see for Association 2)	- (01)		<u> </u>			
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for		n which may have a signi	ficant (	<u>) Y</u> es <u>N</u> o		
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.	N			
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://						
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are spe	cified in this ) <u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re	quires frequency coordina	ition with Mexico?	(	) <u>Y</u> es <u>N</u> o		

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>				
3) Location Description:	4) Area of Operation Code:		5) Location Name:			
R Receive Location			HIGHWOOD			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):	1			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83		
47-26-31.2	( <sub>N</sub> ) <u>N</u> or <u>S</u>	110-37-51.1		( <b>w</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	ner Location Description:					
10) City:	11) State:		12) County/Borough/Parish:			
, ,			, , ,			
42) Flouration of Cita AMCI (motors)	14) Overall Ht AGL Wit	ih ot	15) Overall Ht AGL With			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters)			
2324.1	('b' in antenna stru	cture example):	('c' in antenna structure ex	kample):		
10.0						
16) Support Structure Type:						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
	,					
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o						
environmental effect? See Section 1.1307 of 47 CFR.						
If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.  23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone						
entity was notified:/						
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	pecified in this <u>) <b>Y</b></u> es <u>N</u> o		
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o		
1.7 20 year properties to appoint in an area that requires requested accommunity multimoxide.						

#### Path Data

Transmit Location				
1) Transmit location name: <b>LEWISTOWN</b>		2) Path number: 1		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: RFS		Antenna Model Number: PAD8-59A		
7) Height to Center of Antenna AGL (meters): 10.7	8) Beamwidth (degrees 1.4	s):	<ul><li>Antenna Gain (dBi):</li><li>41.3</li></ul>	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (d	Bi):
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization: <b>V</b>	1	5) Azimuth to RX Location o Repeater (degrees):	r Passive 294.3
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sep		
<ul><li>18) If the final receiver is located outside of the United States of the United State</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainii	ng circumstances.
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w  If 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the Cattach waiver request ex	Seostationary Satellite Arc?	·	(N)Yes No
20a) Angular Separation between main beam and	a Geostationary Satellite	Arc (degrees). Include Orbit	lai Calculations in the wavier	EXTIIDIL.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
HIGHWOOD				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	del number:	
RFS		PAD8-59A		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam  1.4	width (degrees): 2	7) RX Antenna Gain (dBi): 41.3	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gai	n (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

1) Transmit Location Name:	LEWISTOWN	2) Path Number: 1	

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	71.6	30M0D7W (A)	150000.0	128TCM
	New 005974.85000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48 Response	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:44:45

File Number: 0005688050

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	
Ger	neral Information		
2)	(Select only one) (A NE - New MD - Modification AM - Amendment	RO - Renewal Only RM - Renewal/Modification CA - Cancellation of License  AU - Administrative Update WD - Withdrawal of Application DU - Duplicate License	NT - Required Notifications EX - Requests for Extension of Time RL – Registered Location/Link
3a)		for a $\underline{\mathbf{D}}$ evelopmental License, De $\underline{\mathbf{m}}$ onstration License, or ler the code and attach the required exhibit as described in the interval.	
3b)		pecial Temporary Authority due to an emergency situation, enter in explanation of situations considered to be an emergency.	Y'; otherwise enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for on file with the FCC.	an Amendment or Withdrawal, enter the file number of the pendi	ng application currently File Number 0005688050
5)	License, or Administrati	a Modification, Renewal Only, Renewal/Modification, Cancellation of Update, enter the call sign of the existing FCC license. gistered Location/Link, enter the FCC call sign assigned to the ge	·
6)		r a New, Amendment, Renewal Only, or Renewal/Modification date (this item is optional).	n, enter the requested MM DD
7)	applicable radio service	or" as defined in §1.929 of the Commission's rules when read rules found in Parts 22 and 90 of the Commission's rules? (NC ecific applications. See the instructions for applicability and full te	TE: This question only
8)	Are attachments being f	ed with this application?	(γ) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exempti	ons	
9)	Is the applicant exempt fro	m FCC application fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
	) Is the applicant exempt f	• ,	( <b>N</b> ) <u>Y</u> es <u>N</u> o
	If 'Yes', attach an exhib	clude a request for a Waiver of the Commission's rule(s)? t providing rule number(s) and explaining circumstances.	( <b>Y</b> ) <u>Y</u> es <u>N</u> o
11	b) If 11a is 'Y', enter the	number of rule section(s) being waived.	Number of Rule Section(s): 3
12		arameters requested in this filing covered by grandfathered priviled unctionally integrated with an existing station?	

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I						<u> </u>	
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423 (303)323-1313									
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	or Latino Female					
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

#### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership					
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o		
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0		
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules					

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign									
First Name:	MI:	Last Name:	Suffi	x:					
Saconna		Blair							
57) Title:			•						
VP of Technical Operations									
Signature:			58) Date:						
Saconna Blair			03/14/2013						

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answer	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
3) Type of O <sub>1</sub> (X) ( ) ( )	5) DEMS only: SMSA:				
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
8) Frequency Coordination Number  9) Name of Frequency Coordinator Telephone Number			11) Coordination Date		
Broadcast A		l <b>y</b> 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
T Transmit Location			SHELBY	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS.S):	NAD83
48-30-45.6	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-50-52.5		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	her Location Description:			
1.2 km North of Shelby				
10) City:	11) State:		12) County/Borough/Parish:	
Shelby	MT		TOOLE	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)	
(a mantenia structure example).	('b' in antenna stru		('c' in antenna structure exa	mple):
1025.3	18.3		18.3	
	10.3		10.3	
16) Support Structure Type:				
LTOWER 17) Radius (km):				
17) Radius (Kiii):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner)	) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?	(	) <u>Y</u> es <u>N</u> o
, , , , ,			,	, <b>_</b> _
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for		n which may have a signi		) <u>Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.	N	ı
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the proper	Quiet Zone
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are spe	ecified in this ) <b>Y</b> es <b>N</b> o
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Maxico?		,
24) Do you propose to operate in an area that re	quires irequericy coordina	MOIT WITH MEXICO!		) <u>Y</u> es <u>N</u> o

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location				
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83
48-51-15.8	( N ) N or S	111-08-36.1		( <b>₩</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ott	ner Location Description:	1		
10) City:	11) State:		12) County/Borough/Parish:	
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	thout	15) Overall Ht AGL With	
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	vamnle):
2349.7	(b iii anterna stru	cture example).	( c in america structure e	xampic):
16) Support Structure Type:				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ( ) <u>E</u> or <u>W</u>
osciol restangle only (Northwest sollier)	( ) <u>N</u> 01 <u>0</u>	osc for restangle only	y (Northwest corner)	( ) <u>L</u> 01 <u>W</u>
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	pecified in this ) <b>Y</b> es <b>N</b> o
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o
2.7, 23 you propose to operate in an area mat re-	14.135 Hogaonoy ocolulla	alon with Moxico:		, <u>1</u> 00 <u>11</u> 0

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
R Receive Location						
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83		
48-19-04.7	( N ) N or S	113-09-15.4		( <b>₩</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	ner Location Description:					
10) City:	11) State:		12) County/Borough/Parish:			
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi	thout	15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters) ('c' in antenna structure e	yamala).		
2349.7	( b in antenna stru	cture example).	(C in antenna structure e	xampie).		
16) Support Structure Type:						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ( ) <u>E</u> or <u>W</u>		
Use for rectangle only (Northwest corner)	( ) <u>N</u> OI <u>S</u>	Ose for rectangle only	y (Northwest Corner)	( ) <u>L</u> 01 <u>vv</u>		
20) Do you propose to operate in an area that re	quires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o		
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect					
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	e Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone		
23b) Has the applicant obtained prior written con	sent from the proper Quie	at Zone entity for the same	e technical narameters that are s	enecified in this		
application?	oon nom the proper Quie	2010 Chary for the Sallie		<u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o		
, , , , , , , , , , , , , , , , , , , ,						

#### Path Data

Transmit Location					
Transmit location name:     SHELBY		2) Path number:			
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<b>D</b> elete Existing Path	ı		
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal		
Transmit Antenna					
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A			
7) Height to Center of Antenna AGL (meters): 16.8	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 41.3		
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):		
13) Elevation (Tilt) Angle (degrees):  1.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 53.5		
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):		
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.		
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o		
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi					
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	cplaining circumstances.			
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit		
20b) Does the applicant certify that there is no altermine in Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o		
20c) Does the applicant certify that the proposed of	pperation will not cause in	nterference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o		
Final Receiver					
21) Receiver Location Name:					
MOUNT ROYAL		100) D : .			
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna mo	odel number:		
24) Receiver Call Sign:					
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam  1.4	width (degrees):	27) RX Antenna Gain (dBi): 41.3		
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 30) Diversity RX Antenna Gain (dBi):			
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecto	or Separation (meters):		

#### Path Data

Transmit Location							
1) Transmit location name: SHELBY		2) Path number: 2					
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path					
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to User to No	Remote Master ser			
Transmit Antenna							
5) Antenna Manufacturer: RFS		S) Antenna Model Number: PAD10-59A					
7) Height to Center of Antenna AGL (meters): 16.8	8) Beamwidth (degrees 1.2	9	) Antenna Gain (dBi): 43.2				
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (d	Bi):			
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization: <b>H</b>	1	<ol><li>Azimuth to RX Location o Repeater (degrees):</li></ol>	r Passive 257.9			
16) Periscope Reflector Dimensions (meters): Height: Width:	16) Periscope Reflector Dimensions (meters): 17) Periscope Reflector Separation (meters):						
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainir	( N )Yes No			
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w If 'Yes', answer questions 20a, b and c below and 20a) Angular Separation between main beam and	ithin 1.5 degrees of the Gattach waiver request ex	Seostationary Satellite Arc?	·	(N)Yes No			
20a) Angular Ocparation between main beam and	a ocostationary oatomic	Are (degrees). Iricidae Orbit	ai Calculations in the wavier				
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( <u>)Y</u> es <u>N</u> o			
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o			
Final Receiver							
21) Receiver Location Name:							
MOUNT BALDY							
22) Receiver antenna manufacturer:		23) Receiver antenna mod	dal numbar:				
RFS		PAD10-59A	der Humber.				
24) Receiver Call Sign:							
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam	width (degrees): 2	7) RX Antenna Gain (dBi): 43.2				
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	enna Beamwidth 30) Diversity RX Antenna Gain (dBi):					
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):				

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### FCC Form 601 Schedule I

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

	1) Transmit Location Name:	SHELBY	2) Path Number:	1
ı				

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	71.8	30M0D7W (A)	150000.0	128TCM
	New 006004.50000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcater Edecific CoA, Illo.		MDR-8706E -150	N			

1) Transmit Location Name: SHELBY	2) Path Number: <b>2</b>

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	73.7	30M0D7W (A)	150000.0	128TCM
	New 006345.49000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

#### Attachment(s):

Type	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48 Response	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:05:31

File Number: 0005688029

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	F
Gei	neral Information		
2)	MD - Modification RM - Re	enewal/Modification WD - Withdrawal of Application EX - Rec	quired Notifications quests for Extension of Time gistered Location/Link
3a)		Developmental License, Demonstration License, or a Special Te ode and attach the required exhibit as described in the instructions. O	
3b)		emporary Authority due to an emergency situation, enter 'Y'; otherwise enation of situations considered to be an emergency.	enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amer on file with the FCC.	ndment or Withdrawal, enter the file number of the pending application	currently File Number 0005688029
5)	License, or Administrative Updat	cation, Renewal Only, Renewal/Modification, Cancellation of License, E e, enter the call sign of the existing FCC license. Location/Link, enter the FCC call sign assigned to the geographic licens	·
6)	If this application is for a Nev authorization expiration date (this	v, Amendment, Renewal Only, or Renewal/Modification, enter the resitem is optional).	equested MM DD
7)	applicable radio service rules fo	efined in §1.929 of the Commission's rules when read in conjunction und in Parts 22 and 90 of the Commission's rules? (NOTE: This questiplications. See the instructions for applicability and full text of §1.929).	
8)	Are attachments being filed with t	his application?	(γ) <u>Y</u> es <u>N</u> o
Foo	s, Waivers, and Exemptions		<b>-</b>
	Is the applicant exempt from FCC	application fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10	) Is the applicant exempt from FCC	regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11		equest for a Waiver of the Commission's rule(s)? ng rule number(s) and explaining circumstances.	( <b>Y</b> ) <u>Y</u> es <u>N</u> o
11	b) If 11a is 'Y', enter the number of	of rule section(s) being waived.	Number of Rule Section(s): 2
12		rs requested in this filing covered by grandfathered privileges, previously ally integrated with an existing station?	

Applicant Information										
13) FCC Registration Number (FRN): <b>0002526580</b>										
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity	
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship		
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)								
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o	
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:		
17) Legal Entity Name (if other than individual):	I.	I						<u> </u>		
Charter Communications Operating, LLC										
18) Attention To:										
Alexis Anderten		-								
19) P.O. Box:	And/O	<i>'</i>	treet Ad							
		12	2444 Pc	werscou		1				
21) City:					22) State:		23) Zip C			
St. Louis					МО		63131			
24) Telephone Number:			2	5) FAX:						
(303)323-1423 (303)323-1313										
26) E-Mail Address:										
charterfcc@chartercom.com										
27) Demographics (Optional):										
Race:	Ethni		1			Gend				
American Indian or Alaska Native		spanic or	Latino	atino Male						
Asian	□No	ot Hispan	ic or Lat	- Latino Female				;		
Black or African-American										
☐ Native Hawaiian or Other Pacific Islander										
White										
Real Party in Interest										
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:	
applicant):										
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:	
Steven		J	Hor						-	
31) Company Name:		J	пог	/112						
Davis Wright Tremaine LLP										
32) Attention To:										
33) P.O. Box:	And	34) Str	eet Add	ess:						
	/Or	1			a Ave., NW, S	uite 80	0			
35) City:	1	1		36) State				Zip Code:		
Washington				DC				20006-340	)1	
38) Telephone Number:			39	) FAX:						
(202)973-4228										
40) E-Mail Address:										
stevehorvitz@dwt.com										

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

#### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership			
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Co	mmis	sion's R	ules

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate		
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o		
2a) If the ans FCC):	2a) If the answer to Item 1 is 'Yes', enter the pack identification number (required if the pack identification number has already been assigned by the FCC):						
2b) Pack Nan	ne:						
(X) () ()	3) Type of Operation (refer to instructions) Check One Only:  (X) Permanent Fixed Point to Point () Multiple Address System (MAS) () Temporary Fixed/Mobile () Digital Electronic Message Service (DEMS)  () Type of Operation (refer to instructions) Check One Only: () 18 GHz Low Power () 31 GHz () 38 GHz () 38 GHz () 38 GHz						
along with major action	all minor Moon was grante	odification, Renewal/Modification dification or Amendment requests and by the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?		
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o		
Frequency Coordinator Information  Complete Items 8 through 11 if not self-coordinated							
	8) Frequency Name of Frequency Coordinator Telephone Number			11) Coordination Date			
Broadcast Auxiliary Only							
If there is an associated Parent Station, provide:  12a)  Facility Id of Parent Station:  12b)  Radio Service of Parent Station Principal Communit Station:  12c)  City and State of Parent Station Principal Communit Station:							
If there is no associated parent station, applicant certifies that it is a Broadcast Network Entity and completes Item 13.							
Control Poin	t (Technical	Point of Contact)					
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number		

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number:				
3) Location Description:  4) Area of Op		ode:	5) Location Name:			
T Transmit Location			ALLEN PEAK			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS.S):	NAD83		
47-57-01.4	( <sub>N</sub> ) <u>N</u> or <u>S</u>	445.04.47.5	•	( <b>₩</b> ) <u>E</u> or <u>W</u>		
	handardia Danisirtia	115-24-17.5				
9) Street Address, Name of Landing Area, or Ot	ner Location Description:					
50.7 km South of Libby						
10) City:	11) State:		12) County/Borough/Parish:			
Libby	MT		LINCOLN			
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	thout	15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	vamplo):		
1966.2	( b iii ailteilia stidi	ciure example).	( c in antenna structure example).			
	7.0		7.0			
16) Support Structure Type:						
PIPE						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S): NAD83 19) Maximum Longitude (DDD-MM-SS.S): NAD83						
Use for rectangle only (Northwest corner) ( ) $\underline{N}$ or $\underline{S}$ Use for rectangle only (Northwest corner) ( ) $\underline{E}$ or $\underline{W}$						
20) Do you propose to operate in an area that requires frequency coordination with Canada?  ( ) Yes No						
21) Description: (only for Area of Operation Code 'O')						
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o environmental effect? See Section 1.1307 of 47 CFR.						
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect					
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone		
	and from the proper Ouis	t Zana antitu far tha aama	tooknied narometers that are s	anacified in this		
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application?  ( ) Yes No						
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) <u>Y</u> es <u>N</u> o						
, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>					
3) Location Description: 4) Area of Op		ode:	5) Location Name:				
R Receive Location			MOUNT AENEAS				
6) FCC Antenna Structure Registration # or N/A (FAA Notification not Required):							
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	M-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>				
48-09-11.4	(N ) M OI O	( <b>W</b> ) <u>∈</u> 0. <del>V</del>					
9) Street Address, Name of Landing Area, or Otl	her Location Description:	1					
10) City:	11) State:		12) County/Borough/Parish:				
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With				
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure example):				
2154.9							
16) Support Structure Type:							
17) Radius (km):							
18) Maximum Latitude (DD-MM-SS.S): NAD83 19) Maximum Longitude (DDD-MM-SS.S): NAD83							
Use for rectangle only (Northwest corner) ( ) $\underline{\mathbb{N}}$ or $\underline{\mathbb{N}}$ ( ) $\underline{\mathbb{N}}$ or $\underline{\mathbb{N}}$							
20) Do you propose to operate in an area that requires frequency coordination with Canada?  ( ) Yes No							
			·				
21) Description: (only for Area of Operation Code 'O')							
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o							
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.							
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://							
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application?  ( ) Yes No							
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) <u>Y</u> es <u>N</u> o							

#### Path Data

Transmit Location				
Transmit location name:     ALLEN PEAK		2) Path number:		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	1	
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal	
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD10-59A		
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 43.2	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):	
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization:		15) Azimuth to RX Location or Passive Repeater (degrees): 77.9	
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):	
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.	
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o	
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi				
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.		
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit.	
20b) Does the applicant certify that there is no altermine in Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o	
20c) Does the applicant certify that the proposed of	pperation will not cause in	nterference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o	
Final Receiver				
21) Receiver Location Name:				
MOUNT AENEAS  22) Receiver antenna manufacturer:		23) Receiver antenna mo	adal numbar:	
RFS		PAL12-59A		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam  0.9	width (degrees):	27) RX Antenna Gain (dBi): 44.8	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):	
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecte	or Separation (meters):	

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:		8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

1) Transmit Location Name:	ALLEN PEAK	2) Path Number: <b>1</b>	

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	74.2	30M0D7W (A)	150000.0	128TCM
	New 006034.15000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:12:20 File Number: 0005688030

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#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code: MG	1a) Existing Radio Service Code:	pasio sulasi sulinate
Ger	neral Information		
2)	MD - Modification F	RO - Renewal Only AU - Administrative Update NT - Required No.	Extension of Time
3a)		or a <u>Developmental License</u> , De <u>monstration License</u> , or a <u>Special Temporary</u> rethe code and attach the required exhibit as described in the instructions. Otherwise	(N ) <u>D M S N</u> /A
3b)		ecial Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. explanation of situations considered to be an emergency.	( <u>)Y</u> es <u>N</u> o
4)	If this application is for an on file with the FCC.	Amendment or Withdrawal, enter the file number of the pending application currently	File Number 0005688030
5)	License, or Administrative	Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate Update, enter the call sign of the existing FCC license. stered Location/Link, enter the FCC call sign assigned to the geographic license.	Call Sign
6)	If this application is for authorization expiration da	a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested te (this item is optional).	MM DD /_
7)	applicable radio service ru	as defined in §1.929 of the Commission's rules when read in conjunction with the ules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only cific applications. See the instructions for applicability and full text of §1.929).	(N ) <u>Y</u> es <u>N</u> o
8)	Are attachments being filed	d with this application?	(γ) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exemption	s	
9)	Is the applicant exempt from	FCC application fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10	) Is the applicant exempt from	m FCC regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
	If 'Yes', attach an exhibit p	de a request for a Waiver of the Commission's rule(s)? providing rule number(s) and explaining circumstances.	( Y ) <u>Y</u> es <u>N</u> o
		mber of rule section(s) being waived.	Number of Rule Section(s): 2
12		ameters requested in this filing covered by grandfathered privileges, previously nctionally integrated with an existing station?	( <b>N</b> ) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino	Latino Male					
Asian	□No	ot Hispan	ic or Lat	c or Latino Female					
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filling is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filling is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Allen Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u>N</u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u><b>Y</b></u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u> <b>N</b></u> о
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant Section 310(b)(4) of the Communications Act.	to		

Basic Qualification Questions

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?

51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of

#### Aeronautical Advisory Station (Unicom) Certification

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership

53a) Will the requested facilities be used to provide multichannel video programming service?

() Yes No

53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest
(as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules

or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### Broadband Radio Service and Educational Broadband Service (Part 27)

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes of the Commission's Rules?

Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( )Yes No

Note: If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### **General Certification Statements**

56) Typed or Printed Name of Party Authorized to Sign

Blair

- 1) The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application.
- 2) The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules.\* \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- 3) The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.
- 4) The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- 5) The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this application, or (3) is not required to file ownership data under the Commission's rules.
- 6) The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- 7) The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested license(s).
- 8) The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency.

#### Signature

Saconna

First Name:	MI:	Last Name:	Suffix:	
Saconna		Blair		
57) Title:			<u>.</u>	
Vice President of Technical Operations				
Signature:		_	58) Date:	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

03/14/2013

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate	
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o	
2a) If the answ FCC):	2a) If the answer to Item 1 is 'Yes', enter the pack identification number (required if the pack identification number has already been assigned by the FCC):					
2b) Pack Nam	ne:					
3) Type of Operation (refer to instructions) Check One Only: ( X )Permanent Fixed Point to Point ( )Multiple Address System (MAS) ( )Temporary Fixed/Mobile ( )Digital Electronic Message Service (DEMS)  4) Station Class: FXO  5) DEMS only: SMSA  ( )31 GHz  ( )38 GHz					5) DEMS only: SMSA:	
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests by the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?	
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o	
Frequency Coordinator Information  Complete Items 8 through 11 if not self-coordinated						
	8) Frequency Coordination Number		Coordinator	10) Telephone Number	11) Coordination Date	
Broadcast A		l <b>y</b> 12a)	12b)		12c)	
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:	
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:	
Control Poin	t (Technical	Point of Contact)				
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number	

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>				
3) Location Description:	4) Area of Operation Code:		5) Location Name:			
T Transmit Location			BLACKTAIL			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):	•			
1000780						
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS.S):	NAD83		
48-00-48.0	( <sub>N</sub> ) <u>N</u> or <u>S</u>	114-21-58.0		( <b>w</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	9) Street Address, Name of Landing Area, or Other Location Description:					
BLACKTAIL MOUNTAIN						
10) City:	11) State:		12) County/Borough/Parish:			
LAKESIDE	MT		FLATHEAD			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)			
(a in antenna structure example).	('b' in antenna stru		('c' in antenna structure ex	kample):		
2035.8			70.4			
	60.9		73.1			
16) Support Structure Type:						
GTOWER						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	de (DDD-MM-SS.S):	NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner)	( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
20) World Connected Authorization (authorization to the location by the second						
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) Yes No environmental effect? See Section 1.1307 of 47 CFR.						
If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://						
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application?  ( ) Yes No						
24) Do you propose to operate in an area that ro	quires frequency coording	tion with Mexico?		) Yes No		
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>				
3) Location Description:	4) Area of Operation Code:		5) Location Name:			
R Receive Location			KALISPELL			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	-			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83		
48-11-44.0	( <sub>N</sub> ) <u>N</u> or <u>S</u>	114-18-38.0		( <b>w</b> ) <u>E</u> or <u>W</u>		
Street Address, Name of Landing Area, or Ott	her Location Description:	114-10-30.0				
3) Street Address, Name of Landing Alea, of Other	ner Location Description.					
10) City:	11) State:		12) County/Borough/Parish:			
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi		15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample):		
900.7			(5			
16) Support Structure Type:						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
				· / <b>_</b> _		
21) Description: (only for Area of Operation Cod	e O)					
22) Would Commission grant of Authorization for this location be an action which may have a significant () Yes No environmental effect? See Section 1.1307 of 47 CFR.						
If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://						
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this						
application?	cont from the proper Quie	2. 25110 Graty for the Same	(	) Yes No		
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o		
/						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3				
3) Location Description:	4) Area of Operation Code:		5) Location Name:			
R Receive Location			POINT SIX			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83		
47-02-22.9	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-59-17.1		( <b>w</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	9) Street Address, Name of Landing Area, or Other Location Description:					
10) City:	11) State:		12) County/Borough/Parish:			
40) Flooring (O'to AMO) (1000)	44) 0   114 401 105	di and	45) O III II A OL MOI			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wi Appurtenances (mo		15) Overall Ht AGL With Appurtenances (meters)			
2390.7	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):		
2000.1						
16) Support Structure Type:						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	40 (DDD-MM-SS S):	NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only		( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) Yes No						
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone						
entity was notified:/						
23b) Has the applicant obtained prior written con application?	sent trom the proper Quie	et Zone entity for the same	e technical parameters that are s	specified in this <u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						

#### Path Data

Transmit Location			
1) Transmit location name: BLACKTAIL		2) Path number:	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User e-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		6) Antenna Model Number: SUL6-107B	
7) Height to Center of Antenna AGL (meters): 35.0	8) Beamwidth (degree 1.0	,	9) Antenna Gain (dBi): 44.0
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): -3.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 11.5
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sep	
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	and attach an exhibit explaining circumstances.
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w			the Geostationary Satellite ( N )Yes No
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbi	tal Calculations in the wavier exhibit.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed	operation will not cause i	nterference to an authorized	satellite system? ( ) $\underline{\mathbf{Y}}$ es $\underline{\mathbf{N}}$ o
Final Receiver			
21) Receiver Location Name:			
KALISPELL		Lan a	
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna mo SUL6-107B	del number:
24) Receiver Call Sign:			
25) Height to Center of RX Antenna AGL (meters): 22.9	26) RX Antenna Beam 1.0	width (degrees):	27) RX Antenna Gain (dBi): 44.0
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecto	r Separation (meters):

#### Path Data

Transmit Location					
1) Transmit location name: BLACKTAIL		2) Path number: 2			
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Patl	า		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal		
Transmit Antenna					
5) Antenna Manufacturer: Commscope		<ol> <li>Antenna Model Number: UHX8-59J RF</li> </ol>	:		
7) Height to Center of Antenna AGL (meters): 21.3	8) Beamwidth (degrees		9) Antenna Gain (dBi): 41.3		
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):		
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization:		15) Azimuth to RX Location or Passive Repeater (degrees): 165.1		
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):		
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.		
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o		
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w					
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.			
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit		
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( <u>)Y</u> es <u>N</u> o		
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorize	d satellite system? ( ) <u>Y</u> es <u>N</u> o		
Final Receiver					
21) Receiver Location Name: POINT SIX					
22) Receiver antenna manufacturer:  Commscope		23) Receiver antenna m	odel number:		
24) Receiver Call Sign:		UHA0-393 KF			
25) Height to Center of RX Antenna AGL (meters): 7.6	26) RX Antenna Beam	width (degrees):	27) RX Antenna Gain (dBi): 41.3		
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):		
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflect	or Separation (meters):		

