

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION: Enter a description of this application to identify it on the main menu:
KA312 SBY 20 STA for IS903 Testing

1. Applicant

Name: Airbus DS SatCom Government, Inc. **Phone Number:** 703-466-5873
DBA Name: **Fax Number:** 703-466-5901
Street: 2550 Wasser Terrace **E-Mail:** rob.swanson@airbus.com
City: Herndon **State:** VA
Country: USA **Zipcode:** 20171
Attention: Mr Robert W Swanson



File # SES-STA 2015 0701-00434
KAF312
Call Sign Grant Date 7-22-15
(or other identifier)
Term Dates From: 8-3-15 To: 9-2-15
Approved: David E. Hobb

Applicant: Airbus DS SatCom Government, Inc.
Call Sign: KA312
File No.: SES-STA-20150701-00434
Special Temporary Authority (STA)

Airbus DS SatCom Government, Inc. is granted a Special Temporary Authority (STA), for 30 days, beginning August 3, 2015, to use its earth station, Call Sign KA312, to perform testing of a 13.1 Meter C-Band Hub Antenna located at its Southbury, CT. Teleport (identified as SBY20) utilizing a CW Carrier to communicate with IS-903 Satellite at the 34.5° W.L. orbital location, on the following frequency bands: 5925 – 6425 MHz (Earth-to-space) and 3700 – 4200 MHz (space-to-Earth), under the following conditions:

1. Grant of this STA is without prejudice to any determination that the Commission may make regarding pending or future Airbus DS SatCom Government, Inc. applications.
2. All operations under this grant of STA shall be on an unprotected and non-harmful interference basis. Airbus DS SatCom Government, Inc. KA312 shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radio communication system.
4. In the event of any harmful interference as a result of operations under this grant of STA, Airbus DS SatCom shall cease operations immediately upon notification of such interference and shall immediately inform the Commission, in writing, of such an event.
5. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at Airbus DS SatCom Government, Inc's risk.

This grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.



File # SES-STA-20150701-00434
Call Sign KA312 Grant Date 7-22-15
(or other identifier)
From 8-3-15 Term Dates To: 9-2-15
Approved: Paul E. Black

2. Contact			
Name:	Airbus DS SatCom Government, Inc.	Phone Number:	703-466-5945
Company:		Fax Number:	703-466-5901
Street:	2550 Wasser Terrace	E-Mail:	james.love@astrium.eads-na.com
	Suite 6000		
City:	Herndon	State:	VA
Country:	USA	Zipcode:	20171
Attention:		Relationship:	Other
(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)			
3. Reference File Number SESMFS2014063000546 or Submission ID			
4a. Is a fee submitted with this application?			
<input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).			
<input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee			
<input type="radio"/> Other (please explain):			
4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station			
5. Type Request			
<input checked="" type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input type="radio"/> Other			
6. Requested Use Prior Date			
08/03/2015			

7. City	Southbury		
8. Latitude (dd mm ss.s h)	41 27	4.55	N
9. State	CT		
10. Longitude (dd mm ss.s h)	73 17	24.01	W
11. Please supply any need attachments.			
Attachment 1: Need State & Technic	Attachment 2: Frequency Coord	Attachment 3:	
12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) <div style="border: 1px solid black; padding: 5px;"> Airbus DS SatCom Government, Inc. ('ASGI') requests Special Temporary Authority ('STA') for testing of a 13.1 Meter C-Band Hub Antenna located at its Southbury, CT Teleport (identified as SBY20) utilizing a CW Carrier to communicate with the IS-903 Satellite at 34.5 W.L. ASGI also hereby requests a partial waiver of the frequency coordination </div>			
13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; party to the application; for these purposes.			
14. Name of Person Signing James G. Lovelace		15. Title of Person Signing Contractor	
WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).			