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### FCC Form 601 Schedule I

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

1) Transmit Location Name:	BLACKTAIL	2) Path Number:	1

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	65.4	30M0D7W (A)	150000.0	128TCM
	New 010755.00000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcater Educati GOA, Ille.		MDR-8711E -150	N			

1) Transmit Location Name: BLACKTAIL	2) Path Number: <b>2</b>

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	71.6	30M0D7W (A)	150000.0	128TCM
	New 006197.24000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control		3	
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:14:20

File Number: 0005688031

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

				See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service C	ode:	F
	IVIG			
Ger	neral Information			
2)	(Select only one) (AI NE - New MD - Modification AM - Amendment	RO - Renewal Only RM - Renewal/Modification CA - Cancellation of License  AU - Administrative Up WD - Withdrawal of Ap DU - Duplicate License	plication <b>EX</b> - Requ	uired Notifications uests for Extension of Time istered Location/Link
3a)		for a $\underline{\mathbf{D}}$ evelopmental License, De $\underline{\mathbf{m}}$ onstration Licer the code and attach the required exhibit as descri).		
3b)		pecial Temporary Authority due to an emergency situan explanation of situations considered to be an emergence.		nter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for on file with the FCC.	in Amendment or Withdrawal, enter the file number of	f the pending application c	File Number 0005688031
5)	License, or Administrative	a Modification, Renewal Only, Renewal/Modification, e Update, enter the call sign of the existing FCC licens gistered Location/Link, enter the FCC call sign assigned	se.	
6)		a New, Amendment, Renewal Only, or Renewal/date (this item is optional).	Modification, enter the rec	quested MM DD
7)	applicable radio service	r" as defined in §1.929 of the Commission's rules rules found in Parts 22 and 90 of the Commission's ecific applications. See the instructions for applicabilit	rules? (NOTE: This questi	
8)	Are attachments being fi	ed with this application?		(γ) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exemption	ns		
	Is the applicant exempt fro			( N ) <u>Y</u> es <u>N</u> o
	Is the applicant exempt f	•		( <b>N</b> ) <u>Y</u> es <u>N</u> o
11:		lude a request for a Waiver of the Commission's rule(sproviding rule number(s) and explaining circumstance		( Y ) <u>Y</u> es <u>N</u> o
11	b) If 11a is 'Y', enter the	umber of rule section(s) being waived.		Number of Rule Section(s): 2
12		trameters requested in this filing covered by grandfath unctionally integrated with an existing station?	ered privileges, previously	(N) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	ino		☐ Fe	male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

#### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership						
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o			
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0			
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules						

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign								
First Name:	MI:	Last Name:	Suffi	x:				
Saconna		Blair						
57) Title:			•					
VP of Technical Operations								
Signature:			58) Date:					
Saconna Blair			03/14/2013					

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
(X) ()	Permanent F Multiple Addı Temporary F	r to instructions) Check One Onl fixed Point to Point ress System (MAS) ixed/Mobile onic Message Service (DEMS)	y: ( )18 GHz Low Power ( )31 GHz ( )38 GHz	4) Station Class: FXO	5) DEMS only: SMSA:
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
	8) Frequency Ordination Number  8) Name of Frequency Coordinator		10) Telephone Number	11) Coordination Date	
Broadcast A		l <b>y</b> 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
T Transmit Location			CUT BANK	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS S):	NAD83
	(N) N or S	, , ,		( <b>w</b> ) <u>E</u> or <u>W</u>
48-37-35.9		112-19-10.7		
9) Street Address, Name of Landing Area, or Ot	her Location Description:			
1.2 km of Cutbank				
10) City:	11) State:		12) County/Borough/Parish:	
is, siy.	( ) Clair.		12) County, Dorough, and an	
Cutbank	MT		GLACIER	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wit		15) Overall Ht AGL With Appurtenances (meters)	
(a in antenna structure example).	Appurtenances (me		('c' in antenna structure e	example):
1179.4				
	19.8		19.8	
16) Support Structure Type:				
GTOWER				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	de (DDD-MM-SS.S):	NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	e 'O')			
20) Marild Commission ment of Authorization for	andhia la antian ha an antia	a vola ia la mano la mora de la moi	fi a a a b	/ \Vac Na
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n wnich may nave a signi	licant	( <u>) Y</u> es <u>N</u> o N
If 'Yes', submit an environmental assessment as			data farantilda a Nihatiha a asa	0.117
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in item 23b of the	instructions, provide the	date (mm/dd/yyyy) that the prop	per Quiet Zone
23b) Has the applicant obtained prior written con	agent from the proper Quie	t Zono ontitu for the come	tachnical parameters that are	angeified in this
application?	sent from the proper Quie	a Zone entity for the same	e technical parameters that are s	specified in this ( <u>) <b>Y</b></u> es <u><b>N</b>o</u>
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?		( ) <u>Y</u> es <u>N</u> o
2-7, 20 you propose to operate in an area that re	quires irequeries coordina	aion with MOXIOU:		, <u>, 1</u> 03 <u>14</u> 0

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>						
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:					
R Receive Location			MOUNT BALDY					
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):						
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83				
48-19-04.7	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-09-15.4		( <b>₩</b> ) <u>E</u> or <u>W</u>				
9) Street Address, Name of Landing Area, or Other Location Description:								
10) City:	11) State:		12) County/Borough/Parish:					
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi	thout	15) Overall Ht AGL With					
('a' in antenna structure example):	Appurtenances (mo	eters)	Appurtenances (meters)					
2349.7	('b' in antenna stru	cture example):	('c' in antenna structure e	example):				
16) Support Structure Type:								
To) Support Structure Type.								
17) Radius (km):								
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83				
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>				
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o				
21) Description: (only for Area of Operation Cod	e 'O')							
22) Would Commission grant of Authorization for	or this location be an action	on which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o				
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.						
If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.  23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone								
entity was notified://								
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et ∠one entity for the same	e tecnnical parameters that are s )	specified in this <u>) <b>Y</b></u> es <u>N</u> o				
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o				
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No								

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3						
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:					
R Receive Location			MOUNT ROYAL					
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	•					
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83				
48-51-15.8	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-08-36.1		( <b>₩</b> ) <u>E</u> or <u>W</u>				
9) Street Address, Name of Landing Area, or Other Location Description:								
10) City:	11) State:		12) County/Borough/Parish:					
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi	thout	15) Overall Ht AGL With					
('a' in antenna structure example):	Appurtenances (mo	eters)	Appurtenances (meters) ('c' in antenna structure e	vample):				
2349.7	( b iii anterna stra	oture example).	( o in anterna structure e	xampic).				
16) Support Structure Type:								
17) Radius (km):								
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	NAD83 ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ( ) <u>E</u> or <u>W</u>				
osciol restangle only (Northwest sollier)	( ) <u>N</u> or <u>o</u>	Osc for restangle only	y (Northwest comer)	( ) <u>E</u> 01 <u>w</u>				
		••						
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o				
21) Description: (only for Area of Operation Cod	e 'O')							
22) Would Commission grant of Authorization for		on which may have a signi	ificant	( <u>) Y</u> es <u>N</u> o				
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect							
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone				
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are s	pecified in this ) <u>Y</u> es <u>N</u> o				
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o				

#### Path Data

Transmit Location					
1) Transmit location name: CUT BANK		2) Path number: 1			
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path			
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to F ( ) Remote to  DEMS  ( )Nodal to Us ( )User to Nodel	Remote Master ser	
Transmit Antenna					
5) Antenna Manufacturer: Commscope		6) Antenna Model Number: PL6-59E	0 : (10)		
7) Height to Center of Antenna AGL (meters): 9.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 38.9		
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (d	Bi):	
13) Elevation (Tilt) Angle (degrees):  1.0	14) Polarization: <b>V</b>	1	(15) Azimuth to RX Location or Repeater (degrees):	Passive	
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa			
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainir	ng circumstances.	
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w			he Geostationary Satellite	( N )Yes No	
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.			
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	tal Calculations in the wavier e	exhibit	
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o	
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o	
Final Receiver					
21) Receiver Location Name:					
MOUNT BALDY					
22) Receiver antenna manufacturer:		23) Receiver antenna mod	del number:		
RFS		PAD8-59A			
24) Receiver Call Sign:					
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam  1.4	width (degrees):	27) RX Antenna Gain (dBi): 41.3		
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	tenna Beamwidth 30) Diversity RX Antenna Gain (dBi):			
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	r Separation (meters):		

#### Path Data

Transmit Location				
Transmit location name: CUT BANK		2) Path number: 2		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	n-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to F ( ) Remote to DEMS ( )Nodal to Us ( )User to Nod	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A		
7) Height to Center of Antenna AGL (meters): 10.7	8) Beamwidth (degrees 1.4	s): 9	) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwidt	th (degrees):	2) Diversity Antenna Gain (d	Bi):
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization: <b>H</b>	1	<ol><li>Azimuth to RX Location or Repeater (degrees):</li></ol>	Passive
16) Periscope Reflector Dimensions (meters): Height: Width:	1	17) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainir	ng circumstances.
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed will 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the Garage attach waiver request ex	Seostationary Satellite Arc?	ŕ	(N)Yes No
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	al Calculations in the wavier e	exnibit
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Bassiyer				
Final Receiver 21) Receiver Location Name:				
MOUNT ROYAL				
		1-00-0		
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna mod PAD8-59A	del number:	
24) Receiver Call Sign:		L		
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beams 1.4	width (degrees): 2	7) RX Antenna Gain (dBi): 41.3	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gair	ı (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

#### Passive Repeaters (PR)

Transmit Location							
Transmit Location Name:		2) Path Number:					
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater				
Passive Repeater Information							
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )				
6) Passive Repeater Location Name:	V						
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:				
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):				
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:				

#### FCC Form 601 Schedule I

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

	1) Transmit Location Name:	CUT BANK	2) Path Number: 1	
ı				

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	69.5	30M0D7W (A)	150000.0	128TCM
	New 006226.89000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
			MDR-8706E -150	N			

1) Transmit Location Name: CUT BANK	2) Path Number: <b>2</b>

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	A Existing (if mod)		0.00100	71.9	30M0D7W (A)	150000.0	128TCM
	New 006063.80000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control		3	
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:16:26

File Number: 0005688032

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	F
	MG		
Ger	neral Information		
2)	MD - Modification RM - R	enewal/Modification WD - Withdrawal of Application EX - Re-	quired Notifications quests for Extension of Time egistered Location/Link
3a)		Developmental License, Demonstration License, or a Special Tecode and attach the required exhibit as described in the instructions. C	
3b)		emporary Authority due to an emergency situation, enter 'Y'; otherwise enation of situations considered to be an emergency.	enter 'N'. ( <u>)Y</u> es <u>N</u> o
4)	If this application is for an Ameron file with the FCC.	ndment or Withdrawal, enter the file number of the pending application	currently File Number 0005688032
5)	License, or Administrative Update	cation, Renewal Only, Renewal/Modification, Cancellation of License, I te, enter the call sign of the existing FCC license. I Location/Link, enter the FCC call sign assigned to the geographic licens	·
6)	If this application is for a Nev authorization expiration date (thi	w, Amendment, Renewal Only, or Renewal/Modification, enter the resitem is optional).	equested MM DD
7)	applicable radio service rules for	efined in §1.929 of the Commission's rules when read in conjunction and in Parts 22 and 90 of the Commission's rules? (NOTE: This questipplications. See the instructions for applicability and full text of §1.929).	
8)	Are attachments being filed with	this application?	(γ) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exemptions		
	Is the applicant exempt from FCC	application fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10	) Is the applicant exempt from FCC	regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11		request for a Waiver of the Commission's rule(s)? ng rule number(s) and explaining circumstances.	( <b>Y</b> ) <u>Y</u> es <u>N</u> o
11	b) If 11a is 'Y', enter the number of	of rule section(s) being waived.	Number of Rule Section(s): 2
12		rs requested in this filing covered by grandfathered privileges, previously ally integrated with an existing station?	

Applicant Information										
13) FCC Registration Number (FRN): <b>0002526580</b>										
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity	
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship		
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)								
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o	
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:		
17) Legal Entity Name (if other than individual):	I.	I								
Charter Communications Operating, LLC										
18) Attention To:										
Alexis Anderten		-								
19) P.O. Box:	And/O	<i>'</i>	treet Ad							
		12	2444 Pc	werscou		1				
21) City:					22) State:		23) Zip C			
St. Louis					МО		63131			
24) Telephone Number:			2	5) FAX:						
(303)323-1423				(303)32	23-1313					
26) E-Mail Address:										
charterfcc@chartercom.com										
27) Demographics (Optional):										
Race:	Ethni		1			Gend				
American Indian or Alaska Native		spanic or	Latino	no Male						
Asian	□No	ot Hispan	ic or Lat	Latino Female				Э		
Black or African-American										
☐ Native Hawaiian or Other Pacific Islander										
White										
Real Party in Interest										
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:	
applicant):										
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:	
Steven		J	Hor						-	
31) Company Name:		J	пог	/112						
Davis Wright Tremaine LLP										
32) Attention To:										
33) P.O. Box:	And	34) Str	eet Add	ess:						
	/Or	1			a Ave., NW, S	uite 80	0			
35) City:	1	1		36) State				Zip Code:		
Washington				DC				20006-340	)1	
38) Telephone Number:			39	) FAX:						
(202)973-4228										
40) E-Mail Address:										
stevehorvitz@dwt.com										

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

#### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership			
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es	<u>N</u> o
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Co	mmis	sion's R	ules

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes No	
of the Commission's Rules?	
<b>Note:</b> If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{\mathbf{Y}}$ es $\underline{\mathbf{N}}$ o	,
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffix	C:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the ans FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nan	ne:				
(X) () ()	Permanent F Multiple Addi Temporary F	er to instructions) Check One Onl Fixed Point to Point ress System (MAS) Fixed/Mobile onic Message Service (DEMS)	y: ( )18 GHz Low Power ( )31 GHz ( )38 GHz	4) Station Class: FXO	5) DEMS only: SMSA:
along with major action	all minor Moon was grante	odification, Renewal/Modification dification or Amendment requests and by the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
Frequency C		Information  1 if not self-coordinated			
8) Frequency Coordination Number  8) Name of Frequency Coordinator		Telephone Number Coordination Date			
Broadcast A	<del>-</del>	ly 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 1		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
T Transmit Location			FORT BENTON	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	M-SS.S):	NAD83
47-49-16.1	( <sub>N</sub> ) <u>N</u> or <u>S</u>	110-40-37.3		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	her Location Description:			
0.3 km NW of St. Charles & 14th St. Interse	ection			
10) City:	11) State:		12) County/Borough/Parish:	
Fort Benton	МТ		CHOUTEAU	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)	
(a mantenna structure example).	('b' in antenna struc		('c' in antenna structure exa	ample):
862.3	7.6		7.6	
	7.0		7.0	
16) Support Structure Type:				
POLE 17) Radius (km):				
, , ,				
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		<b>NAD83</b> ( ) <u>E</u> or <u>W</u>
, , , , , , , , , , , , , , , , , , , ,	( /= - =		, (	,
		••		
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?	(	) <u>Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	le 'O')			
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signi	ficant (	) <u>Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1 1308 and 1 1311	ı	1
23a) If the site is located in one of the Quiet Zonentity was notified:			date (mm/dd/yyyy) that the proper	· Quiet Zone
23b) Has the applicant obtained prior written cor application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are spo	ecified in this ) <u>Y</u> es <u>N</u> o
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			HIGHWOOD	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83
47-26-31.2	( N ) N or S	110-37-51.1		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Other	ner Location Description:	1		
10) City:	11) State:		12) County/Borough/Parish:	
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	thout	15) Overall Ht AGL With	
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure ex	vamnle):
2324.1	(b iii anterna stru	cture example).	( o in antenna structure ex	tampie).
16) Support Structure Type:				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	NAD83 ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ( ) <u>E</u> or <u>W</u>
ose for restangle only (Northwest sorner)	( ) <u>N</u> 01 <u>0</u>	osc for restangle only	y (Northwest corner)	( ) <u>=</u> 01 <u>vv</u>
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for		n which may have a signi	ficant (	<u>) Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the property	∍r Quiet Zone
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	pecified in this ) <b>Y</b> es <b>N</b> o
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o

#### Path Data

Transmit Location			
1) Transmit location name: FORT BENTON		2) Path number: 1	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	า
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		Antenna Model Number: PAD6-59B	:
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.8	s):	9) Antenna Gain (dBi): 38.7
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): 2.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 175.3
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi			
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit
20b) Does the applicant certify that there is no alternative include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( <u>)Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	pperation will not cause in	nterference to an authorize	d satellite system? ( ) <u>Y</u> es <u>N</u> o
Final Receiver			
21) Receiver Location Name:			
HIGHWOOD  22) Receiver antenna manufacturer:		23) Receiver antenna m	odel number:
RFS 24) Receiver Call Sign:		PAD6-59B	
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam  1.8	width (degrees):	27) RX Antenna Gain (dBi): 38.7
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflect	or Separation (meters):

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:		8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

1) Transmit Location Name:	FORT BENTON	2) Path Number: 1	

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	69.9	30M0D7W (A)	150000.0	128TCM
	New 006034.15000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:18:03

File Number: 0005688033

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	
	MG		
Gen	eral Information		
2)		wal/Modification WD - Withdrawal of Application EX - F	Required Notifications Requests for Extension of Time Registered Location/Link
3a)		velopmental License, De <u>m</u> onstration License, or a <u>S</u> pecial e and attach the required exhibit as described in the instructions.	
3b)		porary Authority due to an emergency situation, enter 'Y'; otherwise on of situations considered to be an emergency.	e enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amenda on file with the FCC.	nent or Withdrawal, enter the file number of the pending application	on currently File Number 0005688033
5)	License, or Administrative Update,	on, Renewal Only, Renewal/Modification, Cancellation of License enter the call sign of the existing FCC license. cation/Link, enter the FCC call sign assigned to the geographic lice	
6)	If this application is for a New, authorization expiration date (this ite	Amendment, Renewal Only, or Renewal/Modification, enter the em is optional).	requested MM DD
7)	applicable radio service rules found	ed in §1.929 of the Commission's rules when read in conjunction in Parts 22 and 90 of the Commission's rules? (NOTE: This que cations. See the instructions for applicability and full text of §1.929)	estion only
8)	Are attachments being filed with this	application?	(γ) <u>Y</u> es <u>N</u> o
Fees	s, Waivers, and Exemptions		
9) I	s the applicant exempt from FCC app	lication fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10)	Is the applicant exempt from FCC re	gulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11a		test for a Waiver of the Commission's rule(s)? rule number(s) and explaining circumstances.	( Y ) <u>Y</u> es <u>N</u> o
	b) If 11a is 'Y', enter the number of re		Number of Rule Section(s): 2
12)	Are the frequencies or parameters r	equested in this filing covered by grandfathered privileges, previous integrated with an existing station?	sly ( N ) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	ino		☐ Fe	male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filling is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filling is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Allen Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u>N</u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u><b>Y</b></u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u> <b>N</b></u> о
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant Section 310(b)(4) of the Communications Act.	to		

Basic Qualification Questions

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?

51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of

#### Aeronautical Advisory Station (Unicom) Certification

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership

53a) Will the requested facilities be used to provide multichannel video programming service?

() Yes No

53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest
(as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules

or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### Broadband Radio Service and Educational Broadband Service (Part 27)

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes of the Commission's Rules?

Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( )Yes No

Note: If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
(X) ()	Permanent F Multiple Addı Temporary F	r to instructions) Check One Onl fixed Point to Point ress System (MAS) ixed/Mobile onic Message Service (DEMS)	y: ( )18 GHz Low Power ( )31 GHz ( )38 GHz	4) Station Class: FXO	5) DEMS only: SMSA:
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
	8) 9) Frequency Name of Frequency Coordina Coordination Number		Coordinator	10) Telephone Number	11) Coordination Date
Broadcast A		l <b>y</b> 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

#### FCC 601 Schedule I Supplement 1

#### **Location Data**

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 1		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
T Transmit Location			GREAT FALLS	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	N-SS.S):	NAD83
47-29-36.6	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-15-24.4		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	her Location Description:	•		
2910 10th Ave. South				
10) City:	11) State:		12) County/Borough/Parish:	
Great Falls	МТ		CASCADE	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wir Appurtenances (mo		15) Overall Ht AGL With Appurtenances (meters)	
(a mantenna structure example).	('b' in antenna stru		('c' in antenna structure ex	ample):
1064.9	16.8		16.8	
	10.0		10.0	
16) Support Structure Type:			1	
LTOWER 17) Radius (km):				
17) Kadids (Kiii).				
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	NAD83 ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ( ) <u>E</u> or <u>W</u>
Ose for rectangle only (Northwest corner)	( ) <u>N</u> 01 <u>3</u>	Ose for rectangle only	y (Northwest Corner)	( ) <u>L</u> OI <u>vv</u>
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?	(	<u>) Y</u> es <u>N</u> o
24) Description (splitter Area of Operation Code	- (0)			
21) Description: (only for Area of Operation Cod	e O)			
22) Would Commission grant of Authorization fe environmental effect? See Section 1.1307 of 47		on which may have a signi	ficant (	) <u>Y</u> es <u>N</u> o
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			
23a) If the site is located in one of the Quiet Zon entity was notified:/	es listed in Item 23b of the	e Instructions, provide the	date (mm/dd/yyyy) that the prope	r Quiet Zone
23b) Has the applicant obtained prior written cor application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are sp (	ecified in this ) <u>Y</u> es <u>N</u> o
24) Do you propose to operate in an area that re	quires frequency coordina	ation with Mexico?	(	) <u>Y</u> es <u>N</u> o

#### FCC 601 Schedule I Supplement 1

#### **Location Data**

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			HIGHWOOD	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83
47-26-31.2	( <sub>N</sub> ) <u>N</u> or <u>S</u>	110-37-51.1		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	ner Location Description:			
10) City:	11) State:		12) County/Borough/Parish:	
, ,			, , ,	
42) Flouration of Cita AMCI (motors)	14) Overall Ht AGL Wit	ih ot	15) Overall Ht AGL With	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters)	
2324.1	('b' in antenna stru	cture example):	('c' in antenna structure ex	kample):
10.0				
16) Support Structure Type:				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	e 'O')			
	,			
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signi	ficant	) <u>Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	CFR.	,		· /— —
23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the prop	er Quiet Zone
entity was notified:/				
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	pecified in this <u>) <b>Y</b></u> es <u>N</u> o
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o
, , , , , , , , , , , , , , , , , , , ,	,			, <u> </u>

FCC Form 601 Schedule I Supplement 2

#### Path Data

Transmit Location			
Transmit location name:     GREAT FALLS		2) Path number:	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	ı
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A	
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 41.3
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees):  1.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 96.7
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w			
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	cplaining circumstances.	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorize	d satellite system? ( ) <u>Y</u> es <u>N</u> o
Final Receiver			
21) Receiver Location Name: HIGHWOOD			
22) Receiver antenna manufacturer:		23) Receiver antenna me	odel number:
Commscope		PL6-59E	
24) Receiver Call Sign:			
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam  1.8	width (degrees):	27) RX Antenna Gain (dBi): 38.9
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflect	or Separation (meters):

FCC Form 601 Schedule I Supplement 3

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

1) Transmit Location Name:	GREAT FALLS	2) Path Number: 1	

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	72.2	30M0D7W (A)	150000.0	128TCM
	New 006004.50000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:19:54

File Number: 0005688034

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	
	MG		
	neral Information		
2)	(Select only one) (AM)	All Advisoration the date	NT Descript Alectication
	NE - New RO - Renew MD - Modification RM - Renew	al Only  AU - Administrative Update al/Modification  WD - Withdrawal of Application	NT - Required Notifications EX - Requests for Extension of Time
		lation of License	RL – Registered Location/Link
3a)		lopmental License, De <u>m</u> onstration License, or a <u>S</u> and attach the required exhibit as described in the instru	
3b)	If this application is for Special Tempo Refer to Rule 1.915 for an explanation	orary Authority due to an emergency situation, enter 'Y'; on of situations considered to be an emergency.	therwise enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amendme on file with the FCC.	nt or Withdrawal, enter the file number of the pending a	pplication currently File Number 0005688034
5)	License, or Administrative Update, en	n, Renewal Only, Renewal/Modification, Cancellation of ter the call sign of the existing FCC license. ttion/Link, enter the FCC call sign assigned to the geogra	·
6)	If this application is for a New, Ar authorization expiration date (this item	nendment, Renewal Only, or Renewal/Modification, ern is optional).	ter the requested MM DD
7)	applicable radio service rules found	d in §1.929 of the Commission's rules when read in con Parts 22 and 90 of the Commission's rules? (NOTE: tions. See the instructions for applicability and full text of	This question only
8)	Are attachments being filed with this a	pplication?	(ү) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exemptions		
	Is the applicant exempt from FCC applic	cation fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10	Is the applicant exempt from FCC regu	llatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11:		st for a Waiver of the Commission's rule(s)? e number(s) and explaining circumstances.	(Y) <u>Y</u> es <u>N</u> o
11	b) If 11a is 'Y', enter the number of rule	e section(s) being waived.	Number of Rule Section(s): 2
12	Are the frequencies or parameters rec approved by waiver, or functionally in	uested in this filing covered by grandfathered privileges, tegrated with an existing station?	previously ( N ) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I						<u> </u>	
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	ino		☐ Fe	male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington	Washington DC 20006-3401						)1		
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

#### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership						
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o			
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0			
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules						

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate	
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o	
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the	
2b) Pack Nam	ne:					
3) Type of Operation (refer to instructions) Check One Only:  ( X ) Permanent Fixed Point to Point ( ) Multiple Address System (MAS) ( ) Temporary Fixed/Mobile ( ) Digital Electronic Message Service (DEMS)  4) Station Class:  FXO  5) DEMS only: SMSA:  ( ) Station Class: ( ) DEMS only: SMSA:  ( ) Station Class: ( ) DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: ( ) Temporary Fixed/Mobile ( ) A DEMS only: SMSA: (						
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?	
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o	
		Information  1 if not self-coordinated				
	8) 9) 10) 11) Frequency Name of Frequency Coordinator Telephone Number Coordination Date ination Number					
Broadcast A		l <b>y</b> 12a)	12b)		12c)	
	Parent Station, provide:  Facility Id of Parent Station:  Facility Id of Parent Station:  Facility Id of Parent Station:  City and State of Parent Station Principal Community:  Station:					
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:	
Control Poin	t (Technical	Point of Contact)				
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number	

#### FCC 601 Schedule I Supplement 1

#### **Location Data**

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>				
3) Location Description:	4) Area of Operation Code:		5) Location Name:			
T Transmit Location			HAMILTON			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):	1			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	И-SS.S):	NAD83		
46-14-46.1	( N ) N or S	444.00.00.0		( <b>₩</b> ) <u>E</u> or <u>W</u>		
10 11 1011		114-09-22.2				
9) Street Address, Name of Landing Area, or Ot	her Location Description:					
104 State Street						
10) City:	11) State:		12) County/Borough/Parish:			
Hamilton	MT		RAVALLI			
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	example):		
1091.1		• ,	,	. ,		
	22.0		22.0			
16) Support Structure Type:						
GTOWER						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	equires frequency coording	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
20) Do you propose to operate in an area that re	equiles frequency coordina	ation with Canada:		( <u>) 1</u> es <u>14</u> 0		
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for	22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) Yes No					
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the prop	er Quiet Zone		
entity was notified:/						
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	specified in this <u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o		
, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,						

#### FCC 601 Schedule I Supplement 1

#### **Location Data**

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
R Receive Location			POINT SIX			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83		
47-02-22.9	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-59-17.1		( <b>w</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	her Location Description:					
10) City:	11) State:		12) County/Borough/Parish:			
12) Flouration of Cita AMCI (motors)	14) Overall Ht AGL Wi	th out	15) Overall Ht AGL With			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters)			
2390.7	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):		
2550.7						
16) Support Structure Type:						
17) Radius (km):						
40) 14 (20 144 00 0)	MARGO	140 14 : 1 :	L (DDD 144 00 0)	NABOO		
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		<b>NAD83</b> ( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
	,					
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o environmental effect? See Section 1.1307 of 47 CFR.						
If 'Yes', submit an environmental assessment as			data (a / lal/ a ) that the array	0.00		
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in item 23b of the	e instructions, provide the	uate (mm/dd/yyyy) that the prop	ei Quiet Zone		
23b) Has the applicant obtained prior written con	sent from the proper Quie	at Zone entity for the same	a technical parameters that are s	necified in this		
application?	som nom me proper Quie	L Zone entity for the sallie	C tooriiiloai parairieters triat are s	) <u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o		
2 1, 20 you propose to operate in an area that required requests, socialitation than monitor.						

FCC Form 601 Schedule I Supplement 2

#### Path Data

Transmit Location				
1) Transmit location name: HAMILTON		2) Path number:		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<b>D</b> elete Existing Path	1	
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal	
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A		
7) Height to Center of Antenna AGL (meters): 21.3	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):	
13) Elevation (Tilt) Angle (degrees):  1.0	14) Polarization:		15) Azimuth to RX Location or Passive Repeater (degrees): 8.2	
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):	
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.	
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o	
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w				
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	cplaining circumstances.		
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Ork	oital Calculations in the wavier exhibit	
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( <u>)Y</u> es <u>N</u> o	
20c) Does the applicant certify that the proposed of	pperation will not cause in	nterference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o	
Final Receiver				
21) Receiver Location Name: POINT SIX				
22) Receiver antenna manufacturer:  23) Receiver antenna model number:				
RFS UA8-59A				
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 7.6	26) RX Antenna Beam 1.5	width (degrees):	27) RX Antenna Gain (dBi): 41.6	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):	
31) RX Periscope Reflector Dimensions (meters): Height:  32) RX Periscope Reflector Separation (meters): Width:				

FCC Form 601 Schedule I Supplement 3

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

1) Transmit Location Name:	HAMILTON	2) Path Number: 1	

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	71.5	30M0D7W (A)	150000.0	128TCM
	New 006152.75000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Albatol Edociti CoA, illo.		MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:21:39

File Number: 0005688036

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code: MG	1a) Existing Radio Service Code:	
Ger	neral Information		
2)		wal/Modification WD - Withdrawal of Application EX - F	Required Notifications Requests for Extension of Time Registered Location/Link
3a)		elopmental License, De <u>m</u> onstration License, or a <u>S</u> pecial and attach the required exhibit as described in the instructions.	
3b)		porary Authority due to an emergency situation, enter 'Y'; otherwisen of situations considered to be an emergency.	e enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amendm on file with the FCC.	ent or Withdrawal, enter the file number of the pending application	on currently File Number 0005688036
5)	License, or Administrative Update, e	on, Renewal Only, Renewal/Modification, Cancellation of License enter the call sign of the existing FCC license. cation/Link, enter the FCC call sign assigned to the geographic lice	
6)	If this application is for a New, A authorization expiration date (this ite	Amendment, Renewal Only, or Renewal/Modification, enter the em is optional).	e requested MM DD
7)	applicable radio service rules found	ed in §1.929 of the Commission's rules when read in conjunction. In Parts 22 and 90 of the Commission's rules? (NOTE: This quantions. See the instructions for applicability and full text of §1.929	uestion only
8)	Are attachments being filed with this	application?	(γ) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exemptions		
9)	Is the applicant exempt from FCC app	lication fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10	) Is the applicant exempt from FCC rec	gulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11		est for a Waiver of the Commission's rule(s)? ule number(s) and explaining circumstances.	( Y ) <u>Y</u> es <u>N</u> o
	b) If 11a is 'Y', enter the number of ru		Number of Rule Section(s): 2
12	<ul> <li>Are the frequencies or parameters re approved by waiver, or functionally</li> </ul>	equested in this filing covered by grandfathered privileges, previou integrated with an existing station?	sly (N) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I						<u> </u>	
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	or Latino Female					
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington								20006-340	)1
38) Telephone Number:			39	DC ) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

#### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership						
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o			
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0			
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules						

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)						
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o					
of the Commission's Rules?						
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or						
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.						
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o					
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d					

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign								
First Name:	MI:	Last Name:	Suffi	x:				
Saconna		Blair						
57) Title:			•					
VP of Technical Operations								
Signature:			58) Date:					
Saconna Blair			03/14/2013					

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
3) Type of O <sub>1</sub> (X) ( ) ( )	5) DEMS only: SMSA:				
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
8) Frequency Coordination Number		9) Name of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date
Broadcast A		l <b>y</b> 12a)	12b)		12c)
	If there is an associated Parent Station, provide:  12a)  Facility Id of Parent Station:  12b)  Radio Service of Parent State of Parent Station Principal Community:  Station:				
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

#### FCC 601 Schedule I Supplement 1

#### **Location Data**

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
T Transmit Location			HAVRE			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM		NAD83		
48-33-13.8	( <sub>N</sub> ) <u>N</u> or <u>S</u>	109-42-50.5	(	<b>w</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	her Location Description:	1				
1866 2nd Street West						
10) City:	11) State:		12) County/Borough/Parish:			
West Havre	MT		HILL			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)			
, , ,	('b' in antenna struc		('c' in antenna structure exam	ple):		
797.8	18.0		18.0			
	10.0		10.0			
16) Support Structure Type:						
LTOWER 17) Radius (km):						
, , ,						
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ) <u>E</u> or <u>W</u>		
Coo to rooming to any (trois minor control)	( ) <u></u> s. <u>s</u>	Joseph Market Ma	(10.11.11.00.00.11.0.1)	/ <u>=</u> 0. <u></u>		
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?	(	<u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signi	ficant (	<u>) Y</u> es <u>N</u> o		
environmental effect? See Section 1.1307 of 47	CFR.		N	<u>, 1</u> 00 <u>11</u> 0		
If 'Yes', submit an environmental assessment as 23a) If the site is located in one of the Quiet Zono			date (mm/dd/yyyy) that the proper Q	uiet Zone		
entity was notified:/		.,				
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same		fied in this Yes <b>N</b> o		
		Cara and March 10				
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No						

#### FCC 601 Schedule I Supplement 1

#### **Location Data**

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>					
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:				
R Receive Location			MOUNT ROYAL				
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):					
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83			
48-51-15.8	( N ) N or S	111-08-36.1		( <b>₩</b> ) <u>E</u> or <u>W</u>			
9) Street Address, Name of Landing Area, or Ott	ner Location Description:	1					
10) City:	11) State:		12) County/Borough/Parish:				
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	thout	15) Overall Ht AGL With				
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	vamnle):			
2349.7	(b iii anterna stru	cture example).	( c in america structure e	xampic):			
16) Support Structure Type:							
17) Radius (km):							
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ( ) <u>E</u> or <u>W</u>			
osciol restangle only (Northwest sollier)	( ) <u>N</u> 01 <u>0</u>	osc for restangle only	y (Northwest corner)	( ) <u>L</u> 01 <u>W</u>			
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o			
21) Description: (only for Area of Operation Cod	e 'O')						
22) Would Commission grant of Authorization for		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o			
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect						
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone			
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	pecified in this ) <b>Y</b> es <b>N</b> o			
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o			
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No							

FCC Form 601 Schedule I Supplement 2

#### Path Data

Transmit Location							
1) Transmit location name: HAVRE		2) Path number: 1					
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path					
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal				
Transmit Antenna							
5) Antenna Manufacturer: RFS		Antenna Model Number: PAD8-59A					
7) Height to Center of Antenna AGL (meters): 16.8	8) Beamwidth (degrees 1.4	s): 9	) Antenna Gain (dBi): 41.3				
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (d	Bi):			
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization:	1	5) Azimuth to RX Location of Repeater (degrees):	Passive			
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa					
<ul><li>18) If the final receiver is located outside of the United States 19.</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainir	ng circumstances.			
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w If 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the G	Seostationary Satellite Arc?	·	(N)Yes No			
20a) Angular Separation between main beam and	d Geostationary Satellite	Aic (degrees). Include Orbit	ai Calculations in the wavier	EXTIIDIL.			
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o			
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( ) <u>Y</u> es <u>N</u> o			
Final Receiver							
21) Receiver Location Name:							
MOUNT ROYAL							
		00) D	Internation				
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna mod PAD8-59A	del number:				
24) Receiver Call Sign:		1					
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam	width (degrees): 2	7) RX Antenna Gain (dBi): 41.3	_			
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gair	n (dBi):			
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector Separation (meters):					

FCC Form 601 Schedule I Supplement 3

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

1) Transmit Location Name:	HAVRE	2) Path Number: 1	

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	71.6	30M0D7W (A)	150000.0	128TCM
	New 006034.15000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcater Edecite COA, inc.		MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

## Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:24:05

File Number: 0005688037

#### FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code: MG	1a) Existing Radio Service Code:	F
Ger	neral Information		
2)	MD - Modification R	O - Renewal Only AU - Administrative Update M - Renewal/Modification A - Cancellation of License  AU - Administrative Update WD - Withdrawal of Application DU - Duplicate License  NT - Required Not EX - Requests for RL - Registered License	Extension of Time
3a)		r a <u>D</u> evelopmental License, De <u>m</u> onstration License, or a <u>S</u> pecial Temporary the code and attach the required exhibit as described in the instructions. Otherwise	( <b>N</b> ) <u>D M S N</u> /A
3b)		ecial Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. explanation of situations considered to be an emergency.	( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an on file with the FCC.	Amendment or Withdrawal, enter the file number of the pending application currently	File Number <b>0005688037</b>
5)	License, or Administrative	Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate Update, enter the call sign of the existing FCC license. stered Location/Link, enter the FCC call sign assigned to the geographic license.	Call Sign
6)	If this application is for a authorization expiration da	a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested te (this item is optional).	MM DD
7)	applicable radio service ru	as defined in §1.929 of the Commission's rules when read in conjunction with the les found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only ific applications. See the instructions for applicability and full text of §1.929).	( <b>N</b> ) <u>Y</u> es <u>N</u> o
8)	Are attachments being filed	with this application?	(γ) <u>Y</u> es <u>N</u> o
Fees	s, Waivers, and Exemptions		
	s the applicant exempt from		(N) <u>Y</u> es <u>N</u> o
10)	Is the applicant exempt from	n FCC regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
118		de a request for a Waiver of the Commission's rule(s)? roviding rule number(s) and explaining circumstances.	(Y) <u>Y</u> es <u>N</u> o
111	o) If 11a is 'Y', enter the nur	nber of rule section(s) being waived.	Number of Rule Section(s): 2

12) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously

approved by waiver, or functionally integrated with an existing station?

(**N**)<u>Y</u>es <u>N</u>o

Applicant Information										
13) FCC Registration Number (FRN): <b>0002526580</b>										
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation Unincorporated Association Trust Government Entity										
☐ Consortium ☐ General Partnership 🗵	Limite	d Liabilit	y Compa	any	Limited	d Liabilit	y Partners	ship		
☐ Limited Partnership ☐ Other (Description of L	egal Er	ntity)								
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o	
16) First Name (if individual):		MI: L	ast Nam	e:			·	Suffix:		
17) Legal Entity Name (if other than individual):	II.	l l								
Charter Communications Operating, LLC										
18) Attention To:										
Alexis Anderten	A 4/0	00) 0								
19) P.O. Box:	And/O	,	treet Ad		ant Dailean					
24) City		14	2444 PC	werscou	22) State:		23) Zip C	odo		
21) City: <b>St. Louis</b>					<b>'</b>		63131			
24) Telephone Number:	$\leftarrow$		2:	5) FAX:	МО		03131			
(303)323-1423				,	23-1313					
26) E-Mail Address:				(303)32	23-1313					
charterfcc@chartercom.com										
27) Demographics (Optional):										
Race:  American Indian or Alaska Native	Ethni		r Latino	Gender: atino Male						
<b>□</b>	Hispanic or La									
Asian		ot Hispan	ic or Lat	Latino			male			
Black or African-American										
☐ Native Hawaiian or Other Pacific Islander										
White										
Real Party in Interest										
28) Name of Real Party in Interest of Applicant (If different applicant):	ent from	1	29	) FCC Reg	istration Numbe	r (FRN)	of Real P	arty in Inter	rest:	
approach).										
Contact Information (If different from the applicant)										
30) First Name:		MI:	Last	Name:					Suffix:	
Steven		J	Hor	vitz						
31) Company Name:										
Davis Wright Tremaine LLP										
32) Attention To:										
33) P.O. Box:	And	34) Str	eet Add	ress:						
	/Or	19 <sup>-</sup>	19 Peni	nsylvania	a Ave., NW, S	uite 80	0			
35) City:				36) State: 37) Zip			Zip Code:	>		
Washington				DC 20006-34			20006-340	1		
38) Telephone Number:			39	) FAX:						
(202)973-4228 40) E-Mail Address:										
,										
stevehorvitz@dwt.com			1							

# Regulatory Status 41) This filling is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filling is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Allen Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u>N</u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u><b>Y</b></u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u> <b>N</b></u> о
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant Section 310(b)(4) of the Communications Act.	to		

Basic Qualification Questions

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?

51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of

### Aeronautical Advisory Station (Unicom) Certification

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership

53a) Will the requested facilities be used to provide multichannel video programming service?

() Yes No

53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest
(as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules

or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

### Broadband Radio Service and Educational Broadband Service (Part 27)

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes of the Commission's Rules?

Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( )Yes No

Note: If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
(X) ()	Permanent F Multiple Addı Temporary F	r to instructions) Check One Onl fixed Point to Point ress System (MAS) ixed/Mobile onic Message Service (DEMS)	y: ( )18 GHz Low Power ( )31 GHz ( )38 GHz	4) Station Class: FXO	5) DEMS only: SMSA:
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
8) Frequence Coordination N		9) Name of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date
Broadcast A		l <b>y</b> 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
T Transmit Location			KALISPELL	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):	•	
1000719				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS.S):	NAD83
48-11-44.0	( <sub>N</sub> ) <u>N</u> or <u>S</u>	114-18-38.0		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	her Location Description:			
333 1ST AVE E				
10) City:	11) State:		12) County/Borough/Parish:	
KALISPELL	MT		FLATHEAD	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)	
(a in antenna structure example).	('b' in antenna stru		('c' in antenna structure e	xample):
900.7			24.4	
	24.4		24.4	
16) Support Structure Type:				
LTOWER				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	de (DDD-MM-SS.S):	NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o N
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			
23a) If the site is located in one of the Quiet Zone entity was notified: / /	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	pecified in this ) <u>Y</u> es <u>N</u> o
24) Do you propose to operate in an area that ro	quires frequency coording	tion with Mexico?		) Ves No
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No				

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>	
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:
R Receive Location			MOUNT AENEAS
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):	
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	M-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>
48-09-11.4	(N ) M OI O	113-55-46.7	( <b>w</b> ) ⊆ 51 <u></u>
9) Street Address, Name of Landing Area, or Otl	ner Location Description:	1	
10) City:	11) State:		12) County/Borough/Parish:
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure example):
2154.9			
16) Support Structure Type:			
17) Radius (km):			
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	de (DDD-MM-SS.S): NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	
20) Do you propose to operate in an area that re	auires frequency coordina	ation with Canada?	( <u>) Y</u> es <u>N</u> o
			,
21) Description: (only for Area of Operation Code	e O)		
22) Would Commission grant of Authorization for	or this location be an action	n which may have a signif	ficant ( ) <u>Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	CFR.		( )
23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the proper Quiet Zone
entity was notified://			
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t ∠one entity for the same	e technical parameters that are specified in this ( <u>) <b>Y</b></u> es <u><b>N</b></u> o
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u> o
, , , , , , , , , , , , , , , , , , , ,			

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>3</b>			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			BLACKTAIL		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Req	uired):			
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	1-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>		
48-00-48.0	(N ) N O S	114-21-58.0	( <b>W</b> ) ⊆ 01 <u>₩</u>		
9) Street Address, Name of Landing Area, or Oth	ner Location Description:	1			
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)		
('a' in antenna structure example):	('b' in antenna struc		('c' in antenna structure example):		
2035.8					
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud			
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner) () E or W		
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?	( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Code	e 'O')				
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n which may have a signif	ficant ( <u>) Y</u> es <u>N</u> o		
If 'Yes', submit an environmental assessment as 23a) If the site is located in one of the Quiet Zone	required by 47 CFR, Sect		data (mm/dd/nnn) that the proper Quiet Zone		
entity was notified://	es listed in item 230 of the	instructions, provide the	date (mini/du/yyyy) that the proper Quiet 20ne		
23b) Has the applicant obtained prior written consapplication?	sent from the proper Quie	t Zone entity for the same	technical parameters that are specified in this ( ) Yes No		
24) Do you propose to operate in an area that rec	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u> o		

Transmit Location			
Transmit location name: KALISPELL		2) Path number:	
3) Action Requested: ( A ) Add New	Path <u>Modify Existing Path</u>	<u>D</u> elete Existing Path	n
4a) For MAS or DEMS only, MAS or DEM MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User MAS ONLY ( )Fixed One-way Outbound ( )Fixed One-way Inbound	( )Multiple Tv Master-Ren	vo-way note/Nodal-User ne-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD6-59B	
7) Height to Center of Antenna AGL (me 22.9	ters): 8) Beamwidth (degre	es):	9) Antenna Gain (dBi): 38.7
10) Diversity Antenna Height AGL (mete	rs): 11) Diversity Beamwi	idth (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): 2.0	14) Polarization:		15) Azimuth to RX Location or Passive Repeater (degrees): 99.3
16) Periscope Reflector Dimensions (me Height: Widt		17) Periscope Reflector Se	
18) If the final receiver is located outside	of the United States, enter the	country in the space provided	d and attach an exhibit explaining circumstances.
19) Does this path include passive repea	ter?		( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanat Arc, or in the 12700 – 13250 MHz band p			
If 'Yes', answer questions 20a, b and c be	elow and attach waiver request	explaining circumstances.	
20a) Angular Separation between main I	peam and Geostationary Satellit	e Arc (degrees). Include Orb	oital Calculations in the wavier exhibit.
20b) Does the applicant certify that there Include explanation in waiver exhibit		ed transmission path?	( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the pr	oposed operation will not cause	interference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o
Final Receiver			
21) Receiver Location Name:			
MOUNT AENEAS		OO) Deseiver enterne en	adal surah ari
22) Receiver antenna manufacturer:  Commscope		23) Receiver antenna mo	odel number:
24) Receiver Call Sign:			
25) Height to Center of RX Antenna AGL (meters): 6.1	. 26) RX Antenna Bear	mwidth (degrees):	27) RX Antenna Gain (dBi): 38.9
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Ante (degrees):	enna Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions Height:	(meters): Width:	32) RX Periscope Reflecte	or Separation (meters):

Transmit Location				
Transmit location name: KALISPELL		2) Path number: 2		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub- MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: RFS		S) Antenna Model Number: SUL6-107B		
7) Height to Center of Antenna AGL (meters): 22.9	8) Beamwidth (degrees 1.0		9) Antenna Gain (dBi): 44.0	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwidt	th (degrees):	12) Diversity Antenna Gain (d	lBi):
13) Elevation (Tilt) Angle (degrees): 3.0	14) Polarization:		15) Azimuth to RX Location o Repeater (degrees)	r Passive : 191.6
16) Periscope Reflector Dimensions (meters): Height: Width:	1	17) Periscope Reflector Sep		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided	and attach an exhibit explainii	( N )Yes No
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed will fixed, answer questions 20a, b and c below and	vithin 1.5 degrees of the G	Beostationary Satellite Arc?	the Geostationary Satellite	( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20a) Angular Separation between main beam an	•		ital Calculations in the wavier	exhibit.
20b) Does the applicant certify that there is no all Include explanation in waiver exhibit.	ternative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed	operation will not cause ir	nterference to an authorized	satellite system?	( ) <u>Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:	-			
BLACKTAIL				
22) Receiver antenna manufacturer:		23) Receiver antenna mo	del number:	
RFS		SUL6-107B		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 35.0	26) RX Antenna Beamv	width (degrees):	27) RX Antenna Gain (dBi): 44.0	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anteni (degrees):	na Beamwidth (	30) Diversity RX Antenna Gai	n (dBi):
31) RX Periscope Reflector Dimensions (meters Height: Width		32) RX Periscope Reflecto	r Separation (meters):	

### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

### FCC Form 601 Schedule I

### Supplement 4

### **Frequency Data**

### **Transmitter Location Information**

	1) Transmit Location Name:	KALISPELL	2) Path Number:	1
ı				

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	69.4	30M0D7W (A)	150000.0	128TCM
	New 006063.80000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1) Transmit Location Name: KALISPELL	2) Path Number: <b>2</b>
--------------------------------------	--------------------------

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	66.6	30M0D7W (A)	150000.0	128TCM
	New 011245.00000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control		3	
	Alcatel-Lucent US	A, Inc.	MDR-8711E -150	N			

### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
W	Waiver Request	03/12/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:25:33

File Number: 0005688038

### FCC 601 Main Form

## FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code: MG	1a) Existing Radio Service Code:	pasilo sul astrocción actividad
Ger	neral Information		
2)	MD - Modification RM	O - Renewal Only O - Renewal Only O - Renewal/Modification O - Cancellation of License  AU - Administrative Update WD - Withdrawal of Application DU - Duplicate License  NT - Required No EX - Requests for RL - Registered L	Extension of Time
3a)		a <u>Developmental License</u> , De <u>monstration License</u> , or a <u>Special Temporary</u> he code and attach the required exhibit as described in the instructions. Otherwise	(N )D M S N/A
3b)		ial Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. xplanation of situations considered to be an emergency.	( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an A on file with the FCC.	Amendment or Withdrawal, enter the file number of the pending application currently	File Number <b>0005688038</b>
5)	License, or Administrative U	odification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate pdate, enter the call sign of the existing FCC license. ered Location/Link, enter the FCC call sign assigned to the geographic license.	Call Sign
6)	If this application is for a authorization expiration date	New, Amendment, Renewal Only, or Renewal/Modification, enter the requested (this item is optional).	MM DD/
7)	applicable radio service rule	as defined in §1.929 of the Commission's rules when read in conjunction with the es found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only ic applications. See the instructions for applicability and full text of §1.929).	( <b>N</b> ) <u>Y</u> es <u>N</u> o
8)	Are attachments being filed v	vith this application?	(γ) <u>Y</u> es <u>N</u> o
Fee	s, Waivers, and Exemptions		
9)	Is the applicant exempt from F	CC application fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10	) Is the applicant exempt from	FCC regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11		e a request for a Waiver of the Commission's rule(s)? oviding rule number(s) and explaining circumstances.	( Y ) <u>Y</u> es <u>N</u> o
		ber of rule section(s) being waived.	Number of Rule Section(s): 2
12		neters requested in this filing covered by grandfathered privileges, previously tionally integrated with an existing station?	( <b>N</b> ) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I						<u> </u>	
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	ino		☐ Fe	male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership			
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Co	mmis	sion's R	ules

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
(X) ()	Permanent F Multiple Addı Temporary F	r to instructions) Check One Onl fixed Point to Point ress System (MAS) ixed/Mobile onic Message Service (DEMS)	y: ( )18 GHz Low Power ( )31 GHz ( )38 GHz	4) Station Class: FXO	5) DEMS only: SMSA:
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests by the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
8) Frequence Coordination N		9) Name of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date
Broadcast A		l <b>y</b> 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number:	
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:
T Transmit Location			MISSOULA
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):	
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	1-SS.S): NAD83 (w) <u>E</u> or <u>W</u>
46-52-02.2	(N ) M OI 3	114-00-40.0	( <b>W</b> ) <u>=</u> 01 <u>vv</u>
9) Street Address, Name of Landing Area, or Oth	ner Location Description:	1	
924 South Third St. West			
10) City:	11) State:		12) County/Borough/Parish:
Missoula	MT		MISSOULA
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)
, ,	('b' in antenna struc		('c' in antenna structure example):
973.8	10.1		10.1
16) Support Structure Type:  LTOWER			
17) Radius (km):			
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner) () <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?	( <u>)Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Code	e 'O')		
22) Would Commission grant of Authorization for		n which may have a signi	
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	-	tions 1.1308 and 1.1311.	N
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the proper Quiet Zone
23b) Has the applicant obtained prior written con- application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are specified in this ( ) <u>Y</u> es <u>N</u> o
24) Do you propose to operate in an area that red	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u> o

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			POINT SIX	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83
47-02-22.9	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-59-17.1		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	her Location Description:			
10) City:	11) State:		12) County/Borough/Parish:	
12) Flouration of Cita AMCI (motors)	14) Overall Ht AGL Wi	th out	15) Overall Ht AGL With	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	Appurtenances (mo	eters)	Appurtenances (meters)	
2390.7	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):
2550.7				
16) Support Structure Type:				
17) Radius (km):				
40) 14 (20 144 00 0)	MARGO	140 14 : 1 :	L (DDD 144 00 0)	NABOO
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		<b>NAD83</b> ( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	e 'O')			
	,			
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		on which may have a signi	ficant	( <u>) <b>Y</b></u> es <u>N</u> o
If 'Yes', submit an environmental assessment as			data (a / lal/ a ) that the array	0.00
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in item 23b of the	e instructions, provide the	uate (mm/dd/yyyy) that the prop	ei Quiet Zone
23b) Has the applicant obtained prior written con	sent from the proper Quie	at Zone entity for the same	a technical parameters that are s	necified in this
application?	som nom me proper Quie	L Zone entity for the sallie	C tooriiiloai parairieters triat are s	) <u>Y</u> es <u>N</u> o
24) Do you propose to operate in an area that re	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o
, systematic sponds in an area marro	,. yzz quanto, oconomio			, <u></u> <u></u>

### FCC Form 601

Schedule I Supplement 2

Transmit Location		<del></del>				
Transmit location name: MISSOULA		2) Path number:				
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path				
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only one pe MAS  ( ) Master to Remote ( ) Remote to Master DEMS  ( )Nodal to User ( )User to Nodal	·		
Transmit Antenna						
5) Antenna Manufacturer: RFS	6	6) Antenna Model Number: SUL4-107A				
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees		9) Antenna Gain (dBi): 40.5			
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwidt	th (degrees):	12) Diversity Antenna Gain (dBi):			
13) Elevation (Tilt) Angle (degrees): 4.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passiv Repeater (degrees): <b>5.2</b>	/e		
16) Periscope Reflector Dimensions (meters): Height: Width:	1	17) Periscope Reflector Sep	paration (meters):			
<ul><li>18) If the final receiver is located outside of the United States 19.</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided		imstances.		
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w			the Geostationary Satellite (N)	<u>Y</u> es <u>N</u> o		
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.				
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	ital Calculations in the wavier exhibit.			
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ))	<u>(</u> es <u>N</u> o		
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	d satellite system? ( ))	<u>r</u> es <u>N</u> o		
Final Receiver						
21) Receiver Location Name:						
POINT SIX						
22) Receiver antenna manufacturer:		23) Receiver antenna mo	odel number:			
	RFS SUL4-107A					
24) Receiver Call Sign:						
25) Height to Center of RX Antenna AGL	26) RX Antenna Beam	width (degrees):	27) RX Antenna Gain (dBi):			
(meters): <b>7.6</b>	1.5		40.5			
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anteni (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):			
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecto	or Separation (meters):			

### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

### Supplement 4

### **Frequency Data**

### **Transmitter Location Information**

1) Transmit Location Name:	MISSOULA	2) Path Number: <b>1</b>

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	63.9	30M0D7W (A)	150000.0	128TCM
	New 011365.00000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Albatol Edocitt OoA, illo:		MDR-8711E -150	N			

### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:27:38

File Number: 0005688039

### FCC 601 Main Form

## FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

1a) Existing Radio Service Code: MG					See instructions for public burden estimates
Select only one) (AM )   NE - New   RO - Renewal Only   AU - Administrative Update   NT - Required Notifications   EX - Requests for Extension of Time   RL - Registered Location/Link   NT - Required Notifications   EX - Requests for Extension of Time   RL - Registered Location/Link   RM - Amendment   CA - Cancellation of License   DU - Duplicate License   DU - Duplicate License   RL - Registered Location/Link   RL - Registered Location/Link	,	1a	) Existing Radio Service Code:		paone bardon commo
NE - New MD - Modification RM - Renewal/Modification AM - Amendment CA - Cancellation of License DU - Duplicate License RL - Reguister for Extension of Time RL - Registered Location/Link  3a) If this application is for a Developmental License, Demonstration License, or a Special Temporary Authorization (STA), enter the code and attach the required exhibit as described in the instructions. Otherwise enter 'N' (Not Applicable).  3b) If this application is for Special Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'.  Refer to Rule 1.915 for an explanation of situations considered to be an emergency.  4) If this application is for an Amendment or Withdrawal, enter the file number of the pending application currently on file with the FCC.  5) If this application is for a Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate License, or Administrative Update, enter the call sign of the existing FCC license. If this is a request for Registered Location/Link, enter the FCC call sign assigned to the geographic license.  6) If this application is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested authorization expiration date (this item is optional).  7) Is this application "major" as defined in §1.929 of the Commission's rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).	General Information				
Authorization (STA), enter the code and attach the required exhibit as described in the instructions. Otherwise enter 'N' (Not Applicable).  3b) If this application is for Special Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'.  Refer to Rule 1.915 for an explanation of situations considered to be an emergency.  4) If this application is for an Amendment or Withdrawal, enter the file number of the pending application currently on file with the FCC.  5) If this application is for a Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate License, or Administrative Update, enter the call sign of the existing FCC license. If this is a request for Registered Location/Link, enter the FCC call sign assigned to the geographic license.  6) If this application is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested authorization expiration date (this item is optional).  7) Is this application "major" as defined in §1.929 of the Commission's rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).	NE - New MD - Modification	RO - Renewal Only RM - Renewal/Modification	<b>WD</b> - Withdrawal of Application	EX - Requests for	Extension of Time
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on file with the FCC.    0005688039				'Y'; otherwise enter 'N'.	( <u>)Y</u> es <u>N</u> o
License, or Administrative Update, enter the call sign of the existing FCC license.  If this is a request for Registered Location/Link, enter the FCC call sign assigned to the geographic license.  6) If this application is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested authorization expiration date (this item is optional).  7) Is this application "major" as defined in §1.929 of the Commission's rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).		r an Amendment or Withdraw	al, enter the file number of the pend	ing application currently	
authorization expiration date (this item is optional).  MM DD  This this application "major" as defined in §1.929 of the Commission's rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).	License, or Administra	tive Update, enter the call sign	of the existing FCC license.	•	Call Sign
applicable radio service rules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).			newal Only, or Renewal/Modificatio	n, enter the requested	MM DD
8) Are attachments being filed with this application? (γ ) <u>Y</u> es <u>N</u> o	applicable radio servic	ce rules found in Parts 22 and	d 90 of the Commission's rules? (NO	OTE: This question only	( <b>N</b> ) <u>Y</u> es <u>N</u> o
	8) Are attachments being	filed with this application?			(γ) <u>Y</u> es <u>N</u> o
Fees, Waivers, and Exemptions	Fees. Waivers, and Exemp	tions			1
9) Is the applicant exempt from FCC application fees? (N) Yes No					( <b>N</b> ) <u>Y</u> es <u>N</u> o
10) Is the applicant exempt from FCC regulatory fees? ( N )Yes No	10) Is the applicant exempt	from FCC regulatory fees?			( <b>N</b> ) <u>Y</u> es <u>N</u> o
11a) Does this application include a request for a Waiver of the Commission's rule(s)?  If 'Yes', attach an exhibit providing rule number(s) and explaining circumstances.					( <b>Y</b> ) <u>Y</u> es <u>N</u> o
11b) If 11a is 'Y', enter the number of rule section(s) being waived.  Number of Rule Section(s): 3	11b) If 11a is 'Y', enter the	number of rule section(s) being	ng waived.		Number of Rule Section(s): 3
12) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station?				ges, previously	

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation Unincorporated Association Trust Government Entity									
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I						<u> </u>	
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423									
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino	o Male					
Asian	□No	ot Hispan	ic or Lat	_atino Female					
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership						
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o			
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0			
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules						

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrative Information						
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o	
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the	
2b) Pack Nam	ne:					
(X) ()	3) Type of Operation (refer to instructions) Check One Only:  (X) Permanent Fixed Point to Point () Multiple Address System (MAS) () Temporary Fixed/Mobile () Digital Electronic Message Service (DEMS)  (3) Station Class: (4) Station Class:  FXO  (3) DEMS only: SMSA:  (3) DEMS only: SMSA:  (4) Station Class: (5) DEMS only: SMSA:					
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests by the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?	
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o	
Frequency Coordinator Information  Complete Items 8 through 11 if not self-coordinated						
8) Frequence Coordination N		9) Name of Frequency (	y Coordinator Telephone Number		11) Coordination Date	
Broadcast A		l <b>y</b> 12a)	12b)		12c)	
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:	
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:	
Control Poin	t (Technical	Point of Contact)				
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number	

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
T Transmit Location			MOUNT AENEAS			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):				
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	M-SS.S): NAD83 (w) <u>E</u> or <u>W</u>			
48-09-11.4	(N ) N O S	113-55-46.7	( <b>W</b> ) <u>=</u> 01 <u>vv</u>			
9) Street Address, Name of Landing Area, or Otl	ner Location Description:	1				
29.0 km ESE of Kalispell						
10) City:	11) State:		12) County/Borough/Parish:			
Kalispell	MT		FLATHEAD			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wit Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)			
, , ,	('b' in antenna struc		('c' in antenna structure example):			
2154.9	8.2		8.2			
16) Support Structure Type:  BANT						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud				
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner) () <u>E</u> or <u>W</u>			
		-				
20) Do you propose to operate in an area that re	quires frequency coordinate	ation with Canada?	( <u>)Y</u> es <u>N</u> o			
21) Description: (only for Area of Operation Code	e 'O')					
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) Yes No						
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://						
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are specified in this ( ) <u>Y</u> es <u>N</u> o			
24) Do you propose to operate in an area that requires frequency coordination with Mexico?  ( ) Yes No						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>			
3) Location Description:	4) Area of Operation Code:		5) Location Name:		
R Receive Location			POLSON		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):			
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	1-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>		
47-40-41.8	(N ) N OI S	114-08-33.4	( <b>W</b> ) ⊆ 01 <u>₩</u>		
9) Street Address, Name of Landing Area, or Otl	ner Location Description:	1			
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure example):		
1036.3					
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	le (DDD-MM-SS.S): NAD83		
Use for rectangle only (Northwest corner)					
20) Do you propose to operate in an area that requires frequency coordination with Canada?  ( ) Yes No					
			, , <b>_</b> _		
21) Description: (only for Area of Operation Code 'O')					
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o					
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://					
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application?  ( ) Yes No					
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No					

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3			
3) Location Description:	4) Area of Operation Code:		5) Location Name:		
R Receive Location			MOUNT BALDY		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83	
48-19-04.7	( N ) N or S	113-09-15.4		( <b>₩</b> ) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Ot	ner Location Description:				
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi	thout	15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters) ('c' in antenna structure e	yamala).	
2349.7	( b in antenna stru	cture example).	(C in antenna structure e	xampie).	
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner) ( ) $\underline{\mathbb{N}}$ or $\underline{\mathbb{S}}$ Use for rectangle only (Northwest corner) ( ) $\underline{\mathbb{E}}$ or $\underline{\mathbb{W}}$					
20) Do you propose to operate in an area that requires frequency coordination with Canada? ( ) <u>Y</u> es <u>N</u> o					
21) Description: (only for Area of Operation Code 'O')					
22) Would Commission grant of Authorization for this location be an action which may have a significant () <u>Y</u> es <u>N</u> o					
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://					
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this					
application?  ( ) Yes No					
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No					

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 4			
3) Location Description:	4) Area of Operation Code:		5) Location Name:		
R Receive Location			KALISPELL		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83	
48-11-44.0	( <sub>N</sub> ) <u>N</u> or <u>S</u>	114-18-38.0		( <b>w</b> ) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Otl	ner Location Description:				
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi	th out	15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (m	eters)	Appurtenances (meters)		
900.7	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):	
16) Support Structure Type:					
16) Support Structure Type.					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner) ( ) $\underline{\mathbb{N}}$ or $\underline{\mathbb{N}}$ Use for rectangle only (Northwest corner) ( ) $\underline{\mathbb{N}}$ or $\underline{\mathbb{N}}$					
20) Do you propose to operate in an area that requires frequency coordination with Canada?  ( ) <u>Y</u> es <u>N</u> o					
21) Description: (only for Area of Operation Cod	e 'O')				
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o					
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://					
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application?  ( ) Yes No					
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No					
/					

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 5			
3) Location Description:	4) Area of Operation Code:		5) Location Name:		
R Receive Location			ALLEN PEAK		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):	1		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83	
47-57-01.4	( N ) N or S	115-24-17.5		( <b>w</b> ) <u>E</u> or <u>W</u>	
Street Address, Name of Landing Area, or Ott	per Location Description:	110 24 17.0			
3) Street Address, Name of Landing Alea, of Other	lei Location Description.				
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample):	
1966.2	(2 a	o.u. o o.up.o).	(0 a		
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner) ( ) $\underline{N}$ or $\underline{S}$ Use for rectangle only (Northwest corner) ( ) $\underline{E}$ or $\underline{W}$					
20) Do you propose to operate in an area that requires frequency coordination with Canada? ( ) Yes No					
21) Description: (only for Area of Operation Cod	e O')				
22) Would Commission grant of Authorization for this location be an action which may have a significant () <u>Y</u> es <u>N</u> o environmental effect? See Section 1.1307 of 47 CFR.					
If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://					
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this					
application? ( ) Yes No					
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No					

Transmit Location				
Transmit location name: MOUNT AENEAS		2) Path number: 1		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: Commscope		6) Antenna Model Number: PL8-59F	D) A.( Q.' (ID')	
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.4	s):	9) Antenna Gain (dBi): 41.5	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (d	lBi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization:	1	15) Azimuth to RX Location o Repeater (degrees)	r Passive
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sep		
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	and attach an exhibit explaini	
19) Does this path include passive repeater?				( N )Yes No
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w			he Geostationary Satellite	( N )Yes No
If 'Yes', answer questions 20a, b and c below and	·			
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbi	tal Calculations in the wavier	exhibit
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed operation will not cause interference to an authorized satellite system? (			( ) <u>Y</u> es <u>N</u> o	
Final Receiver				
21) Receiver Location Name:				
POLSON				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	dal numbar:	
RFS		PAD8-59A	dei number.	
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 12.5	26) RX Antenna Beam 1.4	width (degrees):	27) RX Antenna Gain (dBi): 41.3	_
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	80) Diversity RX Antenna Gai	n (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	r Separation (meters):	

### FCC Form 601

Schedule I Supplement 2 Transmit I ocation

Transmit Location		-		
1) Transmit location name: MOUNT AENEAS		2) Path number: 2		
3) Action Requested: ( A ) Add New Path	<u>M</u> odify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User MAS ONLY ( )Fixed One-way Outbound Master ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only one pounds  ( ) Master to Remote ( ) Remote to Master  DEMS ( )Nodal to User ( )User to Nodal	e ,
Transmit Antenna				
5) Antenna Manufacturer: RFS	6	<ul><li>Antenna Model Number:</li><li>PAD8-59A</li></ul>		
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwidt	th (degrees):	12) Diversity Antenna Gain (dBi):	
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization: <b>V</b>		<ol> <li>Azimuth to RX Location or Passi Repeater (degrees): 72.1</li> </ol>	ive
16) Periscope Reflector Dimensions (meters): Height: Width:	1	7) Periscope Reflector Sep	paration (meters):	
18) If the final receiver is located outside of the United States, enter the country in the space provided and attach an exhibit explaining circumstances.  19) Does this path include passive repeater?  ( N )Yes No				
20) Does this filing add or modify emanations in the 5925-7075 MHz band pointed within 2 degrees of the Geostationary Satellite  Arc, or in the 12700 – 13250 MHz band pointed within 1.5 degrees of the Geostationary Satellite Arc?				
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	plaining circumstances.		
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	ital Calculations in the wavier exhibit.	·
20b) Does the applicant certify that there is no alternative to the proposed transmission path?  [Note that there is no alternative to the proposed transmission path? [Include explanation in waiver exhibit.]				
20c) Does the applicant certify that the proposed operation will not cause interference to an authorized satellite system? ( ) <u>Y</u> es <u>N</u> o				
Final Receiver				
21) Receiver Location Name:				
MOUNT BALDY				
22) Receiver antenna manufacturer:  RFS  23) Receiver antenna model number:  PAD10-59A			del number:	
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beamv	width (degrees):	27) RX Antenna Gain (dBi): 43.2	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anteni (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi)	:
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecto	or Separation (meters):	

Transmit Location		_	
Transmit location name: MOUNT AENEAS		2) Path number: 3	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<b>D</b> elete Existing Path	า
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: Commscope	6	6) Antenna Model Number: PL6-59E	:
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.8	3):	9) Antenna Gain (dBi): 38.9
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): -3.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 279.6
16) Periscope Reflector Dimensions (meters): Height: Width:	1	17) Periscope Reflector Se	paration (meters):
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi			
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit
20b) Does the applicant certify that there is no alternative to the proposed transmission path?  ( ) <u>Y</u> es <u>N</u> o Include explanation in waiver exhibit.			
20c) Does the applicant certify that the proposed operation will not cause interference to an authorized satellite system? ( )Yes N			
Final Receiver			
21) Receiver Location Name:			
KALISPELL  22) Receiver antenna manufacturer:  23) Receiver antenna model number:			
RFS PAD6-59B			
24) Receiver Call Sign:			
25) Height to Center of RX Antenna AGL (meters): 22.9	26) RX Antenna Beamwidth (degrees):  1.8		27) RX Antenna Gain (dBi): 38.7
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Antenna Beamwidth (degrees):		30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflect	or Separation (meters):

Transmit Location				
Transmit location name: MOUNT AENEAS		2) Path number:		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	n	
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal	
Transmit Antenna				
5) Antenna Manufacturer: RFS	6	6) Antenna Model Number: PAL12-59A		
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 0.9	s):	9) Antenna Gain (dBi): 44.8	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):	
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization:		15) Azimuth to RX Location or Passive Repeater (degrees): 259.0	
16) Periscope Reflector Dimensions (meters): Height: Width:	1	17) Periscope Reflector Se	paration (meters):	
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.	
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o	
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi				
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.		
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit.	
20b) Does the applicant certify that there is no alternative to the proposed transmission path?  ( )Yes No Include explanation in waiver exhibit.				
20c) Does the applicant certify that the proposed operation will not cause interference to an authorized satellite system? ( )Yes No				
Final Receiver				
21) Receiver Location Name:				
ALLEN PEAK  22) Receiver antenna manufacturer:  23) Receiver antenna model number:				
RFS PAD10-59A				
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beamwidth (degrees):  1.2		27) RX Antenna Gain (dBi): 43.2	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Antenna Beamwidth (degrees):		30) Diversity RX Antenna Gain (dBi):	
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflect	or Separation (meters):	

# Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

# FCC Form 601 Schedule I

# Supplement 4

# **Frequency Data**

# **Transmitter Location Information**

	1) Transmit Location Name:	MOUNT AENEAS	2) Path Number:	1
П				

# **Frequency Information**

3) Action A/M/D	ction A/M/D Lower or Center Frequency (MHZ) Frequency (MHZ)  Existing (if mod)		6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A			0.00100	72.8	30M0D7W (A)	150000.0	128TCM
	New 006197.24000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N			

1) Transmit Lagation Name:	MOUNT AFNEAS	2) Doth Number: 2
1) Transmit Location Name:	MIDDINI AENEAS	2) Path Number: <b>2</b>

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	A Existing (if mod)		0.00100	72.3	30M0D7W (A)	150000.0	128TCM
	New 006404.79000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control		3	
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N			

1)	Transmit Location Name:	MOUNT AENEAS	2) Path Number:	3

# **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	70.5	30M0D7W (A)	150000.0	128TCM
	New 006315.84000000						
	Alcatel Edecilt COA, Illo.		12) Transmitter Model	13) Automatic Transmitter Power Control			
			MDR-8706E -150	N			

1)	Transmit Location Name:	MOUNT AENEAS	2) Path Number:	4

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	75.7	30M0D7W (A)	150000.0	128TCM
	New 006286.19000000						
	Middle Eddelit GoA, IIIo.		12) Transmitter Model	13) Automatic Transmitter Power Control			
			MDR-8706E -150	N			

# Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

# Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:29:49

File Number: 0005688040

# FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

		public burden estimate
Radio Service Code:     MG	1a) Existing Radio Service Code:	pasio salasii ooliinate
General Information		
MD - Modification RM - Re	enewal/Modification WD - Withdrawal of Application EX - Re	equired Notifications equests for Extension of Time egistered Location/Link
	Developmental License, Demonstration License, or a Special Toode and attach the required exhibit as described in the instructions.	
	remporary Authority due to an emergency situation, enter 'Y'; otherwise nation of situations considered to be an emergency.	enter 'N'. ( ) <u>Y</u> es <u>N</u> o
<ol> <li>If this application is for an Amer on file with the FCC.</li> </ol>	ndment or Withdrawal, enter the file number of the pending application	rile Number 0005688040
License, or Administrative Updat	cation, Renewal Only, Renewal/Modification, Cancellation of License, te, enter the call sign of the existing FCC license.  Location/Link, enter the FCC call sign assigned to the geographic licen	·
If this application is for a Nev authorization expiration date (this	w, Amendment, Renewal Only, or Renewal/Modification, enter the sitem is optional).	requested MM DD
applicable radio service rules fo	efined in §1.929 of the Commission's rules when read in conjunction und in Parts 22 and 90 of the Commission's rules? (NOTE: This que oplications. See the instructions for applicability and full text of §1.929).	
8) Are attachments being filed with t	this application?	(γ) <u>Y</u> es <u>N</u> o
Fees, Waivers, and Exemptions		· · · · · · · · · · · · · · · · · · ·
9) Is the applicant exempt from FCC a	application fees?	(N) <u>Y</u> es <u>N</u> o
10) Is the applicant exempt from FCC	C regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
	equest for a Waiver of the Commission's rule(s)? ng rule number(s) and explaining circumstances.	(Y) <u>Y</u> es <u>N</u> o
11b) If 11a is 'Y', enter the number of	of rule section(s) being waived.	Number of Rule Section(s): 2
	rs requested in this filing covered by grandfathered privileges, previousl ally integrated with an existing station?	

Applicant Information										
13) FCC Registration Number (FRN): <b>0002526580</b>										
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity	
☐ Consortium ☐ General Partnership ☒ Limited Liability Company ☐ Limited Liability Partnership										
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)								
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o	
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:		
17) Legal Entity Name (if other than individual):	I.	I								
Charter Communications Operating, LLC										
18) Attention To:										
Alexis Anderten		-								
19) P.O. Box:	And/O	<i>'</i>	treet Ad							
		12	2444 Pc	werscou		1				
21) City:					22) State:		23) Zip C			
St. Louis					МО		63131			
24) Telephone Number:			2	5) FAX:						
(303)323-1423				(303)32	23-1313					
26) E-Mail Address:										
charterfcc@chartercom.com										
27) Demographics (Optional):										
Race:	Ethni		1			Gend				
American Indian or Alaska Native		spanic or	Latino			ale				
Asian	□No	ot Hispan	ic or Lat	· Latino Female				•		
Black or African-American										
☐ Native Hawaiian or Other Pacific Islander										
White										
Real Party in Interest										
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:	
applicant):										
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:	
Steven		J	Hor						-	
31) Company Name:		J	пог	/112						
Davis Wright Tremaine LLP										
32) Attention To:										
33) P.O. Box:	And	34) Str	eet Add	ess:						
	/Or	1			a Ave., NW, S	uite 80	0			
35) City:	1	1		36) State				Zip Code:		
Washington				DC				20006-340	)1	
38) Telephone Number:			39	) FAX:						
(202)973-4228										
40) E-Mail Address:										
stevehorvitz@dwt.com										

# Regulatory Status 41) This filling is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filling is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Allen Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u>N</u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u><b>Y</b></u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u> <b>N</b></u> о
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant Section 310(b)(4) of the Communications Act.	to		

Basic Qualification Questions

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?

51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of

# Aeronautical Advisory Station (Unicom) Certification

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership

53a) Will the requested facilities be used to provide multichannel video programming service?

() Yes No

53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest
(as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules

or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

### Broadband Radio Service and Educational Broadband Service (Part 27)

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes of the Commission's Rules?

Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( )Yes No

Note: If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
(X) ()	Permanent F Multiple Addı Temporary F	r to instructions) Check One Onl fixed Point to Point ress System (MAS) ixed/Mobile onic Message Service (DEMS)	y: ( )18 GHz Low Power ( )31 GHz ( )38 GHz	4) Station Class: FXO	5) DEMS only: SMSA:
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests by the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
8) Frequence Coordination N		9) Name of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date
Broadcast A		l <b>y</b> 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
T Transmit Location			POINT SIX	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS.S):	NAD83
47-02-22.9	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-59-17.1		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	her Location Description:	1		
16.1 km North of Missoula				
10) City:	11) State:		12) County/Borough/Parish:	
Missoula	MT		MISSOULA	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wit Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)	
(a in antenna structure example).	('b' in antenna stru		('c' in antenna structure e	example):
2390.7			0.0	
	9.8		9.8	
16) Support Structure Type:				
LTOWER				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o
, , , , ,		ation with Garage.		( ) <u></u> ee <u></u> e
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		ions 1.1308 and 1.1311.		N
23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the prop	oer Quiet Zone
entity was notified:/				
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	specified in this ( <u>) <b>Y</b></u> es <u>N</u> o
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?		( ) <u>Y</u> es <u>N</u> o
, , , , , , , , , , , , , , , , , , , ,	, ,,			,

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			POLSON		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):	1		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83	
47-40-41.8	( N ) N or S	114-08-33.4		( <b>₩</b> ) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Otl	ner Location Description:	1			
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	thout	15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters)		
1036.3	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):	
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>	
20) Do you propose to operate in an area that re	quires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o	
21) Description: (only for Area of Operation Cod	e 'O')				
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o	
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.			
23a) If the site is located in one of the Quiet Zone entity was notified://			date (mm/dd/yyyy) that the prop	er Quiet Zone	
,	agent from the proper Quie	t Zana antitu for the same	a tachnical parameters that are a	position in this	
23b) Has the applicant obtained prior written con application?	sent nom the proper Quie	a Zone entity for the same	e technical parameters that are s (	<u>Y</u> es <u>N</u> o	
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o	

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			MISSOULA		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83	
46-52-02.2	( N ) N or S	114-00-40.0		( <b>w</b> ) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Otl	ner Location Description:				
10) City:	11) State:		12) County/Borough/Parish:		
7.7			, 111 ,, 111 ,		
40) Flooring (O'to AMO) (output)	44) 0 1114 401 145	di and	45) 0		
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wit Appurtenances (me	eters)	15) Overall Ht AGL With Appurtenances (meters)		
973.8	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):	
40) O many Olympian Trans					
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>	
20) Do you propose to operate in an area that re	quires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o	
21) Description: (only for Area of Operation Cod	e 'O')				
22) Would Commission grant of Authorization for		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o	
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.			
23a) If the site is located in one of the Quiet Zone entity was notified://			date (mm/dd/yyyy) that the prop	er Quiet Zone	
,		4 7		and a sift and the Alexan	
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t ∠one entity for the same	e tecnnical parameters that are s (	pecified in this <u>) <b>Y</b></u> es <u>N</u> o	
24) Do you propose to operate in an area that re-	quires frequency coordina	ition with Mexico?		) <u>Y</u> es <u>N</u> o	
2.1, 20 you propose to operate in an area material inequality operational with medico:					

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 4		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			HAMILTON	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83
46-14-46.1	( <sub>N</sub> ) <u>N</u> or <u>S</u>	114-09-22.2		( <b>w</b> ) <u>E</u> or <u>W</u>
Street Address, Name of Landing Area, or Ott	her Location Description:	114-03-22.2		
3) Street Address, Name of Landing Alea, of Other	ner Location Description.			
10) City:	11) State:		12) County/Borough/Parish:	
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi		15) Overall Ht AGL With	
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample):
1091.1			(	
16) Support Structure Type:				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coording	ation with Canada?		( <u>) Y</u> es <u>N</u> o
, , , , ,				· / <b>_</b> _
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		on which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sec			
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone
23b) Has the applicant obtained prior written con	sent from the proper Quie	et Zone entity for the same	e technical parameters that are s	
application?				<u>) Y</u> es <u>N</u> o
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 5		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			STEVENVILLE	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83
46-30-40.8	( N ) N or S	114-06-03.5		( <b>w</b> ) <u>E</u> or <u>W</u>
Street Address, Name of Landing Area, or Ott	ner Location Description:	114 00 00.0		
of Street Address, Name of Earlang Area, of St.	ioi Loodiion Besonption.			
10) City:	11) State:		12) County/Borough/Parish:	
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With	
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample):
1005.0	(,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,		(*	
16) Support Structure Type:				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	quires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o
, , , , ,				· / <b>_</b> _
21) Description: (only for Area of Operation Cod	e O')			
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o
If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.				
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone
23b) Has the applicant obtained prior written con	sent from the proper Quie	et Zone entity for the same	e technical parameters that are s	
application?				<u>) <b>Y</b></u> es <u>N</u> o
24) Do you propose to operate in an area that re-	quires frequency coordina	ition with Mexico?		) <u>Y</u> es <u>N</u> o

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 6			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			BLACKTAIL		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83	
48-00-48.0	( <sub>N</sub> ) <u>N</u> or <u>S</u>	114-21-58.0		( <b>w</b> ) <u>E</u> or <u>W</u>	
Street Address, Name of Landing Area, or Ott	her Location Description:	114 21 30.0			
3) Street Address, Name of Landing Alea, of Other	ner Location Description.				
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi		15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample):	
2035.8			(		
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>	
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o	
, , , , ,				· / <b>_</b> _	
21) Description: (only for Area of Operation Cod	e O)				
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		on which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o	
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			0:7	
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	e Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone	
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are s	pecified in this ) <u>Y</u> es <u>N</u> o	
24) Do you propose to operate in an area that re-	guires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o	
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No					

Transmit Location				
1) Transmit location name: POINT SIX		2) Path number:		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U: ( )User to No	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: Commscope		6) Antenna Model Number: HP10-59G	D) Agteure Cair (JDi)	
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees 1.1	5):	9) Antenna Gain (dBi): 43.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (d	Bi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization:	1	<li>15) Azimuth to RX Location o Repeater (degrees):</li>	r Passive
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sep		
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	and attach an exhibit explainir	
19) Does this path include passive repeater?				( N ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w			the Geostationary Satellite	( N )Yes No
If 'Yes', answer questions 20a, b and c below and	·			
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	tal Calculations in the wavier of	exhibit
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( <u>)Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
POLSON				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	dal numbari	
Commscope		HP10-59G	der Humber.	
24) Receiver Call Sign:		10 000		
,				
25) Height to Center of RX Antenna AGL (meters): 12.5	26) RX Antenna Beam  1.1	width (degrees):	27) RX Antenna Gain (dBi): 43.3	_
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	30) Diversity RX Antenna Gair	n (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	r Separation (meters):	