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

12. Description

Airbus DS SatCom Government, Inc. ('ASGI') requests Special Temporary Authority ('STA') for testing of a 13.1 Meter C-Band Hub Antenna located at its Southbury, CT Teleport (identified as SBY20) utilizing a CW Carrier to communicate with the IS-903 Satellite at 34.5 W.L. ASGI also hereby requests a partial waiver of the frequency coordination requirements for purposes of the testing for which STA is sought. Justification for the STA and technical characteristics and parameters for the testing are set forth in attached exhibit.

Airbus DS SatCom Government, Inc.

Request for Special Temporary Authority for
Testing of Southbury, CT Teleport 13.1 Meter C-Band Hub Antenna
Utilizing Low Power CW Carrier to
Communicate With IS-903 Satellite at 325.5 W.L.

Call Sign KA312

FILE NO. SES-MFS-20140630-00546

Airbus DS SatCom Government, Inc. (ASGI) requests a grant of Special Temporary Authority ("STA") for testing of a 13.1 Meter C-Band Hub Antenna located at its Southbury, CT Teleport (identified as SBY20) utilizing a CW Carrier to communicate with the IS-903 Satellite at 34.5 W.L. ASGI also hereby requests a partial waiver of the frequency coordination requirements for purposes of the testing for which STA is sought.

The requested partial waiver is only to the extent that this requirement is for a report specifically prepared for SBY 20. ASGI is respectfully requesting that the coordination requirements for purposes of the testing STA be satisfied with a Frequency Coordination and Interference Analysis Report for a nearby Hub Antenna (identified as SBY 24). SBY 24 is sited nearby SBY 20 within an area bounded by 1 second of latitude and 1 second of longitude on the grounds of the Southbury teleport and the power and other specifications used for the SBY24 frequency coordination are comparable to that to be used for the SBY 20 testing. The SBY 24 coordination report is therefore being attached to the STA application to satisfy the coordination requirements for purposes of the SBY 20 testing STA.

No other waivers are needed or requested for testing of the antenna and the antenna fully complies with all Commission Regulations. All technical characteristics and parameters for the testing follow on the next page. Grant of the STA is in the public interest because the purpose of the testing is to help prepare the antenna for operations which will support the Federal Aviation Authority Wide Area Augmentation System.

Accordingly, ASGI respectfully requests that the Bureau grant the STA for a period of thirty days beginning August 3, 2015. Any questions with respect to this matter may be directed to James G. Lovelace at 703 466 5945.

Technical Characteristics and Parameters

Antenna Size	13.1m
Antenna Latitude/Longitude	41° 27' 4.55" N, 73° 17 ' 24.01" W
Antenna height above Ground Level (meters)	15.1
Antenna height above Sea Level (meters)	51.7
Antenna Gain	53.4 dBi @ 4.200/57.2 dBi @ 6.725
Total Input Power at antenna flange (Watts)	0.398
Total EIRP for all carriers (dBW)	53.2
Transmit Parameters	
Frequency range	5925 – 6425 MHz
Antenna Polarization	Right Hand Circular
Emission Designators	N0N (pure carrier)
Maximum EIRP per Carrier	53.2
Maximum EIRP Density per Carrier(dBW/4kHz)	53.2
Receive Parameters	
Frequency range	3600-3629 MHz
Antenna Polarization	Right Hand Circular
Emission Designators	N0N (pure carrier)
Maximum EIRP per Carrier	N/A
Maximum EIRP Density per Carrier (dBW/4kHz)	N/A
FREQUENCY COORDINATION Information	
Satellite Orbit Type	Geostationary
Frequency Limits	3600-3629 & 6425 – 6454 MHz
Range of Satellite Arc	2W-144W
Earth Station Azimuth Angle Eastern Limit	102.6
Earth Station Azimuth Angle Western Limit	257.0
Antenna Elevation Angle Eastern Limit	5.3
Antenna Elevation Angle Western Limit	5.7
Maximum EIRP Density toward the Horizon	53.2

FREQUENCY COORDINATION AND INTERFERENCE
ANALYSIS REPORT

PREPARED FOR

TELENOR SATELLITE SERVICES
SOUTHBURY, CONNECTICUT

SATELLITE EARTH STATION
CALL SIGN: KA312

PREPARED BY
COMSEARCH
19700 JANELIA FARM BOULEVARD
ASHBURN, VIRGINIA 20147
SEPTEMBER 18, 2002

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1. CONCLUSIONS

AN INTERFERENCE STUDY CONSIDERING ALL EXISTING, PROPOSED AND PRIOR COORDINATED MICROWAVE FACILITIES WITHIN THE COORDINATION CONTOURS OF THE PROPOSED EARTH STATION DEMONSTRATES THAT THIS SITE WILL OPERATE SATISFACTORILY WITH THE COMMON CARRIER MICROWAVE ENVIRONMENT. FURTHER, THERE WILL BE NO RESTRICTIONS OF ITS OPERATION DUE TO INTERFERENCE CONSIDERATIONS.

2. SUMMARY OF RESULTS

A NUMBER OF GREAT CIRCLE INTERFERENCE CASES WERE IDENTIFIED DURING THE INTERFERENCE STUDY OF THE PROPOSED EARTH STATION. EACH OF THE CASES WHICH EXCEEDED THE INTERFERENCE OBJECTIVE ON A LINE-OF-SIGHT BASIS WAS PROFILED AND THE PROPAGATION LOSSES ESTIMATED USING NBS TN101 (REVISED) TECHNIQUES. THE LOSSES WERE FOUND TO BE SUFFICIENT TO REDUCE THE SIGNAL LEVELS TO ACCEPTABLE MAGNITUDES IN EVERY CASE.

THE FOLLOWING COMPANIES REPORTED POTENTIAL GREAT CIRCLE INTERFERENCE CONFLICTS WHICH DID NOT MEET THE OBJECTIVES ON A LINE-OF-SIGHT BASIS. WHEN OVER-THE-HORIZON LOSSES ARE CONSIDERED ON THE INTERFERING PATHS, SUFFICIENT BLOCKAGE EXISTS TO NEGATE HARMFUL INTERFERENCE FROM OCCURRING WITH THE PROPOSED TRANSMIT AND RECEIVE EARTH STATION.

COMPANY

CELLCO PARTNERSHIP - CT, W-MA
COMCAST CABLE COMMUNICATIONS (EASTERN)
ACC NEW YORK LICENSE II LLC
DUTCHESS COUNTY CELLULAR TELEPHONE COMPANY
ORANGE POUGHKEEPSIE SMSA LTD PARTNERSHIP

NO OTHER CARRIERS REPORTED POTENTIAL INTERFERENCE CASES.

3. SUPPLEMENTAL SHOWING
RE: PART 25.203(C)

PURSUANT TO PART 25.203(C) OF THE FCC RULES AND REGULATIONS,
THE SATELLITE EARTH STATION PROPOSED IN THIS APPLICATION
WAS COORDINATED BY COMSEARCH USING COMPUTER TECHNIQUES
AND IN ACCORDANCE WITH PART 25 OF THE FCC RULES AND
REGULATIONS.

COORDINATION DATA FOR THIS EARTH STATION WAS SENT TO THE
BELOW LISTED CARRIERS WITH A LETTER DATED JULY 30, 2002.