# FCC Form 601

Schedule I Supplement 2 Transmit I ocation

Transmit Location		•	
Transmit location name: POINT SIX		2) Path number: 2	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	١
4a) For MAS or DEMS only, MAS or DEMS Sub- MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		S) Antenna Model Number: SUL4-107A	:
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 40.5
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): -4.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 185.2
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w	rithin 1.5 degrees of the C	Seostationary Satellite Arc?	
If 'Yes', answer questions 20a, b and c below and 20a) Angular Separation between main beam an	•	, ,	oital Calculations in the wavier exhibit.
Does the applicant certify that there is no all Include explanation in waiver exhibit.	ternative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed	operation will not cause in	nterference to an authorize	d satellite system? ( ) <u>Y</u> es <u>N</u> o
Final Receiver			
21) Receiver Location Name:			
MISSOULA			
22) Receiver antenna manufacturer:		23) Receiver antenna me	odel number:
RFS		SUL4-107A	
24) Receiver Call Sign:			
25) Height to Center of RX Antenna AGL (meters): 7.6	26) RX Antenna Beam  1.5	width (degrees):	27) RX Antenna Gain (dBi): <b>40.5</b>
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters Height: Width	,	32) RX Periscope Reflect	or Separation (meters):

Transmit Location				
Transmit location name: POINT SIX		2) Path number: 3		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub- MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	h-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote o Master
Transmit Antenna				
5) Antenna Manufacturer: RFS		S) Antenna Model Number: UA8-59A		
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees 1.5	9	) Antenna Gain (dBi): 41.6	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (c	dBi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization:	1	5) Azimuth to RX Location of Repeater (degrees)	r Passive : 188.4
16) Periscope Reflector Dimensions (meters): Height: Width:		7) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>				( N )Yes No
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w If 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the G	Geostationary Satellite Arc?	ne Geostationary Satellite	( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20a) Angular Separation between main beam an	d Geostationary Satellite	Arc (degrees). Include Orbit	al Calculations in the wavier	exhibit
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( <u>)Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
HAMILTON				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	del number:	-
RFS		PAD8-59A		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 21.3	26) RX Antenna Beam	width (degrees):	7) RX Antenna Gain (dBi): 41.3	<u> </u>
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gai	n (dBi):
31) RX Periscope Reflector Dimensions (meters Height: Width		32) RX Periscope Reflector	Separation (meters):	

Transmit Location				
1) Transmit location name: POINT SIX		2) Path number: 4		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: UA8-59A		
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees 1.5	s):	<ul><li>Antenna Gain (dBi):</li><li>41.6</li></ul>	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (d	lBi):
13) Elevation (Tilt) Angle (degrees): -2.0	14) Polarization:	1	5) Azimuth to RX Location o Repeater (degrees)	r Passive
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sep		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explaini	ng circumstances.
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w			he Geostationary Satellite	( N )Yes No
If 'Yes', answer questions 20a, b and c below and	·			
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	al Calculations in the wavier	exhibit
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
STEVENVILLE				
		00) Danai ya antana ma	dal avverbani	
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna mod PAD8-59A	del number:	
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 7.6	26) RX Antenna Beam	width (degrees):	7) RX Antenna Gain (dBi): 41.3	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gai	n (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

Transmit Location				
1) Transmit location name: POINT SIX		2) Path number: 5		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: Commscope		6) Antenna Model Number: UHX8-59J RF	0.5 (10.5)	
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees 1.4	s):	9) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	(2) Diversity Antenna Gain (d	lBi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization: <b>H</b>	1	15) Azimuth to RX Location o Repeater (degrees):	r Passive : 345.4
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the United States 19.</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainii	ng circumstances.
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w If 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the Cattach waiver request ex	Seostationary Satellite Arc?	·	(N)Yes No
20a) Angular Separation between main beam and	a Geostationary Satellite	Aic (degrees). Include Orbit	tal Calculations in the wavier	EXIIIDIL.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( <u>)Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( ) <u>Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
BLACKTAIL				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	del number:	
Commscope		UHX8-59J RF		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 21.3	26) RX Antenna Beam  1.4	width (degrees):	27) RX Antenna Gain (dBi): 41.3	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	30) Diversity RX Antenna Gai	n (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	r Separation (meters):	

# Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

# FCC Form 601 Schedule I

# Supplement 4

# **Frequency Data**

# **Transmitter Location Information**

l	1) Transmit Location Name:	POINT SIX	2) Path Number: 1	
П				

# **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	74.7	30M0D7W (A)	150000.0	128TCM
	New 006315.84000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1) Transmit Location Name: POINT SIX	2) Path Number: 2

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	64.7	30M0D7W (A)	150000.0	128TCM
	New 010875.000000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control		3	
	Alcatel-Lucent US	A, Inc.	MDR-8711E -150	N			

1)	Transmit Location Name:	POINT SIX	2) Path Number:	3

# **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	72.3	30M0D7W (A)	150000.0	128TCM
	New 006404.79000000						
	11) Transmitter Man	ufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent USA	A, Inc.	MDR-8706E -150	N			

1) Transmit Location Name:	POINT SIX	2) Path Number: 4

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	72.3	30M0D7W (A)	150000.0	128TCM
	New 006315.84000000		-				
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1)	Transmit Location Name:	POINT SIX	2) Path Number:	5

3) Action A/M/D	4) 5) Lower or Center Frequency (MHZ) Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)	0.00100	72.1	30M0D7W (A)	150000.0	128TCM
	New 005945.20000000					
	11) Transmitter Manufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent USA, Inc.	MDR-8706E -150	N			

# Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

# Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:31:19

File Number: 0005688042

# FCC 601 Main Form

# FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	
	MG		
	eral Information		
2)	(Select only one) (AM) NE - New RO - Renewal	Only AU - Administrative Update	NT - Required Notifications
	MD - Modification RM - Renewal/		EX - Requests for Extension of Time
			RL – Registered Location/Link
3a)		omental License, De <u>m</u> onstration License, or a <u>S</u> p d attach the required exhibit as described in the instruc	
3b)	If this application is for Special Tempora Refer to Rule 1.915 for an explanation o	ry Authority due to an emergency situation, enter 'Y'; oth f situations considered to be an emergency.	erwise enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amendment on file with the FCC.	or Withdrawal, enter the file number of the pending app	lication currently File Number 0005688042
5)	License, or Administrative Update, enter	Renewal Only, Renewal/Modification, Cancellation of Lithe call sign of the existing FCC license.  on/Link, enter the FCC call sign assigned to the geograph	
6)	If this application is for a New, Ame authorization expiration date (this item is	ndment, Renewal Only, or Renewal/Modification, enters optional).	er the requested MM DD
7)	applicable radio service rules found in	n §1.929 of the Commission's rules when read in con Parts 22 and 90 of the Commission's rules? (NOTE: T ns. See the instructions for applicability and full text of §	nis question only
8)	Are attachments being filed with this app	lication?	(γ) <u>Y</u> es <u>N</u> o
Food	s, Waivers, and Exemptions		
	ls the applicant exempt from FCC applicat	ion fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
- /			(11.72** 2**
10)	Is the applicant exempt from FCC regular	tory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
118	Does this application include a request if 'Yes', attach an exhibit providing rule if 'Yes'.	for a Waiver of the Commission's rule(s)? number(s) and explaining circumstances.	(Y) <u>Y</u> es <u>N</u> o
111	b) If 11a is 'Y', enter the number of rule s	ection(s) being waived.	Number of Rule Section(s): 2
12)	Are the frequencies or parameters reque approved by waiver, or functionally integ	ested in this filing covered by grandfathered privileges, prograted with an existing station?	eviously (N) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423 (303)323-1313									
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	ino		☐ Fe	male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

# Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership			
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Co	mmis	sion's R	ules

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the answ FCC):	wer to Item 1	is 'Yes', enter the pack identification	tion number (required if the p	pack identification number has	already been assigned by the
2b) Pack Nam	ne:				
(X) ()	Permanent F Multiple Addı Temporary F	r to instructions) Check One Onl fixed Point to Point ress System (MAS) ixed/Mobile onic Message Service (DEMS)	y: ( )18 GHz Low Power ( )31 GHz ( )38 GHz	4) Station Class: FXO	5) DEMS only: SMSA:
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
		Information  1 if not self-coordinated			
8) Frequence Coordination N		9) Name of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date
Broadcast A		l <b>y</b> 12a)	12b)		12c)
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:
Control Poin	t (Technical	Point of Contact)			
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 1				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
T Transmit Location			POLSON			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1			
1002161						
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS.S):	NAD83		
47-40-41.8	( <sub>N</sub> ) <u>N</u> or <u>S</u>	114-08-33.4		( <b>₩</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	her Location Description:					
POLSON RIDGE - SKYLINE DR						
10) City:	11) State:		12) County/Borough/Parish:			
POLSON	МТ		LAKE			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)			
(a mantenia strastare example).	('b' in antenna stru		('c' in antenna structure ex	(ample):		
1036.3	14.0		14.0			
	14.0		14.0			
16) Support Structure Type:						
LTOWER 17) Radius (km):				_		
17) Radius (Kill).						
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	NAD83	19) Maximum Longitud Use for rectangle only		NAD83		
Ose for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Ose for rectangle only	(Northwest corner)	( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( ) <u>Y</u> es <u>N</u> o		
24) Description (exhibits and Constitution Configuration Co	- (01)					
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for		n which may have a signi	ficant (	) <u>Y</u> es <u>N</u> o		
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.		N		
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://						
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are sp	pecified in this ) <u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re	quires frequency coordina	ition with Mexico?		) <u>Y</u> es <u>N</u> o		

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>					
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:				
R Receive Location			MOUNT AENEAS				
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):					
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	M-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>				
48-09-11.4	(N ) M OI O	113-55-46.7	( <b>w</b> ) ⊆ 51 <u></u>				
9) Street Address, Name of Landing Area, or Otl	ner Location Description:	1					
10) City:	11) State:		12) County/Borough/Parish:				
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With				
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure example):				
2154.9							
16) Support Structure Type:							
17) Radius (km):							
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	de (DDD-MM-SS.S): NAD83				
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only					
20) Do you propose to operate in an area that re	auires frequency coordina	ation with Canada?	( <u>) Y</u> es <u>N</u> o				
			,				
21) Description: (only for Area of Operation Code	e O)						
22) Would Commission grant of Authorization for	or this location be an action	n which may have a signif	ficant ( ) <u>Y</u> es <u>N</u> o				
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) Yes No environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.							
23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the proper Quiet Zone				
entity was notified://							
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t ∠one entity for the same	e technical parameters that are specified in this ( <u>) <b>Y</b></u> es <u><b>N</b></u> o				
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u> o				
	bo you propose to operate in an area that requires frequency coordination with Mexico?						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			POINT SIX	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83
47-02-22.9	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-59-17.1		( <b>w</b> ) <u>E</u> or <u>W</u>
9) Street Address, Name of Landing Area, or Ot	ner Location Description:			
10) City:	11) State:		12) County/Borough/Parish:	
40) Flooring (O'to AMO) (1000)	44) 0   114 401 105	di and	45) O III II A OL MOI	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wi Appurtenances (mo		15) Overall Ht AGL With Appurtenances (meters)	
2390.7	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):
2000.1				
16) Support Structure Type:				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	40 (DDD-MM-SS S):	NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only		( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for		on which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.		
23a) If the site is located in one of the Quiet Zone entity was notified://			date (mm/dd/yyyy) that the prop	er Quiet Zone
,				
23b) Has the applicant obtained prior written con application?	sent trom the proper Quie	et Zone entity for the same	e technical parameters that are s	specified in this <u>Y</u> es <u>N</u> o
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o
2-7, 20 you propose to operate in an area that re-	quiles irequeries coordina	MIGH WITH INICAICU:		) <u>1</u> 03 <u>14</u> 0

Transmit Location					
1) Transmit location name: POLSON		2) Path number:			
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path			
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote Master ser	
Transmit Antenna					
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A			
7) Height to Center of Antenna AGL (meters): 12.5	8) Beamwidth (degrees 1.4	s):	<ul><li>Antenna Gain (dBi):</li><li>41.3</li></ul>		
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (c	dBi):	
13) Elevation (Tilt) Angle (degrees):  1.0	14) Polarization: <b>V</b>	1	15) Azimuth to RX Location o Repeater (degrees)	r Passive : 16.7	
16) Periscope Reflector Dimensions (meters): Height:  17) Periscope Reflector Separation (meters): Height:					
<ul><li>18) If the final receiver is located outside of the United States of the United State</li></ul>	nited States, enter the co	ountry in the space provided	and attach an exhibit explaini	ng circumstances.	
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w  If 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the Cattach waiver request ex	Seostationary Satellite Arc?	·	( N )Yes No	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	tal Calculations in the wavier	exnibit	
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	transmission path?		( ) <u>Y</u> es <u>N</u> o		
20c) Does the applicant certify that the proposed operation will not cause interference to an authorized satellite system? ( )Yes No					
Final Receiver					
21) Receiver Location Name:					
MOUNT AENEAS					
22) Receiver antenna manufacturer:		23) Pocciver antenna mod	dol numbor:		
Commscope	23) Receiver antenna model number: PL8-59F				
•	FLO-39F				
24) Receiver Call Sign:					
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beamwidth (degrees): 1.4		27) RX Antenna Gain (dBi): 41.5		
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Antenna Beamwidth (degrees):		30) Diversity RX Antenna Gai	n (dBi):	
31) RX Periscope Reflector Dimensions (meters): Height: Width:		32) RX Periscope Reflector	r Separation (meters):		

Transmit Location					
1) Transmit location name: POLSON		2) Path number: 2			
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path			
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote Master ser	
Transmit Antenna					
5) Antenna Manufacturer: Commscope		6) Antenna Model Number: HP10-59G	0.5 (10.5)		
7) Height to Center of Antenna AGL (meters): 12.5	8) Beamwidth (degrees 1.1	s):	9) Antenna Gain (dBi): 43.3		
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	(2) Diversity Antenna Gain (c	lBi):	
13) Elevation (Tilt) Angle (degrees):  1.0	14) Polarization:	1	<li>Azimuth to RX Location of Repeater (degrees)</li>	r Passive : 170.6	
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sep			
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided	and attach an exhibit explaini	ng circumstances.	
20) Does this filing add or modify emanations in the			he Geostationary Satellite	( <sub>N</sub> ) <u>Y</u> es <u>N</u> o	
Arc, or in the 12700 – 13250 MHz band pointed w If 'Yes', answer questions 20a, b and c below and	· ·				
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	tal Calculations in the wavier	exhibit	
20b) Does the applicant certify that there is no alternative to the proposed transmission path? Include explanation in waiver exhibit.				( ) <u>Y</u> es <u>N</u> o	
20c) Does the applicant certify that the proposed operation will not cause interference to an authorized satellite system? ( )Yes No					
Final Receiver					
21) Receiver Location Name:					
POINT SIX					
22) Receiver antenna manufacturer:  23) Receiver antenna model number:					
Commscope		HP10-59G			
24) Receiver Call Sign:					
25) Height to Center of RX Antenna AGL (meters): 7.6	AGL 26) RX Antenna Beamwidth (degr		27) RX Antenna Gain (dBi): 43.3	_	
28) Diversity RX Antenna Height AGL (meters):			0) Diversity RX Antenna Gain (dBi):		
31) RX Periscope Reflector Dimensions (meters): Height: Width:		32) RX Periscope Reflector	r Separation (meters):		

# Passive Repeaters (PR)

Transmit Location			
1) Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Paraira Parasta Information			
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:			
7) Passive Repeater Antenna Manufacturer:		8) Passive Repeater Ant	enna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	n:	14) Azimuth to RX Location or Next Passive Repeater:

### FCC Form 601 Schedule I

### Supplement 4

### **Frequency Data**

### **Transmitter Location Information**

	1) Transmit Location Name:	POLSON	2) Path Number:	1
ı				

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	72.5	30M0D7W (A)	150000.0	128TCM
	New 005945.20000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcater Edecirt OOA, me.		MDR-8706E -150	N			

1) Transmit Location Name: POLSON	2) Path Number: <b>2</b>

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	A Existing (if mod)		0.00100	74.5	30M0D7W (A)	150000.0	128TCM
	New 006063.80000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N			

### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:32:50

File Number: 0005688043

### FCC 601 Main Form

## FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code: MG	1a) Existing Radio Service Code:	public burden estimate
Gen	eral Information		
2)	MD - Modification RM - Ren	ewal/Modification WD - Withdrawal of Application EX	- Required Notifications - Requests for Extension of Time - Registered Location/Link
3a)		evelopmental License, De <u>m</u> onstration License, or a <u>S</u> pecial le and attach the required exhibit as described in the instruction	
3b)		nporary Authority due to an emergency situation, enter 'Y'; otherwion of situations considered to be an emergency.	vise enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amend on file with the FCC.	ment or Withdrawal, enter the file number of the pending applica-	ation currently File Number 0005688043
5)	License, or Administrative Update,	tion, Renewal Only, Renewal/Modification, Cancellation of Licer enter the call sign of the existing FCC license. ocation/Link, enter the FCC call sign assigned to the geographic	
6)	If this application is for a New, authorization expiration date (this i	Amendment, Renewal Only, or Renewal/Modification, enter tem is optional).	the requested MM DD
7)	applicable radio service rules four	ned in §1.929 of the Commission's rules when read in conjund in Parts 22 and 90 of the Commission's rules? (NOTE: This locations. See the instructions for applicability and full text of §1.9.	question only
8)	Are attachments being filed with thi	s application?	(γ) <u>Y</u> es <u>N</u> o
Fees	s, Waivers, and Exemptions		<u>'</u>
	s the applicant exempt from FCC ap	plication fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10)	Is the applicant exempt from FCC re	gulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11a		uest for a Waiver of the Commission's rule(s)? rule number(s) and explaining circumstances.	( <b>Y</b> ) <u>Y</u> es <u>N</u> o
11b	b) If 11a is 'Y', enter the number of	rule section(s) being waived.	Number of Rule Section(s): 2
12)		requested in this filing covered by grandfathered privileges, previ rintegrated with an existing station?	ously ( N ) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I I	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino	atino Male					
Asian	□No	ot Hispan	ic or Lat	or Latino Female					
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:				) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filling is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filling is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Allen Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u>N</u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u><b>Y</b></u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u> <b>N</b></u> о
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant Section 310(b)(4) of the Communications Act.	to		

Basic Qualification Questions

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?

51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of

### Aeronautical Advisory Station (Unicom) Certification

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership

53a) Will the requested facilities be used to provide multichannel video programming service?

() Yes No

53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest
(as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules

or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

### Broadband Radio Service and Educational Broadband Service (Part 27)

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes of the Commission's Rules?

Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( )Yes No

Note: If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate			
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o			
2a) If the answ FCC):	2a) If the answer to Item 1 is 'Yes', enter the pack identification number (required if the pack identification number has already been assigned by the FCC):							
2b) Pack Nam	ne:							
3) Type of Operation (refer to instructions) Check One Only:  ( X ) Permanent Fixed Point to Point ( )Multiple Address System (MAS) ( )Temporary Fixed/Mobile ( )Digital Electronic Message Service (DEMS)  4) Station Class:  FXO  5) DEMS only: SMS  FXO								
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?			
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o			
		Information  1 if not self-coordinated						
8) Frequency Coordination Number		9) Name of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date			
Broadcast A		l <b>y</b> 12a)	12b)		12c)			
If there is an associated Parent Station, provide:    Station								
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:			
Control Poin	t (Technical	Point of Contact)						
14) Action <b>A/M</b>		15) Locatio Street Address, City or Town, Co			16) Telephone Number			

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number:					
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:				
T Transmit Location			STEVENVILLE				
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Req	uired):					
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS.S): NAD83 ( <sub>W</sub> ) <u>E</u> or <u>W</u>				
46-30-40.8	( N ) N or S	114-06-03.5	( <b>W</b> ) <u>⊏</u> 01 <u>vv</u>				
9) Street Address, Name of Landing Area, or Otl	ner Location Description:	1					
0.6 km W of Main & 2nd St. Intersection							
10) City:	11) State:		12) County/Borough/Parish:				
Stevensville	МТ		RAVALLI				
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wit Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)				
, , ,	('b' in antenna struc		('c' in antenna structure example):				
1005.0	25.6		25.6				
16) Support Structure Type:  LTOWER							
17) Radius (km):							
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud					
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner) () <u>E</u> or <u>W</u>				
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?	( ) <u>Y</u> es <u>N</u> o				
21) Description: (only for Area of Operation Cod	e 'O')						
	,						
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signit	ficant ( <u>) Y</u> es <u>N</u> o				
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.							
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://_							
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are specified in this ( ) <u>Y</u> es <u>N</u> o				
24) Do you propose to operate in an area that requires frequency coordination with Mexico?  ( ) Yes No							

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>					
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:				
R Receive Location			POINT SIX				
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83			
47-02-22.9	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-59-17.1		( <b>w</b> ) <u>E</u> or <u>W</u>			
9) Street Address, Name of Landing Area, or Ot	her Location Description:						
10) City:	11) State:		12) County/Borough/Parish:				
12) Flouration of Cita AMCI (motors)	14) Overall Ht AGL Wi	th out	15) Overall Ht AGL With				
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters)				
2390.7	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):			
2550.7							
16) Support Structure Type:							
17) Radius (km):							
40) 14 (20 144 00 0)	MARGO	140 14 : 1 :	L (DDD 144 00 0)	NABOO			
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		<b>NAD83</b> ( ) <u>E</u> or <u>W</u>			
		•					
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o			
21) Description: (only for Area of Operation Cod	e 'O')						
	,						
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		on which may have a signi	ficant	( <u>) <b>Y</b></u> es <u>N</u> o			
If 'Yes', submit an environmental assessment as			data (a / lal/ a ) that the array	0.00			
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in item 23b of the	e instructions, provide the	uate (mm/dd/yyyy) that the prop	ei Quiet Zone			
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this							
application?	som nom me proper Quie	L Zone entity for the sallie	C tooriiiloai parairieters triat are s	) <u>Y</u> es <u>N</u> o			
24) Do you propose to operate in an area that re	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o			
2-7, 50 you propose to operate in an area that requires inequency coordination with mexico:							

### Path Data

Transmit Location				
1) Transmit location name: STEVENVILLE		2) Path number: 1		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	n-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to User to No	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A		
7) Height to Center of Antenna AGL (meters): 7.6	8) Beamwidth (degrees 1.4	s): 9	) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (d	Bi):
13) Elevation (Tilt) Angle (degrees):  1.0	14) Polarization: <b>H</b>	1	5) Azimuth to RX Location o Repeater (degrees):	r Passive : 8.3
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the United States of the United State</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainir	ng circumstances.
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w If 'Yes', answer questions 20a, b and c below and 20a) Angular Separation between main beam and	ithin 1.5 degrees of the Cattach waiver request ex	Seostationary Satellite Arc?	·	(N)Yes No
20a) Angulai Separation between main beam and	a Geostationary Satellite	Aic (degrees). Include Orbit	al Calculations in the wavier	EXIIIDIL.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
POINT SIX				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	del number:	
RFS		UA8-59A	aci number.	
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 7.6	26) RX Antenna Beam 1.5	width (degrees): 2	7) RX Antenna Gain (dBi): 41.6	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gair	n (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

### Supplement 4

### **Frequency Data**

### **Transmitter Location Information**

1) Transmit Location Name:	STEVENVILLE	2) Path Number: 1	

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	71.5	30M0D7W (A)	150000.0	128TCM
	New 006063.80000000						
	11) Transmitter Mai	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:34:23 File Number: 0005688044

### **FCC 601 Main Form**

MG

1) Radio Service Code:

### FCC Application for Wireless Telecommunications Bureau **Radio Service Authorization**

1a) Existing Radio Service Code:

Approved by OMB 3060 - 0798 See instructions for public burden estimate

MM

DD

(N )Yes No

(γ)<u>Y</u>es <u>N</u>o

Gen	eral Information	
2)	(Select only one) (AM)	
	NE - New RO - Renewal Only AU - Administrative Update NT - Required No	tifications
	MD - Modification RM - Renewal/Modification WD - Withdrawal of Application EX - Requests for	r Extension of Time
	AM - Amendment CA - Cancellation of License DU - Duplicate License RL - Registered	Location/Link
3a)	If this application is for a <u>D</u> evelopmental License, De <u>m</u> onstration License, or a <u>S</u> pecial Temporary Authorization (STA), enter the code and attach the required exhibit as described in the instructions. Otherwise enter ' <u>N</u> ' (Not Applicable).	( <b>N</b> ) <u>D M S <b>N</b></u> /A
3b)	If this application is for Special Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'.	( <u>)Y</u> es <b>N</b> o
	Refer to Rule 1.915 for an explanation of situations considered to be an emergency.	
4)	If this application is for an Amendment or Withdrawal, enter the file number of the pending application currently on file with the FCC.	File Number 0005688044
5)	If this application is for a Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate	Call Sign

License, or Administrative Update, enter the call sign of the existing FCC license.

authorization expiration date (this item is optional).

Are attachments being filed with this application?

If this is a request for Registered Location/Link, enter the FCC call sign assigned to the geographic license. If this application is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested

applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).

Is this application "major" as defined in §1.929 of the Commission's rules when read in conjunction with the

applicable radio service rules found in Parts 22 and 90 of the Commission's rules? (NOTE: This question only

Fees, Waivers, and Exemptions	
9) Is the applicant exempt from FCC application fees?	( N ) <u>Y</u> es <u>N</u> o
10) Is the applicant exempt from FCC regulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11a) Does this application include a request for a Waiver of the Commission's rule(s)?  If 'Yes', attach an exhibit providing rule number(s) and explaining circumstances.	( Y ) <u>Y</u> es <u>N</u> o
11b) If 11a is 'Y', enter the number of rule section(s) being waived.	Number of Rule Section(s): 2
12) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station?	(N) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I I	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	ino		☐ Fe	male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership			
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Co	mmis	sion's R	ules

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrativ	e Informati	ion	,		for public burden estimate		
		g filed as part of a pack?			( <b>N</b> ) <u>Y</u> es/ <u>N</u> o		
2a) If the answ FCC):	2a) If the answer to Item 1 is 'Yes', enter the pack identification number (required if the pack identification number has already been assigned by the FCC):						
2b) Pack Nam	ne:						
3) Type of Operation (refer to instructions) Check One Only:  ( X )Permanent Fixed Point to Point ( )Multiple Address System (MAS) ( )Temporary Fixed/Mobile ( )Digital Electronic Message Service (DEMS)  4) Station Class:  FXO							
along with major action	all minor Mod on was grante	odification, Renewal/Modification dification or Amendment requests drow the Commission, produce a	filed since you applied for a cumulative effect that would	new authorization or since the	e last or a major filing?		
7) Has freque	ency coordina	ation been completed for this appl	ication?		( <b>N</b> ) <u>Y</u> es/ <u>N</u> o		
Frequency Coordinator Information  Complete Items 8 through 11 if not self-coordinated							
8) Frequence Coordination N		9) Name of Frequency (	Coordinator	10) Telephone Number	11) Coordination Date		
Broadcast A		l <b>y</b> 12a)	12b)		12c)		
Parent Statio		Facility Id of Parent Station:	Radio Service of Parent Station:		Station Principal Community:		
If there is no as and completes		ent station, applicant certifies that	it is a Broadcast Network Er	13) State of Primary Op	eration:		
Control Poin	t (Technical	Point of Contact)					
14) Action <b>A/M</b>	14) 15) Action Location			16) Telephone Number			

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
T Transmit Location			WEST KNEE		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM			
48-00-54.1	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-21-04.7	( w) <u>l</u>	<u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Ot	her Location Description:	I.			
56.6 km North of Great Falls					
10) City:	11) State:		12) County/Borough/Parish:		
Great Falls	MT		CHOUTEAU		
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)		
(a in antenna structure example).	('b' in antenna stru		('c' in antenna structure example):		
1175.3	24.4		24.4		
	24.4		24.4		
16) Support Structure Type:					
LTOWER 17) Radius (km):					
Try Radias (Killy:					
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		0 <b>83</b> or <u>W</u>	
ose for restangle only (Northwest somer)	( ) <u>N</u> or <u>o</u>	Osc for restaingle only	( ) <u>-</u>	01 <u>vv</u>	
		-			
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?	( ) <u>Y</u> e	s <u>N</u> o	
21) Description: (only for Area of Operation Cod	e 'O')				
	,				
20) Model Occasion and Authorization	(b.) b	and the second second second			
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) Yes No environmental effect? See Section 1.1307 of 47 CFR.					
If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://					
23b) Has the applicant obtained prior written con	sent from the proper Quie	et Zone entity for the same	technical parameters that are specified i	n this	
application?		,		<u>N</u> o	
24) Do you propose to operate in an area that re	quires frequency coordina	ition with Mexico?	( ) <u>Y</u> es	3 <u>N</u> o	

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			MOUNT ROYAL		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	uired):			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83	
48-51-15.8	( N ) N or S	111-08-36.1		( <b>₩</b> ) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Ott	ner Location Description:	1			
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	thout	15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	vamnle):	
2349.7	(b iii anterna stru	cture example).	( c in america structure e	xampic):	
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		NAD83 ( ) <u>E</u> or <u>W</u>	
osciol restangle only (Northwest sollier)	( ) <u>N</u> 01 <u>0</u>	osc for restangle only	y (Northwest corner)	( ) <u>L</u> 01 <u>W</u>	
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o	
21) Description: (only for Area of Operation Cod	e 'O')				
22) Would Commission grant of Authorization for this location be an action which may have a significant () <u>Y</u> es <u>N</u> o					
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://					
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	pecified in this ) <b>Y</b> es <b>N</b> o	
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		<u> </u>	
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No					

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			HIGHWOOD		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83	
47-26-31.2	( <sub>N</sub> ) <u>N</u> or <u>S</u>	110-37-51.1		( <b>w</b> ) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Ot	her Location Description:				
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi	thout	15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (mo	eters)	Appurtenances (meters)		
2324.1	('b' in antenna stru	cture example):	('c' in antenna structure ex	xample):	
16) Support Structure Type:					
16) Support Structure Type.					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>	
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o	
21) Description: (only for Area of Operation Cod	e 'O')				
22) Would Commission grant of Authorization for this location be an action which may have a significant () Yes No					
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified:///					
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t ∠one entity for the same	e tecnnical parameters that are s (	pecified in this <u>) <b>Y</b></u> es <u>N</u> o	
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o	
2-7) Do you propose to operate in an area that requires frequency coordination with Mexico:					

### Path Data

Transmit Location				
1) Transmit location name: WEST KNEE		2) Path number: 1		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only on MAS  ( ) Master to Re ( ) Remote to M  DEMS  ( )Nodal to User ( )User to Nodal	mote aster
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD10-59A		
7) Height to Center of Antenna AGL (meters): 21.3	8) Beamwidth (degrees 1.2	s):	9) Antenna Gain (dBi): 43.2	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (dBi)	:
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization:	1	5) Azimuth to RX Location or P Repeater (degrees): 9.	assive 3
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sep	aration (meters):	
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a		circumstances.
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w If 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the C	Geostationary Satellite Arc?		N )Yes No
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	tal Calculations in the wavier exh	nibit
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	(	) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system? (	) <u>Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
MOUNT ROYAL				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	del number:	
RFS		PAD10-59A		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam 1.2	width (degrees): 2	7) RX Antenna Gain (dBi): 43.2	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gain (	dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

### FCC Form 601

Schedule I Supplement 2 Transmit I ocation

### Path Data

Transmit Location		<del></del>		
Transmit location name: WEST KNEE		2) Path number: 2		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User MAS ONLY ( )Fixed One-way Outbound Master ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only one per parts)  ( ) Master to Remote ( ) Remote to Master  DEMS ( )Nodal to User ( )User to Nodal	ath):
Transmit Antenna				
5) Antenna Manufacturer:	6	6) Antenna Model Number:		
RFS		PAD10-59A		
7) Height to Center of Antenna AGL (meters): 21.3	8) Beamwidth (degrees 1.2	,	9) Antenna Gain (dBi): 43.2	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):	
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 139.4	
16) Periscope Reflector Dimensions (meters): Height: Width:	1	17) Periscope Reflector Se	paration (meters):	
<ul><li>18) If the final receiver is located outside of the United States 19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided	and attach an exhibit explaining circums ( N )Yes	
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w			the Geostationary Satellite ( N )Yes	; <u>М</u> о
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	plaining circumstances.		
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	ital Calculations in the wavier exhibit	
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es	<u> <b>N</b></u> о
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	I satellite system? ( ) <u>Y</u> es	. <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
HIGHWOOD				
22) Receiver antenna manufacturer:		23) Receiver antenna mo	odel number:	
RFS		PAD10-59A		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL	26) RX Antenna Beam	width (degrees):	27) RX Antenna Gain (dBi):	
(meters): 6.1	1.2	. 3 -7	43.2	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):	
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecto	or Separation (meters):	

### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

### FCC Form 601 Schedule I

### Supplement 4

### **Frequency Data**

### **Transmitter Location Information**

	1) Transmit Location Name:	WEST KNEE	2) Path Number:	1
ı				

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	74.1	30M0D7W (A)	150000.0	128TCM
	New 006152.75000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1) Transmit Location Name: WEST KNEE	2) Path Number: 2

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	73.5	30M0D7W (A)	150000.0	128TCM
	New 005945.20000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control		3	
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N			

### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48a	03/12/2013

### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:35:47

File Number: 0005688045

### FCC 601 Main Form

## FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	·
	MG		
_			<u>-</u>
	neral Information		
2)		wal Only wal/Modification ellation of License  AU - Administrative Update WD - Withdrawal of Application DU - Duplicate License	NT - Required Notifications EX - Requests for Extension of Time RL – Registered Location/Link
3a)		relopmental License, De <u>m</u> onstration License, or a <u>\$</u> and attach the required exhibit as described in the instru	
3b)		porary Authority due to an emergency situation, enter 'Y'; on of situations considered to be an emergency.	therwise enter 'N'. ( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amendm on file with the FCC.	nent or Withdrawal, enter the file number of the pending a	pplication currently File Number 0005688045
5)	License, or Administrative Update, e	on, Renewal Only, Renewal/Modification, Cancellation of enter the call sign of the existing FCC license. cation/Link, enter the FCC call sign assigned to the geogra	·
6)	If this application is for a New, A authorization expiration date (this ite	Amendment, Renewal Only, or Renewal/Modification, erem is optional).	nter the requested MM DD
7)	applicable radio service rules found	ed in §1.929 of the Commission's rules when read in or I in Parts 22 and 90 of the Commission's rules? (NOTE: ations. See the instructions for applicability and full text of	This question only
8)	Are attachments being filed with this	application?	(γ) <u>Y</u> es <u>N</u> o
	s, Waivers, and Exemptions		
9)	Is the applicant exempt from FCC app	lication fees?	(N) <u>Y</u> es <u>N</u> o
10	) Is the applicant exempt from FCC re	gulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11		est for a Waiver of the Commission's rule(s)? rule number(s) and explaining circumstances.	( <b>Y</b> ) <u>Y</u> es <u>N</u> o
	b) If 11a is 'Y', enter the number of ru		Number of Rule Section(s): 2
12	<ul> <li>Are the frequencies or parameters re approved by waiver, or functionally</li> </ul>	equested in this filing covered by grandfathered privileges, integrated with an existing station?	previously ( N ) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity
☐ Consortium ☐ General Partnership 🗵	Limite	d Liability	y Compa	ıny	Limited	d Liabilit	y Partner	ship	
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I I	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	ino		☐ Fe	male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership			
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Co	mmis	sion's R	ules

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrat	ive Infor	mati	on				for public burden estimate
			g filed as part of a pack?				( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the ar	nswer to Ite	em 1	is 'Yes', enter the pack identifica	tion number (required if the p	pack identif	cation number has	already been assigned by the
2b) Pack N	ame:	,					
3) Type of Operation (refer to instructions) Check One Only:  ( X ) Permanent Fixed Point to Point ( )Multiple Address System (MAS) ( )Temporary Fixed/Mobile ( )Digital Electronic Message Service (DEMS)  4) Station Class:  FXO							
along wi major ad	th all minor	Mod rante	odification, Renewal/Modification lification or Amendment requests d by the Commission, produce a tion been completed for this app	s filed since you applied for a cumulative effect that would	new autho	rization or since the	e last
7) Has nee	uchey coo	Idilla	tion been completed for this app	ilication:			N ) <u>T</u> CS/ <u>N</u> O
			Information				
Complete Iter	ms 8 throu	gh 11	if not self-coordinated				
8) Freque Coordination			9) Name of Frequency	Coordinator	10) 11) Telephone Number Coordination Date		
Broadcast	Auxiliary	Onl	у				
	If there is an associated Parent Station, provide:    Station						
If there is no and complete		pare	nt station, applicant certifies tha	t it is a Broadcast Network E	ntity 13) \$	State of Primary Op	peration:
Control Po	int (Techi	nical	Point of Contact)				
14) Action <b>A/M</b>			15) Location Street Address, City or Town, Co	on ounty/Borough/Parish, State			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 1				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
T Transmit Location			HIGHWOOD			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	1-SS S):	NAD83		
	(N) N or S	, , ,	. 55.5).	( <b>w</b> ) <u>E</u> or <u>W</u>		
47-26-31.2		110-37-51.1				
9) Street Address, Name of Landing Area, or Ot	her Location Description:					
51.2 km East of Great Falls						
10) City:	11) State:		12) County/Borough/Parish:			
Great Falls	MT		CHOUTEAU			
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi		15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure exa	ample):		
2324.1						
	8.2		8.2			
16) Support Structure Type:						
BANT						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner)	( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	auires frequency coordina	ation with Canada?	(	<u>) Y</u> es <u>N</u> o		
			,	, <u> </u>		
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for		n which may have a signit		) <u>Y</u> es <u>N</u> o		
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.		N		
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prope	r Quiet Zone		
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are sp	ecified in this <u>) <b>Y</b></u> es <u>N</u> o		
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that requires frequency coordination with Mexico? ( ) Yes No						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>					
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:				
R Receive Location			FORT BENTON				
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83			
47-49-16.1	( <sub>N</sub> ) <u>N</u> or <u>S</u>	110-40-37.3		( <b>₩</b> ) <u>E</u> or <u>W</u>			
9) Street Address, Name of Landing Area, or Otl	her Location Description:	<u> </u>					
10) City:	11) State:		12) County/Borough/Parish:				
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	thout	15) Overall Ht AGL With				
('a' in antenna structure example):	Appurtenances (me	eters)	Appurtenances (meters)				
862.3	('b' in antenna stru	cture example):	('c' in antenna structure e	xampie):			
16) Support Structure Type:							
17) Radius (km):							
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83			
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>			
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o			
21) Description: (only for Area of Operation Cod	e 'O')						
	,						
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o			
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zone entity was notified: / /			date (mm/dd/yyyy) that the prop	er Quiet Zone			
,		. =					
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et ∠one entity for the same	e tecnnical parameters that are s )	pecified in this <u>) <b>Y</b></u> es <u>N</u> o			
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o			
24) Do you propose to operate in an area that requires frequency coordination with Mexico:							

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3					
3) Location Description:	4) Area of Operation C	4) Area of Operation Code:					
R Receive Location			GREAT FALLS				
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	•				
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83			
47-29-36.6	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-15-24.4		( <b>w</b> ) <u>E</u> or <u>W</u>			
9) Street Address, Name of Landing Area, or Otl	ner Location Description:						
10) City:	11) State:		12) County/Borough/Parish:				
7.7			,,				
40) Flooring (O'to AMO) (output)	44) 0   11   40   10	the second	45) O				
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wir Appurtenances (me	eters)	15) Overall Ht AGL With Appurtenances (meters)				
1064.9	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):			
40) O many Olympian Trans							
16) Support Structure Type:							
17) Radius (km):							
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83			
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>			
20) Do you propose to operate in an area that re	quires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o			
21) Description: (only for Area of Operation Cod	e 'O')						
	,						
22) Would Commission grant of Authorization for	or this location be an action	on which may have a signi	ificant	( <u>) Y</u> es <u>N</u> o			
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1.1308 and 1.1311.					
23a) If the site is located in one of the Quiet Zone entity was notified: / /				er Quiet Zone			
,							
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et ∠one entity for the same	e tecnnical parameters that are s )	pecified in this <u>) <b>Y</b></u> es <u>N</u> o			
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o			
24) Do you propose to operate in an area that requires frequency coordination with Mexico:							

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 4			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			WEST KNEE		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Req	uired):	1		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	И-SS.S):	NAD83	
48-00-54.1	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-21-04.7		( <b>₩</b> ) <u>E</u> or <u>W</u>	
Street Address, Name of Landing Area, or Other	por Location Description:	111-21-04.7			
9) Street Address, Name of Landing Area, of Oth	iei Location Description.				
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	hout	15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample).	
1175.3	(2 a	staro example).	(o iii ainoinia oii aotai o		
16) Support Structure Type:					
, , ,					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>	
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o	
21) Description: (only for Area of Operation Code	e 'O')				
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o	
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			0:17	
23a) If the site is located in one of the Quiet Zone entity was notified:/	es listed in Item 23b of the	instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone	
23b) Has the applicant obtained prior written con-	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	•	
application?				<u>) <b>Y</b></u> es <u>N</u> o	
24) Do you propose to operate in an area that rec	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o	

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 5				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
R Receive Location			LEWISTOWN			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	1-SS.S):	NAD83		
47-04-29.8	( <sub>N</sub> ) <u>N</u> or <u>S</u>	109-24-34.4		( <b>w</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	her Location Description:					
10) City:	11) State:		12) County/Borough/Parish:	-		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	vamnle).		
1219.2	( b iii aineilia sii a	otare example).	(o in antenna structure o	Kampio):		
40\ 0 O T						
16) Support Structure Type:						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>		
20) Do you propose to operate in an area that re	aguiros fraguesos coordina	ation with Canada?		/ You No		
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o		
environmental effect? See Section 1.1307 of 47	CFR.			· / <u>-</u> - · · <u>-</u> ·		
If 'Yes', submit an environmental assessment as 23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the prop	er Quiet Zone		
entity was notified:/		-				
23b) Has the applicant obtained prior written con	sent from the proper Quie	et Zone entity for the same	e technical parameters that are s	•		
application?				<u>) Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o		

Transmit Location			
Transmit location name: HIGHWOOD		2) Path number:	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	ı
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD6-59B	
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.8	s):	9) Antenna Gain (dBi): 38.7
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): -2.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 355.3
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):
18) If the final receiver is located outside of the Ur	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi			
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	cplaining circumstances.	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit
20b) Does the applicant certify that there is no alto Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	pperation will not cause in	nterference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o
Final Receiver			
21) Receiver Location Name:			
FORT BENTON			
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna mo	odel number:
24) Receiver Call Sign:		1	
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam	width (degrees):	27) RX Antenna Gain (dBi): 38.7
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecte	or Separation (meters):

Transmit Location				
Transmit location name: HIGHWOOD		2) Path number: 2		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only of MAS  ( ) Master to R ( ) Remote to N  DEMS  ( )Nodal to Use ( )User to Nodal	emote Master
Transmit Antenna				
5) Antenna Manufacturer: Commscope		S) Antenna Model Number: PL6-59E		
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.8	s): 9	) Antenna Gain (dBi): 38.9	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	Diversity Antenna Gain (dB	i):
13) Elevation (Tilt) Angle (degrees): -2.0	14) Polarization: <b>V</b>	1	5) Azimuth to RX Location or Repeater (degrees):	Passive 277.1
16) Periscope Reflector Dimensions (meters): Height: Width:		7) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>				N )Yes No
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w  If 'Yes', answer questions 20a, b and c below and	ithin 1.5 degrees of the G	Geostationary Satellite Arc?	ne Geostationary Satellite	(N) <u>Y</u> es <u>N</u> o
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	al Calculations in the wavier ex	chibit.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
GREAT FALLS				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	del number:	
RFS		PAD8-59A		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 7.6	26) RX Antenna Beams 1.4	width (degrees):	7) RX Antenna Gain (dBi): 41.3	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gain	(dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

Transmit Location				
Transmit location name: HIGHWOOD		2) Path number:		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	1	
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal	
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD10-59A		
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 43.2	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):	
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 320.0	
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):	
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	and attach an exhibit explaining circumstances.	
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o	
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi			the Geostationary Satellite $(N)$ Yes No	
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.		
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	ital Calculations in the wavier exhibit	
20b) Does the applicant certify that there is no altermine in Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o	
20c) Does the applicant certify that the proposed of	pperation will not cause in	nterference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o	
Final Receiver				
21) Receiver Location Name:				
WEST KNEE  22) Receiver antenna manufacturer:		23) Receiver antenna mo	odel number:	
RFS		PAD10-59A		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 21.3	26) RX Antenna Beam 1.2	width (degrees):	27) RX Antenna Gain (dBi): 43.2	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):	
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector Separation (meters):		

Transmit Location				
1) Transmit location name: HIGHWOOD		2) Path number: 4		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TIMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	h-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to I ( ) Remote to DEMS  ( )Nodal to Us ( )User to Node	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: RFS		S) Antenna Model Number: PAD8-59A	) A	
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.4	5):	<ul><li>Antenna Gain (dBi):</li><li>41.3</li></ul>	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees): 1	2) Diversity Antenna Gain (d	Bi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization: <b>V</b>	1	5) Azimuth to RX Location of Repeater (degrees):	Passive
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainir	ng circumstances.
20) Does this filing add or modify emanations in the	ne 5925-7075 MHz band	pointed within 2 degrees of t	he Geostationary Satellite	( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
Arc, or in the 12700 – 13250 MHz band pointed w	ithin 1.5 degrees of the G	Geostationary Satellite Arc?	,	N /—
If 'Yes', answer questions 20a, b and c below and 20a) Angular Separation between main beam and	•	,	al Calculations in the wavier $\epsilon$	exhibit.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( ) <u>Y</u> es <u>N</u> o
Final Bassiver				
Final Receiver 21) Receiver Location Name:				
LEWISTOWN				
		23) Receiver antenna mod	dal averal an	
22) Receiver antenna manufacturer:  RFS		PAD8-59A	del number.	
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 10.7	26) RX Antenna Beam	width (degrees):	7) RX Antenna Gain (dBi): 41.3	_
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gair	n (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### FCC Form 601 Schedule I

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

	1) Transmit Location Name:	HIGHWOOD	2) Path Number:	1
ı				

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	70.4	30M0D7W (A)	150000.0	128TCM
	New 006286.19000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1) Transmit Location Name: HIGHWOOD	2) Path Number: <b>2</b>
-------------------------------------	--------------------------

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	70.5	30M0D7W (A)	150000.0	128TCM
	New 006256.54000000						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control		3	
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1)	Transmit Location Name:	HIGHWOOD	2) Path Number:	3

#### **Frequency Information**

3) Action A/M/D	4) 55 Lower or Center Upp Frequency (MHZ) Frequ (MH	Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
Α	Existing (if mod)	0.00100	74.8	30M0D7W (A)	150000.0	128TCM
	New 006197.24000000					
	11) Transmitter Manufacture	er 12) Transmitte Model	Automatic Transmitter Power Control			
	Alcatel-Lucent USA, Inc.	MDR-8706E -150	N			

1) Transmit Location Name:	HIGHWOOD	2) Path Number: <b>4</b>	

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	72.8	30M0D7W (A)	150000.0	128TCM
	New 006226.89000000		-				
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

#### Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48 Response	03/12/2013

#### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:41:14

File Number: 0005688047

#### FCC 601 Main Form

### FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			See instructions for public burden estimate
1)	Radio Service Code:	1a) Existing Radio Service Code:	
	MG		
Gen	eral Information		
2)	MD - Modification RM - Ren	ewal/Modification WD - Withdrawal of Application EX	- Required Notifications - Requests for Extension of Time - Registered Location/Link
3a)		evelopmental License, De <u>m</u> onstration License, or a <u>S</u> pecial le and attach the required exhibit as described in the instruction	
3b)		nporary Authority due to an emergency situation, enter 'Y'; otherwion of situations considered to be an emergency.	wise enter 'N'. ( <u>)Y</u> es <u>N</u> o
4)	If this application is for an Amendon file with the FCC.	ment or Withdrawal, enter the file number of the pending application	ation currently File Number 0005688047
5)	License, or Administrative Update,	tion, Renewal Only, Renewal/Modification, Cancellation of Licer enter the call sign of the existing FCC license. ocation/Link, enter the FCC call sign assigned to the geographic	
6)	If this application is for a New, authorization expiration date (this i	Amendment, Renewal Only, or Renewal/Modification, enter tem is optional).	the requested MM DD
7)	applicable radio service rules four	ned in §1.929 of the Commission's rules when read in conjund in Parts 22 and 90 of the Commission's rules? (NOTE: This ications. See the instructions for applicability and full text of §1.9	question only
8)	Are attachments being filed with this	s application?	(γ) <u>Y</u> es <u>N</u> o
Fees	s, Waivers, and Exemptions		1
9) I	s the applicant exempt from FCC ap	plication fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
10)	Is the applicant exempt from FCC re	egulatory fees?	( <b>N</b> ) <u>Y</u> es <u>N</u> o
11a		uest for a Waiver of the Commission's rule(s)? rule number(s) and explaining circumstances.	( <b>Y</b> ) <u>Y</u> es <u>N</u> o
	b) If 11a is 'Y', enter the number of		Number of Rule Section(s): 2
12)		requested in this filing covered by grandfathered privileges, previ rintegrated with an existing station?	ously (N) <u>Y</u> es <u>N</u> o

Applicant Information									
13) FCC Registration Number (FRN): <b>0002526580</b>									
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation Unincorporated Association Trust Government Entity							ent Entity		
☐ Consortium ☐ General Partnership 🗵	☐ Consortium ☐ General Partnership 🗵 Limited Liability Company ☐ Limited Liability Partnership								
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)							
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:	
17) Legal Entity Name (if other than individual):	I.	I							
Charter Communications Operating, LLC									
18) Attention To:									
Alexis Anderten		-							
19) P.O. Box:	And/O	<i>'</i>	treet Ad						
		12	2444 Pc	werscou		1			
21) City:					22) State:		23) Zip C		
St. Louis					МО		63131		
24) Telephone Number:			2	5) FAX:					
(303)323-1423				(303)32	23-1313				
26) E-Mail Address:									
charterfcc@chartercom.com									
27) Demographics (Optional):									
Race:	Ethni		1			Gend			
American Indian or Alaska Native		spanic or	Latino			□ Ma	ale		
Asian	□No	ot Hispan	ic or Lat	Latino			male		
Black or African-American									
☐ Native Hawaiian or Other Pacific Islander									
White									
Real Party in Interest									
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:
applicant):									
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:
Steven		J	Hor						-
31) Company Name:		J	пог	/112					
Davis Wright Tremaine LLP									
32) Attention To:									
33) P.O. Box:	And	34) Str	eet Add	ess:					
	/Or	1			a Ave., NW, S	uite 80	0		
35) City:	1	1		36) State				Zip Code:	
Washington				DC				20006-340	)1
38) Telephone Number:			39	) FAX:					
(202)973-4228									
40) E-Mail Address:									
stevehorvitz@dwt.com									

# Regulatory Status 41) This filling is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filling is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Allen Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u>N</u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u><b>Y</b></u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u> <b>N</b></u> о
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant Section 310(b)(4) of the Communications Act.	to		

Basic Qualification Questions

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?

50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?

51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of

#### Aeronautical Advisory Station (Unicom) Certification

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership

53a) Will the requested facilities be used to provide multichannel video programming service?

() Yes No

53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest
(as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?

Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules

or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### Broadband Radio Service and Educational Broadband Service (Part 27)

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes of the Commission's Rules?

Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( )Yes No

Note: If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrat	ive Infor	mati	on				for public burden estimate
2a) If the ar	2a) If the answer to Item 1 is 'Yes', enter the pack identification number (required if the pack identification number has already been assigned by the FCC):						
2b) Pack N	ame:	,					
3) Type of Operation (refer to instructions) Check One Only:  ( X )Permanent Fixed Point to Point ( )18 GHz Low Power ( )Multiple Address System (MAS) ( )Temporary Fixed/Mobile ( )Digital Electronic Message Service (DEMS)  4) Station Class:  FXO							
along wi major ad	th all minor	Mod rante	odification, Renewal/Modification lification or Amendment requests d by the Commission, produce a tion been completed for this app	s filed since you applied for a cumulative effect that would	new autho	rization or since the	e last
7) Has nee	uchey coo	Idilla	tion been completed for this app	ilication:			N ) <u>T</u> CS/ <u>N</u> O
			Information				
Complete Iter	ms 8 throu	gh 11	if not self-coordinated				
8) Freque Coordination			9) Name of Frequency	Coordinator	Teleph	10) one Number	11) Coordination Date
Broadcast	Auxiliary	Onl	у				
	there is an associated arent Station, provide:  12a) Facility Id of Parent Station:  12b) Radio Service of Parent State of Parent Station Principal Communication:  12c) City and State of Parent Station Principal Communication:						
If there is no associated parent station, applicant certifies that it is a Broadcast Network Entity and completes Item 13.							
Control Po	int (Techi	nical	Point of Contact)				
14) Action <b>A/M</b>		15) Location Street Address, City or Town, County/Borough/Parish, State					16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>1</b>				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
T Transmit Location			MOUNT BALDY			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):	1			
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	N-SS.S):	NAD83		
48-19-04.7	( <sub>N</sub> ) <u>N</u> or <u>S</u>	113-09-15.4		( <b>₩</b> ) <u>E</u> or <u>W</u>		
9) Street Address, Name of Landing Area, or Ot	her Location Description:					
14.5 km SSE of East Glacier						
10) City:	11) State:		12) County/Borough/Parish:			
East Glacier	MT		GLACIER			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)			
(a in antenna structure example).	('b' in antenna stru		('c' in antenna structure e	example):		
2349.7	7.3		7.3			
	7.3		7.5			
16) Support Structure Type:						
T7) Radius (km):						
40) 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 14 (20 (20 (20 (20 (20 (20 (20 (20 (20 (20	NAPAS	140) 14	(DDD 144 00 0)	NABOO		
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		<b>NAD83</b> ( ) <u>E</u> or <u>W</u>		
		•				
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o		
21) Description: (only for Area of Operation Cod	e 'O')					
22) Would Commission grant of Authorization for this location be an action which may have a significant () Yes No						
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the prop	er Quiet Zone		
entity was notified:/						
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	specified in this <u>Y</u> es <u>N</u> o		
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o		

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
R Receive Location			MOUNT AENEAS			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):				
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	M-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>			
48-09-11.4	(N ) M OI O	113-55-46.7	( <b>w</b> ) ⊆ 51 <u></u>			
9) Street Address, Name of Landing Area, or Otl	ner Location Description:	1				
10) City:	11) State:		12) County/Borough/Parish:			
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure example):			
2154.9						
16) Support Structure Type:						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	de (DDD-MM-SS.S): NAD83			
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only				
20) Do you propose to operate in an area that re	auires frequency coordina	ation with Canada?	( <u>) Y</u> es <u>N</u> o			
			,			
21) Description: (only for Area of Operation Code	e O)					
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o						
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone						
entity was notified://						
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t ∠one entity for the same	e technical parameters that are specified in this ( <u>) <b>Y</b></u> es <u><b>N</b>o</u>			
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u> o			
, , , , , , , , , , , , , , , , , , , ,						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3				
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:			
R Receive Location			CUT BANK			
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Req	uired):				
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	M-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>			
48-37-35.9	(N ) N O S	112-19-10.7	( <b>W</b> ) ⊆ 01 <u>w</u>			
9) Street Address, Name of Landing Area, or Otl	her Location Description:	1				
10) City:	11) State:		12) County/Borough/Parish:			
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With			
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure example):			
1179.4						
16) Support Structure Type:						
17) Radius (km):						
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud				
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner) () <u>E</u> or <u>W</u>			
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?	( <u>) Y</u> es <u>N</u> o			
21) Description: (only for Area of Operation Code	e 'O')					
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) Yes No						
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.						
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified://						
23b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application?  ( ) Yes No						
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u> o			
2-1) Do you propose to operate in an area that requires frequency coordination with mexico:						

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 4						
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:					
R Receive Location			SHELBY					
6) FCC Antenna Structure Registration # or N/A	6) FCC Antenna Structure Registration # or N/A (FAA Notification not Required):							
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	M-SS.S):	NAD83				
48-30-45.6	( N ) N or S	111-50-52.5		( <b>w</b> ) <u>E</u> or <u>W</u>				
9) Street Address, Name of Landing Area, or Otl	9) Street Address, Name of Landing Area, or Other Location Description:							
10) City:	11) State:		12) County/Borough/Parish:					
io, oily.	(1) Glater		12) County/Boroughly anom					
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL Wir Appurtenances (mo		15) Overall Ht AGL With Appurtenances (meters)					
1025.3	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):				
.020.0								
16) Support Structure Type:								
17) Radius (km):								
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83				
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>				
20) Do you propose to operate in an area that re	quires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o				
21) Description: (only for Area of Operation Code	e 'O')							
22) Would Commission grant of Authorization for this location be an action which may have a significant ( ) <u>Y</u> es <u>N</u> o								
environmental effect? See Section 1.1307 of 47 CFR.  If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.								
23a) If the site is located in one of the Quiet Zones listed in Item 23b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified:///								
entity was notified:/								
24) Do you propose to operate in an area that requires frequency coordination with Mexico?  ( ) Yes No								

Transmit Location						
Transmit location name: MOUNT BALDY		2) Path number:				
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	ı			
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal			
Transmit Antenna						
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD10-59A				
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 43.2			
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):			
13) Elevation (Tilt) Angle (degrees):  0.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 252.6			
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):			
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.			
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o			
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w						
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	cplaining circumstances.				
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit			
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o			
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o			
Final Receiver						
21) Receiver Location Name:						
MOUNT AENEAS						
22) Receiver antenna manufacturer:  RFS  23) Receiver antenna model number:  PAD8-59A						
24) Receiver Call Sign:						
25) Height to Center of RX Antenna AGL (meters): 6.1	26) RX Antenna Beam  1.4	mwidth (degrees): 27) RX Antenna Gain (dBi): 41.3				
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):			
31) RX Periscope Reflector Dimensions (meters): Height:  32) RX Periscope Reflector Separation (meters): Width:						

Transmit Location				
Transmit location name: MOUNT BALDY		2) Path number: 2		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	n-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to I ( ) Remote to DEMS  ( )Nodal to Us ( )User to Nod	Remote Master ser
Transmit Antenna				
5) Antenna Manufacturer: RFS		Antenna Model Number: PAD8-59A		
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.4	s): 9	9) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (d	Bi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization: <b>V</b>	1	5) Azimuth to RX Location of Repeater (degrees):	Passive
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a	and attach an exhibit explainir	ng circumstances.
20) Does this filing add or modify emanations in th	oo 5025-7075 MHz band	pointed within 2 degrees of t	ha Gaostationary Satallita	
Arc, or in the 12700 – 13250 MHz band pointed w			ne Geostationary Satellite	( N )Yes No
If 'Yes', answer questions 20a, b and c below and	·		al Calaulatiana in the marine	la 1la 14
20a) Angular Separation between main beam and	a Geostationary Satellite	Arc (degrees). Include Orbit	ai Calculations in the wavier e	XIIIDIL.
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( <u>)Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
CUT BANK				
22) Receiver antenna manufacturer:		23) Receiver antenna mod	dal numbar:	
•		′	der Humber.	
Commscope		PL6-59E		
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 9.1	26) RX Antenna Beam	width (degrees): 2	7) RX Antenna Gain (dBi): 38.9	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gair	ı (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

Transmit Location					
Transmit location name: MOUNT BALDY		2) Path number: 3			
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path			
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to F ( ) Remote to  DEMS ( )Nodal to Us ( )User to Nod	Remote Master ser	
Transmit Antenna					
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD10-59A			
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.2	s):	9) Antenna Gain (dBi): 43.2		
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	(12) Diversity Antenna Gain (df	3i):	
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization:	1	5) Azimuth to RX Location or Repeater (degrees):	Passive 76.9	
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa			
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a		g circumstances.	
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed w			ne Geostationary Satellite	( N )Yes No	
If 'Yes', answer questions 20a, b and c below and		, ,	tal Calaulatiana in the marian	la lla la	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	tal Calculations in the wavier e	exhibit.	
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o	
20c) Does the applicant certify that the proposed	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o	
Final Receiver					
21) Receiver Location Name:					
SHELBY					
22) Receiver antenna manufacturer:		23) Receiver antenna mod	dal number:		
RFS		PAD10-59A	del Hullibel.		
24) Receiver Call Sign:					
25) Height to Center of RX Antenna AGL (meters): 16.8	26) RX Antenna Beam	width (degrees):	27) RX Antenna Gain (dBi): 43.2		
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	30) Diversity RX Antenna Gain (dBi):		
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	r Separation (meters):		

#### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### FCC Form 601 Schedule I

#### Supplement 4

#### **Frequency Data**

#### **Transmitter Location Information**

	1) Transmit Location Name:	MOUNT BALDY	2) Path Number:	1
1				

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	A Existing (if mod)		0.00100	74.5	30M0D7W (A)	150000.0	128TCM
	New 006152.75000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Albatol Edociti OoA, illo.		MDR-8706E -150	N			

1) Transmit Location Name:	MOUNT BALDY	2) Path Number: <b>2</b>

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type	
A	A Existing (if mod)		0.00100	72.6	30M0D7W (A)	150000.0	128TCM	
	New 005974.85000000							
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control				
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N				

1)	Transmit Location Name:	MOUNT BALDY	2) Path Number:	3

#### **Frequency Information**

3) Action A/M/D	4) 5) Lower or Center Frequency (MHZ) Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)	0.00100	74.8	30M0D7W (A)	150000.0	128TCM
	New 006093.45000000	-				
	11) Transmitter Manufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent USA, Inc.	MDR-8706E -150	N			

#### Attachment(s):

Type	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48 Response	03/12/2013

#### Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 03/14/2013 at 11:42:53

11b) If 11a is 'Y', enter the number of rule section(s) being waived.

approved by waiver, or functionally integrated with an existing station?

12) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously

File Number: 0005688049

#### FCC 601 Main Form

### FCC Application for Wireless Telecommunications Bureau Radio Service Authorization

Approved by OMB
3060 - 0798
See instructions for

			public burden estimate
1)		a) Existing Radio Service Code:	·
	MG		
<b>0</b>			
	eral Information		
2)	(Select only one) (AM)  NE - New RO - Renewal Only	AU - Administrative Update NT - Required No	tifications
	MD - Modification RM - Renewal/Modification		Extension of Time
		se <b>DU</b> - Duplicate License RL – Registered L	
3a)		cense, De <u>m</u> onstration License, or a <u>S</u> pecial Temporary required exhibit as described in the instructions. Otherwise	( <b>N</b> ) <b>D</b> <u>M</u> <u>S</u> <u>N</u> /A
3b)	If this application is for Special Temporary Authority Refer to Rule 1.915 for an explanation of situations	due to an emergency situation, enter 'Y'; otherwise enter 'N'. considered to be an emergency.	( ) <u>Y</u> es <u>N</u> o
4)	If this application is for an Amendment or Withdraw on file with the FCC.	wal, enter the file number of the pending application currently	File Number <b>0005688049</b>
5)	License, or Administrative Update, enter the call sig	nly, Renewal/Modification, Cancellation of License, Duplicate in of the existing FCC license.  er the FCC call sign assigned to the geographic license.	Call Sign
6)	If this application is for a New, Amendment, Reauthorization expiration date (this item is optional).	enewal Only, or Renewal/Modification, enter the requested	MM DD/_
7)	applicable radio service rules found in Parts 22 ar	f the Commission's rules when read in conjunction with the d 90 of the Commission's rules? (NOTE: This question only e instructions for applicability and full text of §1.929).	(N ) <u>Y</u> es <u>N</u> o
8)	Are attachments being filed with this application?		(γ) <u>Y</u> es <u>N</u> o
Fees	, Waivers, and Exemptions		1
9) I	s the applicant exempt from FCC application fees?		( N ) <u>Y</u> es <u>N</u> o
10)	Is the applicant exempt from FCC regulatory fees?		( <b>N</b> ) <u>Y</u> es <u>N</u> o
11a	) Does this application include a request for a Waive		( Y ) <u>Y</u> es <u>N</u> o
	If 'Yes', attach an exhibit providing rule number(s) a	and explaining circumstances.	

Number of Rule Section(s): 2

(**N**)<u>Y</u>es <u>N</u>o

Applicant Information										
13) FCC Registration Number (FRN): <b>0002526580</b>										
14) Applicant/Licensee legal entity type: (Select One ) Individual Corporation	Unince	orporated	d Associa	ation	Trust			Governm	ent Entity	
☐ Consortium ☐ General Partnership ☒ Limited Liability Company ☐ Limited Liability Partnership										
☐ Limited Partnership ☐ Other (Description of L	.egal Eı	ntity)								
15) If the licensee name is being updated, is the updat to another party and for which proper Commission provided?								( )	<u>Y</u> es <u>N</u> o	
16) First Name (if individual):		MI: L	ast Nam	e:				Suffix:		
17) Legal Entity Name (if other than individual):	I.	I								
Charter Communications Operating, LLC										
18) Attention To:										
Alexis Anderten		-								
19) P.O. Box:	And/O	<i>'</i>	treet Ad							
		12	2444 Pc	werscou		1				
21) City:					22) State:		23) Zip C			
St. Louis					МО		63131			
24) Telephone Number:			2	5) FAX:						
(303)323-1423				(303)32	23-1313					
26) E-Mail Address:										
charterfcc@chartercom.com										
27) Demographics (Optional):										
Race:	Ethni		1			Gend				
American Indian or Alaska Native		spanic or	Latino	no Male						
Asian	□No	ot Hispan	ic or Lat	r Latino Female				е		
Black or African-American										
☐ Native Hawaiian or Other Pacific Islander										
White										
Real Party in Interest										
28) Name of Real Party in Interest of Applicant (If differently)	ent from	)	29	FCC Reg	istration Numbe	r (FRN)	of Real F	Party in Inte	rest:	
applicant):										
Contact Information (If different from the applicant)  30) First Name:		MI:	Last	Name:					Suffix:	
Steven		J	Hor						-	
31) Company Name:		J	пог	/112						
Davis Wright Tremaine LLP										
32) Attention To:										
33) P.O. Box:	And	34) Str	eet Add	ess:						
	/Or	1			a Ave., NW, S	uite 80	0			
35) City:	1	1		36) State				Zip Code:		
Washington				DC				20006-340	)1	
38) Telephone Number:			39	) FAX:						
(202)973-4228										
40) E-Mail Address:										
stevehorvitz@dwt.com										

# Regulatory Status 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): ( )Common Carrier ( )Non-Common Carrier (X )Private, internal communications ( )Broadcast Services ( )Band Manager Type of Radio Service 42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply): (X )Fixed ( )Mobile ( )Radiolocation ( )Satellite (sound) ( )Broadcast Services 43) Interconnected Service? ( N )Yes No Alien Ownership Questions 44) Is the applicant a foreign government or the representative of any foreign government? ( N )Yes No 45) Is the applicant an alien or the representative of an alien? ( )Yes No

Alien Ownership Questions			
44) Is the applicant a foreign government or the representative of any foreign government?	( N	) <u><b>Y</b></u> es	<u><b>N</b></u> o
45) Is the applicant an alien or the representative of an alien?	(	) <u>Y</u> es	<u>N</u> o
46) Is the applicant a corporation organized under the laws of any foreign government?	(	) <u>Y</u> es	<u>N</u> o
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	(	) <u>Y</u> es	<u>N</u> o
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	(	) <u>Y</u> es	<u>N</u> o
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	:0		

# Basic Qualification Questions 49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? 50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court? 51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?

#### Aeronautical Advisory Station (Unicom) Certification

Item 11a must be answered 'Y'

52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.

Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership			
53a) Will the requested facilities be used to provide multichannel video programming service?	(	) <u>Y</u> es <u>l</u>	<u>N</u> o
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	(	) <u>Y</u> es <u>I</u>	<u>1</u> 0
Note: If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Co	mmis	sion's R	ules

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

Broadband Radio Service and Educational Broadband Service (Part 27)	
54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 ( )Yes	<b>N</b> o
of the Commission's Rules?	
Note: If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules of	or
justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules? ( ) $\underline{Y}$ es	<u>N</u> o
Note: If the answer to item 55 is 'N' attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested	2d

#### **General Certification Statements**

- The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application
- The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules. \*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of 3) this application, and are true, complete, correct, and made in good faith.
- The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this 5) application, or (3) is not required to file ownership data under the Commission's rules.
- The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested
- The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency

#### Signature

56) Typed or Printed Name of Party Authorized to Sign				
First Name:	MI:	Last Name:	Suffi	x:
Saconna		Blair		
57) Title:			•	
VP of Technical Operations				
Signature:			58) Date:	
Saconna Blair			03/14/2013	

#### FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.

Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18. §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).

FCC 601 Schedule I

# Technical Data Schedule for the Fixed Microwave and Microwave Broadcast Auxiliary Services (Parts 101 and 74)

Approved by OMB 3060 - 0798 See 601 Main Form Instructions

Administrat	ive Infor	mati	on				for public burden estimate
			g filed as part of a pack?				( <b>N</b> ) <u>Y</u> es/ <u>N</u> o
2a) If the ar	nswer to Ite	em 1	is 'Yes', enter the pack identifica	tion number (required if the p	pack identif	cation number has	already been assigned by the
2b) Pack N	ame:	,					
()	( )Permane )Multiple )Tempora )Digital E	ent Fi Addr ary Fi lectro	r to instructions) Check One On exed Point to Point ess System (MAS) xed/Mobile onic Message Service (DEMS)	( )18 GHz Low Power ( )31 GHz ( )38 GHz	FXO	on Class:	5) DEMS only: SMSA:
along wi major ad	th all minor	Mod rante	odification, Renewal/Modification lification or Amendment requests d by the Commission, produce a tion been completed for this app	s filed since you applied for a cumulative effect that would	new autho	rization or since the	e last
7) Has nee	uchey coo	Idilla	tion been completed for this app	ilication:			N ) <u>T</u> CS/ <u>N</u> O
			Information				
Complete Iter	ms 8 throu	gh 11	if not self-coordinated				
8) Freque Coordination			9) Name of Frequency	Coordinator	Teleph	10) one Number	11) Coordination Date
Broadcast	Auxiliary	Onl	у				
If there is a Parent Sta			12a) Facility Id of Parent Station:	12b) Radio Service of Parent Station:	City a		12c) Station Principal Community:
If there is no and complete		pare	nt station, applicant certifies tha	t it is a Broadcast Network E	ntity 13) \$	State of Primary Op	peration:
Control Po	int (Techi	nical	Point of Contact)				
14) Action <b>A/M</b>			15) Location Street Address, City or Town, Co	on ounty/Borough/Parish, State			16) Telephone Number

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 1		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
T Transmit Location			MOUNT ROYAL	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	juired):		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	I-SS.S): NAD83 ( w) <u>E</u> or	
48-51-15.8	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-08-36.1	( <b>W</b> ) ⊆ OI	<u>vv</u>
9) Street Address, Name of Landing Area, or Ot	her Location Description:			
45.1 km NNWof Chester				
10) City:	11) State:		12) County/Borough/Parish:	
Chester	МТ		LIBERTY	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)	
(a in antenna structure example).	('b' in antenna stru		('c' in antenna structure example):	
2349.7				
	6.1		6.1	
16) Support Structure Type:			<u> </u>	
BANT				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner) ( ) $\underline{E}$ or $\underline{V}$	<u>N</u>
20) Do you propose to operate in an area that re	aguiros fraguesos acordina	otion with Conodo?	( ) Yes I	No
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?	( <u>) Y</u> es <u>I</u>	<u>4</u> 0
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for	or this location be an actio	n which may have a signif	icant ( <u>) Y</u> es <u>N</u>	lo.
environmental effect? See Section 1.1307 of 47	CFR.		N /	•
If 'Yes', submit an environmental assessment as 23a) If the site is located in one of the Quiet Zono			date (mm/dd/yyyy) that the proper Quiet Zon	e
entity was notified:/				
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	technical parameters that are specified in th	
				l.
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u>	0

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: <b>2</b>		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			HAVRE	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	M-SS.S):	NAD83
48-33-13.8	( <sub>N</sub> ) <u>N</u> or <u>S</u>	109-42-50.5		( <b>w</b> ) <u>E</u> or <u>W</u>
Street Address, Name of Landing Area, or Ott	her Location Description:	103-42-30.3		
3) Street Address, Name of Landing Alea, of Other	ner Location Description.			
10) City:	11) State:		12) County/Borough/Parish:	
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With	
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample):
797.8	(1		(*	
16) Support Structure Type:				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) Y</u> es <u>N</u> o
				· / <b>_</b> _
21) Description: (only for Area of Operation Cod	e 'O')			
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			0:7
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are s	pecified in this ) <u>Y</u> es <u>N</u> o
24) Do you propose to operate in an area that re-	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o
2.7, 23 you propose to operate in air area that le	quillo iroquorioy ocoitulia	alon with Monioo:		, <u>1</u> 00 <u>11</u> 0

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 3	
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:
R Receive Location			CUT BANK
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Req	uired):	
7) Latitude (DD-MM-SS.S):	NAD83 ( <sub>N</sub> ) <u>N</u> or <u>S</u>	8) Longitude (DDD-MM	M-SS.S): NAD83 ( w) <u>E</u> or <u>W</u>
48-37-35.9	(N ) N O S	112-19-10.7	( <b>W</b> ) ⊆ 01 <u>w</u>
9) Street Address, Name of Landing Area, or Otl	her Location Description:	1	
10) City:	11) State:		12) County/Borough/Parish:
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit		15) Overall Ht AGL With
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure example):
1179.4			
16) Support Structure Type:			
17) Radius (km):			
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	(Northwest corner) () <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?	( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Code	e 'O')		
	,		
22) Would Commission grant of Authorization for		n which may have a signit	ficant ( ) <u>Y</u> es <u>N</u> o
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect		
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the proper Quiet Zone
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	t Zone entity for the same	e technical parameters that are specified in this  ( ) Yes No
24) Do you propose to operate in an area that re	quires frequency coordina	tion with Mexico?	( ) <u>Y</u> es <u>N</u> o
, systems is applied in all all all all all all all all all al	,		, <u>1</u> 35 <u>II</u> 6

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 4		
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:	
R Receive Location			WEST KNEE	
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Req	uired):	1	
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MM	И-SS.S):	NAD83
48-00-54.1	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-21-04.7		( <b>₩</b> ) <u>E</u> or <u>W</u>
Street Address, Name of Landing Area, or Other	por Location Description:	111-21-04.7		
9) Street Address, Name of Landing Area, of Oth	iei Location Description.			
10) City:	11) State:		12) County/Borough/Parish:	
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wit	hout	15) Overall Ht AGL With	
('a' in antenna structure example):	Appurtenances (me		Appurtenances (meters) ('c' in antenna structure e	xample).
1175.3	(2 a	staro example).	(o iii ainoinia oii aotai o	
16) Support Structure Type:				
, , ,				
17) Radius (km):				
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud		NAD83
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only	y (Northwest corner)	( ) <u>E</u> or <u>W</u>
20) Do you propose to operate in an area that re	quires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o
21) Description: (only for Area of Operation Code	e 'O')			
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect			0:17
23a) If the site is located in one of the Quiet Zone entity was notified:/	es listed in Item 23b of the	instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone
23b) Has the applicant obtained prior written con-	sent from the proper Quie	t Zone entity for the same	e technical parameters that are s	•
application?				<u>) <b>Y</b></u> es <u>N</u> o
24) Do you propose to operate in an area that rec	quires frequency coordina	tion with Mexico?		) <u>Y</u> es <u>N</u> o

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 5			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			CONRAD		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	Л-SS.S):	NAD83	
48-11-10.9	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-56-19.5		( <b>₩</b> ) <u>E</u> or <u>W</u>	
	nor Landian Depariation	111-30-19.3			
9) Street Address, Name of Landing Area, or Otl	ner Location Description:				
10) City:	11) State:		12) County/Borough/Parish:		
13) Elevation of Site AMSL (meters)	14) Overall Ht AGL Wi	thout	15) Overall Ht AGL With		
('a' in antenna structure example):	Appurtenances (mo	eters)	Appurtenances (meters)	vomala).	
1078.1	('b' in antenna stru	cture example):	('c' in antenna structure e	xampie):	
10) 0					
16) Support Structure Type:					
17) Radius (km):					
18) Maximum Latitude (DD-MM-SS.S):	NAD83	19) Maximum Longitud	de (DDD-MM-SS.S):	NAD83	
Use for rectangle only (Northwest corner)	( ) <u>N</u> or <u>S</u>	Use for rectangle only		( ) <u>E</u> or <u>W</u>	
		ii iii 0 1 0		, N. N.	
20) Do you propose to operate in an area that re	equires frequency coordinate	ation with Canada?		( <u>) <b>Y</b></u> es <u><b>N</b></u> o	
21) Description: (only for Area of Operation Cod	e 'O')				
22) Would Commission grant of Authorization for	or this location be an action	on which may have a signi	ficant	( <u>) Y</u> es <u>N</u> o	
environmental effect? See Section 1.1307 of 47 If 'Yes', submit an environmental assessment as		tions 1 1308 and 1 1311			
23a) If the site is located in one of the Quiet Zone			date (mm/dd/yyyy) that the prop	er Quiet Zone	
entity was notified:/					
23b) Has the applicant obtained prior written con application?	sent from the proper Quie	et Zone entity for the same	e technical parameters that are s (	pecified in this ) <u>Y</u> es <u>N</u> o	
24) Do you propose to operate in an area that re-	quires frequency coordina	ation with Mexico?		) <u>Y</u> es <u>N</u> o	
24) Bo you propose to operate in an area that requires nequency coordination with wexico:					

1) Action Requested: ( A ) Add Mod	<u>D</u> el	2) Location Number: 6			
3) Location Description:	4) Area of Operation C	ode:	5) Location Name:		
R Receive Location			SHELBY		
6) FCC Antenna Structure Registration # or N/A	(FAA Notification not Rec	quired):	1		
7) Latitude (DD-MM-SS.S):	NAD83	8) Longitude (DDD-MN	1-SS.S):	NAD83	
48-30-45.6	( <sub>N</sub> ) <u>N</u> or <u>S</u>	111-50-52.5		( <b>w</b> ) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Ot	her Location Description:				
10) City:	11) State:		12) County/Borough/Parish:		
			(5) 0 1111 101 1111		
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):	14) Overall Ht AGL With Appurtenances (me		15) Overall Ht AGL With Appurtenances (meters)		
1025.3	('b' in antenna stru	cture example):	('c' in antenna structure e	xample):	
1025.5					
16) Support Structure Type:					
17) Radius (km):					
, , ,					
18) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)	<b>NAD83</b> ( ) <u>N</u> or <u>S</u>	19) Maximum Longitud Use for rectangle only		<b>NAD83</b> ( ) <u>E</u> or <u>W</u>	
, , , , , , , , , , , , , , , , , , , ,	( ,		, (	( /= -	
20) Do you propose to operate in an area that re	equires frequency coordina	ation with Canada?		( <u>) Y</u> es <u>N</u> o	
21) Description: (only for Area of Operation Cod	e 'O')				
,, ,	,				
22) Would Commission grant of Authorization for environmental effect? See Section 1.1307 of 47		n which may have a signi	ficant	( <u>) <b>Y</b></u> es <u>N</u> o	
If 'Yes', submit an environmental assessment as	required by 47 CFR, Sect		detection of the control of the control	0.001.7	
23a) If the site is located in one of the Quiet Zone entity was notified://	es listed in Item 23b of the	Instructions, provide the	date (mm/dd/yyyy) that the prop	er Quiet Zone	
23b) Has the applicant obtained prior written con	sent from the proper Quio	at Zone entity for the same	a technical parameters that are s	necified in this	
application?	sent nom the proper Quie	a Zone entity for the Same	technical parameters that are s	) <b>Y</b> es <b>N</b> o	
24) Do you propose to operate in an area that re	quires frequency coordina	ition with Mexico?		) <u>Y</u> es <u>N</u> o	
24) Bo you propose to operate in an area that requires frequency coordination with mexico:					

Transmit Location				
Transmit location name: MOUNT ROYAL		2) Path number: 1		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path		
4a) For MAS or DEMS only, MAS or DEMS Sub-TMAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only of MAS  ( ) Master to R ( ) Remote to R  DEMS  ( )Nodal to Us ( )User to Nod	emote Master er
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A	0 : (10)	
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	2) Diversity Antenna Gain (dE	Bi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization:	1	5) Azimuth to RX Location or Repeater (degrees):	Passive 107.1
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Sepa		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>	nited States, enter the co	ountry in the space provided a		g circumstances.
	- 5005 7075 MHz h			
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed w			ne Geostationary Satellite	( N )Yes No
If 'Yes', answer questions 20a, b and c below and	•	, ,		
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orbit	tal Calculations in the wavier ex	xhibit
20b) Does the applicant certify that there is no alt Include explanation in waiver exhibit.	ernative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause i	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
HAVRE				
		(22) Deseiver enteres	dal averal au	
22) Receiver antenna manufacturer: RFS		23) Receiver antenna mod PAD8-59A	del number:	
24) Receiver Call Sign:				
25) Height to Center of RX Antenna AGL (meters): 16.8	26) RX Antenna Beam 1.4	width (degrees):	7) RX Antenna Gain (dBi): 41.3	
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth 3	0) Diversity RX Antenna Gain	(dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflector	Separation (meters):	

Transmit Location					
Transmit location name	MOUNT ROYAL		2) Path number: 2		
3) Action Requested: ( A	) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	١	
, ,	-way	( )Multiple Two Master-Remo	o-way ote/Nodal-User e-way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote o Master
Transmit Antenna					
5) Antenna Manufacturer: RFS			6) Antenna Model Number: PAD8-59A		
7) Height to Center of Ant 6.1	enna AGL (meters):	8) Beamwidth (degree 1.4	s):	<ul><li>9) Antenna Gain (dBi):</li><li>41.3</li></ul>	
10) Diversity Antenna He	ght AGL (meters):	11) Diversity Beamwid	Ith (degrees):	12) Diversity Antenna Gain (d	dBi):
13) Elevation (Tilt) Angle -1.0	(degrees):	14) Polarization:		15) Azimuth to RX Location of Repeater (degrees)	or Passive : 254.1
16) Periscope Reflector D Height:	imensions (meters): Width:		17) Periscope Reflector Se		
18) If the final receiver is I	ocated outside of the U	Inited States, enter the co	ountry in the space provided	d and attach an exhibit explaini	ng circumstances.
19) Does this path include	passive repeater?				( N )Yes No
			pointed within 2 degrees of Geostationary Satellite Arc?	the Geostationary Satellite	( N )Yes No
If 'Yes', answer questions	20a, b and c below and	d attach waiver request ex	xplaining circumstances.		
20a) Angular Separation I	oetween main beam ar	d Geostationary Satellite	Arc (degrees). Include Orb	pital Calculations in the wavier	exhibit
20b) Does the applicant of Include explanation is	•	ternative to the proposed	transmission path?		( <u>)Y</u> es <u>N</u> o
20c) Does the applicant ce	rtify that the proposed	operation will not cause i	nterference to an authorized	d satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver					
21) Receiver Location Na	me:				
CUT BANK  22) Receiver antenna ma	outacturer:		23) Receiver antenna mo	odel number:	
RFS	idiacidici.		PAD8-59A	oder Humber.	
24) Receiver Call Sign:					
25) Height to Center of RX (meters): 10.7	( Antenna AGL	26) RX Antenna Beam 1.4	width (degrees):	27) RX Antenna Gain (dBi): 41.3	_
28) Diversity RX Antenna (meters):	Height AGL	29) Diversity RX Anten (degrees):	nna Beamwidth	30) Diversity RX Antenna Gai	in (dBi):
31) RX Periscope Reflect Height:	or Dimensions (meters Widt		32) RX Periscope Reflecte	or Separation (meters):	

Transmit Location			
Transmit location name: MOUNT ROYAL		2) Path number:	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	1
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User o-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD10-59A	
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 43.2
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization:		15) Azimuth to RX Location or Passive Repeater (degrees): 189.4
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	and attach an exhibit explaining circumstances.
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi			the Geostationary Satellite $(N)$ Yes No
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	xplaining circumstances.	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit.
20b) Does the applicant certify that there is no alternation in waiver exhibit.	ernative to the proposed	transmission path?	( <u>)Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	pperation will not cause in	nterference to an authorized	d satellite system? ( ) <u>Y</u> es <u>N</u> o
Final Receiver			
21) Receiver Location Name:			
WEST KNEE  22) Receiver antenna manufacturer:		23) Receiver antenna mo	odel number:
RFS		PAD10-59A	
24) Receiver Call Sign:			
25) Height to Center of RX Antenna AGL (meters): 21.3	26) RX Antenna Beam  1.2	width (degrees):	27) RX Antenna Gain (dBi): 43.2
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflecto	or Separation (meters):

Transmit Location				
Transmit location name: MOUNT ROYAL		2) Path number: 4		
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	P	
4a) For MAS or DEMS only, MAS or DEMS Sub- MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	o-way ote/Nodal-User -way Outbound Master	4b) Path code (Enter only MAS  ( ) Master to ( ) Remote to DEMS  ( )Nodal to U ( )User to No	Remote o Master Jser
Transmit Antenna				
5) Antenna Manufacturer: RFS		6) Antenna Model Number: PAD8-59A		
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees 1.4		9) Antenna Gain (dBi): 41.3	
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwidt	th (degrees):	12) Diversity Antenna Gain (d	dBi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization:		15) Azimuth to RX Location of Repeater (degrees)	or Passive 1: 218.6
16) Periscope Reflector Dimensions (meters): Height: Width:	1	17) Periscope Reflector Sep		
<ul><li>18) If the final receiver is located outside of the U</li><li>19) Does this path include passive repeater?</li></ul>				( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in the Arc, or in the 12700 – 13250 MHz band pointed with 'Yes', answer questions 20a, b and c below and	vithin 1.5 degrees of the G	Beostationary Satellite Arc?	the Geostationary Satellite	( N )Yes No
20a) Angular Separation between main beam an	d Geostationary Satellite	Arc (degrees). Include Orb	ital Calculations in the wavier	exhibit
20b) Does the applicant certify that there is no all Include explanation in waiver exhibit.	ternative to the proposed	transmission path?		( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed	operation will not cause in	nterference to an authorized	satellite system?	( <u>)Y</u> es <u>N</u> o
Final Receiver				
21) Receiver Location Name:				
CONRAD		100) 5		
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna mo	odel number:	
24) Receiver Call Sign:		I.		
25) Height to Center of RX Antenna AGL (meters): 10.7	26) RX Antenna Beam	width (degrees):	27) RX Antenna Gain (dBi): 41.3	_
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anteni (degrees):	na Beamwidth	30) Diversity RX Antenna Ga	in (dBi):
31) RX Periscope Reflector Dimensions (meters Height: Width		32) RX Periscope Reflecto	or Separation (meters):	

Transmit Location		_	
Transmit location name: MOUNT ROYAL		2) Path number: 5	
3) Action Requested: ( A ) Add New Path	Modify Existing Path	<u>D</u> elete Existing Path	า
4a) For MAS or DEMS only, MAS or DEMS Sub-T MAS or DEMS  ( )Fixed Two-way Master-Remote/Nodal-User  MAS ONLY ( )Fixed One-way Outbound Master  ( )Fixed One-way Inbound Master	( )Multiple Two Master-Remo	n-way ote/Nodal-User n-way Outbound Master	4b) Path code (Enter only one per path):  MAS  ( ) Master to Remote ( ) Remote to Master  DEMS  ( )Nodal to User ( )User to Nodal
Transmit Antenna			
5) Antenna Manufacturer: RFS		Antenna Model Number: PAD8-59A	:
7) Height to Center of Antenna AGL (meters): 6.1	8) Beamwidth (degrees	s):	9) Antenna Gain (dBi): 41.3
10) Diversity Antenna Height AGL (meters):	11) Diversity Beamwid	th (degrees):	12) Diversity Antenna Gain (dBi):
13) Elevation (Tilt) Angle (degrees): -1.0	14) Polarization: <b>V</b>		15) Azimuth to RX Location or Passive Repeater (degrees): 234.0
16) Periscope Reflector Dimensions (meters): Height: Width:		17) Periscope Reflector Se	paration (meters):
18) If the final receiver is located outside of the U	nited States, enter the co	ountry in the space provided	d and attach an exhibit explaining circumstances.
19) Does this path include passive repeater?			( <sub>N</sub> ) <u>Y</u> es <u>N</u> o
20) Does this filing add or modify emanations in th Arc, or in the 12700 – 13250 MHz band pointed wi			
If 'Yes', answer questions 20a, b and c below and	attach waiver request ex	cplaining circumstances.	
20a) Angular Separation between main beam and	d Geostationary Satellite	Arc (degrees). Include Orb	oital Calculations in the wavier exhibit
20b) Does the applicant certify that there is no altermine in Include explanation in waiver exhibit.	ernative to the proposed	transmission path?	( ) <u>Y</u> es <u>N</u> o
20c) Does the applicant certify that the proposed of	operation will not cause in	nterference to an authorize	d satellite system? ( ) <u>Y</u> es <u>N</u> o
Final Receiver			
21) Receiver Location Name:			
SHELBY		22) Desciver entenne m	odel number
22) Receiver antenna manufacturer:  RFS		23) Receiver antenna me	oder number.
24) Receiver Call Sign:			
25) Height to Center of RX Antenna AGL (meters): 16.8	26) RX Antenna Beam  1.4	width (degrees):	27) RX Antenna Gain (dBi): 41.3
28) Diversity RX Antenna Height AGL (meters):	29) Diversity RX Anten (degrees):	na Beamwidth	30) Diversity RX Antenna Gain (dBi):
31) RX Periscope Reflector Dimensions (meters) Height: Width		32) RX Periscope Reflect	or Separation (meters):

### Passive Repeaters (PR)

Transmit Location			
Transmit Location Name:		2) Path Number:	
3) Action Requested: ( ) Add New Passive	Repeater <u>M</u> odify Existin	g Passive Repeater	<u>D</u> elete Existing Passive Repeater
Passive Repeater Information			
4) Passive Repeater Id: ( )		5) Passive Repeater Se	equence Number: ( )
6) Passive Repeater Location Name:	V		
7) Passive Repeater Antenna Manufacturer:	3	8) Passive Repeater And	tenna Model Number:
9) Height to Center of Passive Repeater Antenna AGL (meters):	10) Back-to-Back RX D	ish Gain (dBi):	11) Back-to-Back TX Dish Gain (dBi):
12) Reflector Dimensions (meters): Height: Width:	13) Transmit Polarization	on:	14) Azimuth to RX Location or Next Passive Repeater:

#### FCC Form 601 Schedule I

#### Supplement 4

### **Frequency Data**

#### **Transmitter Location Information**

	1) Transmit Location Name:	MOUNT ROYAL	2) Path Number:	1		
ı						

#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	72.9	30M0D7W (A)	150000.0	128TCM
	New 006286.19000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

Transmit Location Name: MOUNT ROYAL	2) Path Number: <b>2</b>
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#### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	72.9	30M0D7W (A)	150000.0	128TCM
	New 006315.84000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent USA, Inc.		MDR-8706E -150	N			

1)	Transmit Location Name:	MOUNT ROYAL	2) Path Number:	3
			1	

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	74.6	30M0D7W (A)	150000.0	128TCM
	New 006404.79000000						
	11) Transmitter Manufacturer		12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1)	Transmit Location Name:	MOUNT ROYAL	2) Path Number:	4

### **Frequency Information**

3) Action A/M/D	4) Lower or Center Frequency (MHZ)	5) Upper Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)		0.00100	73.0	30M0D7W (A)	150000.0	128TCM
	New <b>006226.89000000</b>						
	11) Transmitter Ma	nufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent US	A, Inc.	MDR-8706E -150	N			

1)	Transmit Location Name:	MOUNT ROYAL	2) Path Number:	5

## Frequency Information

3) Action A/M/D	4) 5) Lower or Center Frequency (MHZ) Frequency (MHZ)	6) Tolerance (%)	7) EIRP (dBm)	8) Emission Designator	9) Baseband Digital Rate (kbps)	10) Digital Modulation Type
A	Existing (if mod)	0.00100	73.1	30M0D7W (A)	150000.0	128TCM
	New 006256.54000000					
	11) Transmitter Manufacturer	12) Transmitter Model	13) Automatic Transmitter Power Control			
	Alcatel-Lucent USA, Inc.	MDR-8706E -150	N			

## Attachment(s):

Туре	Description	Date Entered
W	Waiver Request	03/14/2013
N	Question 48 Response	03/12/2013

#### **REQUEST FOR WAIVER**

Charter Communications Operating, LLC ("Charter") respectfully requests a waiver of Sections 101.103(d), 101.145(b) and101.603(b)(3) of the Commission's rules in connection with its applications for new licenses in the private operational fixed point-to-point service ("POFS") to replace the existing common carrier authorizations licensed to Bresnan Communications, LLC ("Bresnan") as explained below. Specifically, Charter requests that the Commission waive frequency coordination and grant it new POFS licenses that will use the same frequencies, over the same paths, as are currently in use by Bresnan's existing common carrier licenses. In addition, for certain applications waiver is requested to allow Charter to use the specified POFS frequencies as the final radiofrequency ("RF") link in the chain of transmission of program material to the Bresnan cable headends. Finally, two of the microwave stations operate under a waiver that allows operation in the 5925 to 6875 MHz frequency band, aimed within 2 degrees of the geostationary satellite orbit. Charter requests a waiver so that its proposed POFS station may operate under precisely the same parameters as the existing Bresnan stations that currently operate under the waiver.

Bresnan provides video and broadband services to 304,073 subscribers over cable television systems that it operates in Montana, Wyoming, Utah and Colorado. A number of these cable systems provide service in remote areas that, due to distance and rugged terrain, cannot receive direct over-the-air access to broadcast television stations, including television stations that are located within the same DMAs as the cable communities.

In order to provide access to these television broadcasts, a number of microwave links were developed over the years by Bresnan's predecessors serving the cable communities. These microwave links were licensed as Common Carrier Fixed Point-to-Point Microwave Service stations ("Microwave Stations") and retransmit the broadcast signals, ultimately to cable headends. From there, the signals are retransmitted to Bresnan's cable customers over the cable system networks serving the relevant cable communities. Some of the microwave stations are used as last links for video traffic while others are merely employed as intermediate hops in the transmission path. Exhibit 1 provides a list of the Microwave Stations showing the function of each of the licensed links.

As noted, Charter will be acquiring control of Bresnan, its cable television systems and associated microwave facilities that serve the cable systems. Charter seeks to obtain new licenses in the POFS to replace each of the existing Microwave Station licenses because the microwave links are more accurately described as non-common services. Each of these POFS licenses would use the same frequencies, paths and facilities currently licensed under the existing Microwave Station licenses. Once the new POFS licenses are granted to Charter, Bresnan will

These applications are part of a broader transaction in which Bresnan and Charter seek FCC consent to the transfer of control of Bresnan. The parties have already submitted applications seeking the FCC's consent to the transfer of control of the cable relay service ("CARS") licenses and Section 214 authorization held by Bresnan and are submitting simultaneously herewith an application seeking FCC consent to the transfer of control of other wireless licenses held by Bresnan.

surrender the existing Microwave Station licenses in connection with the pending transaction. See Exhibit 2.

As indicated on Exhibit 1, the frequencies used by the Microwave Stations operate in the 5925-6425 MHz and the 10700-11700 MHz bands (the "Frequency Bands"). Although the Frequency Bands are allocated by Commission rules for both the Common Carrier Microwave Service and the POFS, the rules generally prohibit the use of the Frequency Bands in the POFS as the final RF link in the chain of transmission of program material to a multichannel video distributor ("MVPD"). Because a number of these Microwave Stations provide the final RF link in the chain of transmission of program material to the Bresnan cable systems, a waiver of Section 101.603(b)(3) is needed for the operation of these stations in the POFS. In addition, because the proposed POFS licenses would be operating over the same frequencies and paths and using the same equipment as the Microwave Stations, Charter has not obtained frequency coordination to accompany these applications and a waiver of the frequency coordination requirements of 101.103(d) is requested.

As explained more fully in Exhibit 3, two of the Microwave Stations (WQJQ464 and WQJQ487) currently operate under a waiver of FCC Rule Section 101.145(b) as they transmit in the 5925 to 6875 MHz frequency band and are aimed within 2 degrees of the geostationary satellite orbit. Exhibit 3 was submitted with the original waiver request with Bresnan's application for these two stations and demonstrates that the stations do not exceed the maximum EIRP under Section 101.145. Charter will operate the two proposed POFS stations that will replace WQJQ464 and WQJQ487 in accordance with the technical specifications of WQJQ464 and WQJQ487. Consequently, there will be no potential for harmful interference into any authorized satellite system with respect to these two proposed POFS stations.

Section 1.925(b)(3)(i) of the Commission's Rules requires parties seeking a waiver to demonstrate that:

The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the required waiver would be in the public interest...<sup>5</sup>

A waiver of Sections 101.103(d), 101.145(b) and 101.603(b)(3) is justified under this provision based on the circumstances described above.

2

<sup>&</sup>lt;sup>2</sup> 47 C.F.R. §101.603(b)(3). The rules generally allow the use of the Frequency Bands for the retransmission of program material to MVPDs, except for the final RF link in the chain to an MVPD. 47 C.F.R. §101.603(b)(3). Such final RF MVPD links are permitted for POFS only in the 6452-6525 MHz, the 17,700-18,500 MHz bands and frequencies above 21,200 MHz.

<sup>&</sup>lt;sup>3</sup> The definition of MVPD includes cable television systems. *See* 47 U.S.C. §522(13) and 47 C.F.R. §76.1300(d). <sup>4</sup> Exhibit 1 indicates which of the Microwave Stations provides the final RF link in the chain of programming to the Bresnan cable systems.

<sup>&</sup>lt;sup>5</sup> 47 C.F.R. §1.925(b)(3)(i). Subsection 1.925(b)(3)(ii) alternatively provides that a waiver will be granted upon a showing that "[i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative."

Under analogous circumstances, the Wireless Telecommunications Bureau recently granted waivers of Sections 101.103(d) and 101.603(b)(3) to Atlantic Broadband (PENN), L.L.C.<sup>6</sup> In its request for waiver, Atlantic Broadband explained that it operated a Common Carrier Microwave station using the Frequency Bands that delivered over-the-air broadcast signals from Washington D.C. to a reception station on Irons Mountain, Maryland. From that reception point, Atlantic Broadband carried the broadcast signals by optical fiber to its cable headend in Cumberland, Maryland. The broadcast signals are otherwise unavailable over-the-air in Cumberland because it is located in a valley and blocked by the adjacent mountains.

Atlantic Broadband further explained that the microwave station delivering the broadcast signals was no longer a common carrier service. Because the Frequency Paths were also allocated to the POFS, Atlantic Broadband applied for a POFS license to replace its existing common carrier license, which would operate on precisely the same frequencies, over the same path, and use the same equipment as its existing common carrier microwave license utilized. However, because the microwave station provided the final RF link in the chain of transmission to its Cumberland cable system, Atlantic Broadband sought a waiver of Section 101.603(b)(3). In addition, because the same frequencies and paths would be used for the POFS operations as were already in use, a waiver of the frequency coordination requirements of Section 101.103(d) was sought.

The Bureau concluded that Atlantic Broadband had justified a waiver of the rules because their underlying purposes would not be served or frustrated and that waiver was in the public interest. Specifically, with respect to Section 101.103(d), the Bureau found that:

[W]e determine that no purpose would be served by requiring Atlantic Broadband to undergo the frequency coordination processes set forth in Section 101.103(d), because there is no reason to believe that reclassifying the regulatory status of an existing facility would generate any additional electrical interference. We also find it to be in the public interest to relieve Atlantic Broadband of the burden of undergoing frequency coordination for a facility that is already operating.<sup>7</sup>

The Bureau also waived Section 101.603(b)(3) to allow Atlantic Broadband to use the POFS license to deliver broadcast programming to its Cumberland cable system. In reaching this result the Bureau explained that the original purpose of the rule was to "prevent MVPDs from causing congestion on channels that were allocated for [POFS] and intended primarily for private, internal communications." This purpose would not be frustrated:

Because Atlantic Broadband is already using the channels that it proposes to reclassify from common carrier to POFS, issuing the requested license could not increase

<sup>&</sup>lt;sup>6</sup> In the Matter of Atlantic Broadband (Penn), L.L.C., Application For New License in the Microwave Industrial/Business Radio Pool Request for Waiver of Sections 101.103(d) and 101.603(b)(3) of the Commission's Rules, Memorandum Opinion and Order, 27 FCC Rcd. 13082 (2012)("Atlantic MO&O").

<sup>&</sup>lt;sup>7</sup> Atlantic MO&O at 13084.

<sup>&</sup>lt;sup>8</sup> Id.

congestion on POFS channels or deprive other POFS applicants from access to spectrum that would otherwise be available to them.<sup>9</sup>

The Bureau also observed that a similar rule that had prohibited broadcasters from using POFS frequencies as the final RF link to broadcast stations was recently eliminated and that the Frequency Bands were now available to both common carrier and POF services, although originally different frequencies were assigned to each service. Based on these considerations, the Bureau granted the waiver of Section 101.603(b)(3) holding that:

[....A] waiver would not frustrate the underlying purpose of the rule. Furthermore, we find that a waiver would be in the public interest because it would allow Atlantic Broadband to continue relaying programming to its subscribers, and a POFS license would more accurately reflect the nature of Atlantic Broadband's operations. <sup>10</sup>

The circumstances in this case are like those in the Atlantic Broadcast MO&O. Like Atlantic Broadband, Charter will continue to deliver broadcast signals from various broadcast stations to its cable headends using the proposed POFS microwave links. Also like Atlantic Broadband, Charter will not use the microwave links to provide common carrier services but proposes to operate the microwave links as POFS stations on precisely the same frequencies, over the same paths and using the same equipment as Bresnan's current common carrier microwave licenses authorize. The FCC should, therefore, similarly find that Charter's continued operation of the microwave links, but as a POFS licensee, will not generate any additional electrical interference and that it would be in the public interest to relieve Charter from the burden of undergoing frequency coordination for a facility Bresnan is already operating. Bresnan has committed to surrender the Microwave Stations following grant of the POFS applications in connection with the pending transaction.

Also like its decision in Atlantic Broadband, the FCC should allow Charter to use the POFS license to deliver broadcast programming as the final link in video distribution path. Charter will use no additional microwave channels if the FCC grants the requested waiver and there will be no additional congestion of channels originally intended for private, internal communications. Indeed, the locations of the affected stations are remote and there was never a danger that the use of these stations would limit entities eligible to obtain POFS authorizations there.

Finally, waiver of the Rule Section 101.145(b) should be granted to allow continued operation of the frequencies and paths now used by Stations WQJQ464 and WQJQ487 in accordance with the waiver previously granted by the FCC to Bresnan for these Stations. Exhibit 3 explains the existing and proposed operational parameters for these paths and establishes that no interference will be caused by Charter's operation of these microwave links as POFS, which will not change from the manner in which Bresnan is now operating them.

Consistent with the waivers granted in the Atlantic MO&O and the waiver of Rule Section 101.145(b) previously granted to Bresnan for the two relevant stations, Charter's waiver requests should be granted. Granting Charter's applications for POFS stations as requested will

<sup>10</sup> Id.

<sup>&</sup>lt;sup>9</sup> Id.

more accurately reflect how the stations will be used and allow cable subscribers in the cable communities to continue receiving valued video programming without frustrating the underlying purpose of the rule. In addition, no purpose would be served by requiring additional frequency coordination since the identical frequencies and paths that are now licensed and operating without interference will simply continue operations reclassified as POFS. Finally, a waiver of Rule Section 101.145(b) should be granted because the proposed operation of the two POFS paths replacing WQJQ464 and WQJQ487 will not cause any interference for the same reasons that the FCC has already granted a waiver of this rule for Bresnan's existing stations.

## **EXHIBIT 1**

### MICROWAVE STATION LICENSES

WQJQ462	Point Six to Stevensville, Missoula, Polson, Blacktail.	Intermediate
	Blacktail to Kalispell, Point	
WQJQ463	Six,	Last link
WQJQ464	Mt. Anease to Mt. Baldy, Kalispell, Polson	Intermediate
WQJQ465	Cut Bank to Mt. Baldy, Mt Royal	Intermediate
WQJQ466	Hamilton to Point Six	Last link
WQJQ467	Missoula to Point Six	Last link
WQJQ468	Stevensville to Point Six	Last link
WQJQ469	West Knee to Mt. Royal, Highwoods	Intermediate
WQJQ481	Allen Peak to Mt. Anease	Last link
WQJQ482	Great Falls to Highwoods	Last link
WQJQ483	Havre to Mt. Royal	Last link
WO 10484	Kalispell to Blacktail, Mt. Anease	Intermediate
WQJQ484	Allease	mtermediate
WQJQ485	Fort Benton to Highwoods	Last link
WQJQ486	Lewistown to Highwoods	Last link
WQJQ487	Shelby to Mt. Baldy, Mt Royal	Intermediate
WQJQ488	Highwoods to Lewistown, West Knee, Great Falls, Fort Benton	Intermediate
WQJQ489	Mt. Royal to Shelby, Cut Bank, Havre, West Knee	Intermediate
WQJQ559	Polson to Mt. Anease, Point Six	Intermediate
WQJQ560	Mt. Baldy to Shelby, Cut Bank	Intermediate

## **EXHIBIT 2**

#### BRESNAN COMMUNICATIONS, LLC 1111 STEWART AVENUE BETHPAGE, NY 11714

March 12, 2013

Federal Communications Commission 1270 Fairfield Road Gettysburg, PA 17325

**RE: POFS Microwave Consent** 

Dear Sir or Madam:

Bresnan Communications, LLC ("Bresnan") is the licensee of the 19 common carrier microwave authorizations listed on Exhibit 1 (the "Stations"). The Stations are currently used in connection with Bresnan's cable television operations in Montana, Wyoming, Utah, and Colorado. Bresnan understands that Charter Communications Operating, LLC ("Charter") is applying for new licenses for the existing Stations, in the private operational fixed point-to-point service ("POFS"), instead of the currently licensed common carrier service. The replacement licenses otherwise will use the same equipment, frequencies and paths now used by the Stations to serve the Bresnan cable systems.

Charter has entered into an agreement under which it will acquire control of Bresnan. It is Bresnan's expectation that as part of that transaction, it will surrender the common carrier licenses for the existing Stations. Accordingly, Bresnan consents to Charter's application and respectfully requests that the Commission proceed with the processing of the Charter application.

Should you have any questions please contact the undersigned.

Very truly yours,

James Viggo

James Nuzzo

Senior Executive Vice President, Operations and Business Planning

## **EXHIBIT 3**

# REQUEST FOR WAIVER GEOSTATIONARY SATELLITE ORBIT

#### To whom it may concern:

Applicant is requesting a waiver of FCC Rule Section 101.145 (b) regarding operation in the 5925 to 6875 MHz frequency band, aimed within 2 degrees of the geostationary satellite orbit. The aforementioned rule section states"...said transmission path may be authorized on a waiver basis where the maximum value of the equivalent isotropically radiated power (EIRP) does not exceed: (2) +47 to +55 dBW, on a linear scale (8 dB per degree) for any antenna beam directed between 0.5 degrees and 1.5 degrees of the stationary orbit." Please find attached orbital calculations from our coordinator, Comsearch, indicating that we are not exceeding the maximum EIRP according to 101.145. The attached calculation also shows the EIRP to be well below the maximum permissible EIRP of 53.6 dBW. As such, we submit this as evidence that there will be no potential for harmful interference into any authorized satellite system.

It is also important to note that there were no alternative tower sites for use in routing traffic for this system in a manner which would not put this path's azimuth in the geostationary satellite orbital arc. Additionally, higher frequency bands of 11 and 18 GHz are not feasible due to the lack of path reliability for paths over 17km.

If you have any questions regarding the orbital calculations, please contact Mr. Richard Hibbeler of Comsearch at (703) 726-5671.

If I can be of further assistance please feel free to contact me at.

Sincerely,

Site Names	MOUNT AENEAS	>	ALLEN PEAK
AZIMUTH	258.96		
Azimuth (DD MM SS)	258 57 46		
DISTANCE (KM)	112.24		
DISTANCE (MI)	69.76		
ELEVATION ANGLE (DEG)	-0.47		
CRITICAL AZIMUTH ZONE		CRITICAL	AZIMUTH ZONE
(DEG)		(DD M	IM SS)
257.99 TO 263.80		257 59 11	TO 263 47 53

\*\* BEAM POINTS ARE WITHIN CRITICAL AZIMUTH ZONE
ANGULAR SEPARATION BETWEEN BEAM AND REFRACTED ORBIT = 1.41 DEGREES
MAX PERMISSIBLE EIRP = 54.3 DBW
TOTAL EIRP ON THIS PATH = PWR(33.0) + AGAIN(44.8) - LL(2.1) -30.0 DB = 45.7
DBW

Site Names	SHELBY	>	MOUNT BALDY
AZIMUTH	257.87		
Azimuth (DD MM SS)	257 52 10		
DISTANCE (KM)	99.08		
DISTANCE (MI)	61.58		
ELEVATION ANGLE (DEG)	0.42		
CRITICAL AZIMUTH ZONE		CRITICAL AZ	IMUTH ZONE
(DEG)		(DD MM	SS)
256.76 TO 262.44		256 45 42 TO	262 26 37

\*\* BEAM POINTS ARE WITHIN CRITICAL AZIMUTH ZONE
ANGULAR SEPARATION BETWEEN BEAM AND REFRACTED ORBIT = 1.33 DEGREES
MAX PERMISSIBLE EIRP = 53.6 DBW
TOTAL EIRP ON THIS PATH = PWR(33.0) + AGAIN(43.2) - LL(2.5) -30.0 DB = 43.7
DBW