ACC NEW YORK LICENSE I LLC
ACC NEW YORK LICENSE II LLC
ACC NEW YORK LICENSE III LLC
ALBANY TELEPHONE COMPANY
AMERICAN CELLULAR NETWORK COMPANY LLC
AT&T COMMUNICATIONS OF PENNSYLVANIA, INC
AT&T CORP.
AT&T WIRELESS SERVICES - NY/NJ
AT&T Wireless Services of FL - East Reg
CELLCO PARTNERSHIP - (W-NY)
CELLCO PARTNERSHIP - CT, W-MA
CELLCO PARTNERSHIP - Newark-Dallas Route
CELLCO PARTNERSHIP- E-MA, NH, RI
CELLCO PARTNERSHIP- PA REGION
COMCAST CABLE COMMUNICATIONS (EASTERN)
CONNECTICUT STATE POLICE DEPARTMENT
CONSOLIDATED EDISON COMPANY OF NEW YORK
DIRECT BROADCAST SERVICES, INC.
DIRECT CONNECT EQUIPMENT, INC.
DUTCHESS COUNTY CELLULAR TELEPHONE CO
EQUAL ACCESS NETWORKS LLC
FELHC, Inc.
GLOBAL CROSSING NORTH AMERICA, INC.
GWNS ACQUISITION SUB, INC
INTERMEDIA COMMUNICATIONS, INC.
MCI WORLDCOM NETWORK SERVICES INC
Massachusetts, Commonwealth Public Works
NATIONAL BROADCASTING COMPANY INC
NEW ENGLAND TELEPHONE & TELEGRAPH CO

NEW YORK CELLULAR GEOGRAPHIC SRVC AREA
NEW YORK DIVISION OF STATE POLICE
NORTHEAST PENNSYLVANIA SMSA LTD PRTRSH
NYNEX MOBILE LIMITED PARTNERSHIP 2
ORANGE POUGHKEEPSIE SMSA LTD PARTNERSHIP
PENN SERVICE MICROWAVE CO. INC.
PENNSYLVANIA CELLULAR TELEPHONE CORP.
RCC ATLANTIC, INC.
SBA BROADBAND SERVICES, INC.
SES AMERICOM, INC.
SNET MOBILITY, LLC
SOUTHWESTERN BELL MOBILE SYSTEMS LLC, MA
SUFFOLK, COUNTY OF, POLICE DEPARTMENT
VERESTAR, INC
VERIZON NY
WORCESTER TELEPHONE COMPANY

4. EARTH STATION COORDINATION DATA

THIS SECTION PRESENTS THE DATA PERTINENT TO FREQUENCY
COORDINATION OF THE PROPOSED EARTH STATION WHICH WAS
CIRCULATED TO ALL COMMON CARRIERS WITHIN ITS COOR-
DINATION CONTOURS.

SATELLITE EARTH STATION
FREQUENCY COORDINATION DATA
07/12/2002

Company	TELENOR SATELLITE SERVICES		
Earth Station Name, State	SOUTHBURY, CT		
Call Sign	KA312		
Latitude (DMS) (NAD83)	41 27 6.3 N		
Longitude (DMS) (NAD83)	73 17 21.4 W		
Ground Elevation AMSL (Ft/m)	120.0 /	36.58	
Antenna Centerline AGL (Ft/m)	22.0 /	6.71	
Receive Antenna Type:	SCIENTIFIC-ATLANTA 8007		
4.0 GHz Gain (dBi) / Diameter (m)	51.5 /	11.0	
3 dB / 15 dB Half Beamwidth	0.20 /	0.40	
Transmit Antenna Type:	SCIENTIFIC-ATLANTA 8007		
6.0 GHz Gain (dBi) / Diameter (m)	54.0 /	11.0	
3 dB / 15 dB Half Beamwidth	0.10 /	0.20	
Operating Mode	TRANSMIT AND RECEIVE		
Modulation	ANALOG & DIGITAL		
Emission / Receive Band (MHz)	(1) 21K9G7W - 72M0G7W /	3700.0000 - 4200.0000	
	(1) 4M00G7F - 36M0G7F /	3700.0000 - 4200.0000	
	(2) 18M0F8F - 36M0F8F /	3700.0000 - 4200.0000	
Emission / Transmit Band (MHz)	(1) 21K9G7W - 72M0G7W /	5925.0000 - 6425.0000	
	(1) 4M00G7F - 36M0G7F /	5925.0000 - 6425.0000	
	(2) 18M0F8F - 36M0F8F /	5925.0000 - 6425.0000	
	(1) DIGITAL	(2) ANALOG	
Max. Available RF Power (dBW)/4 kHz)	-2.70	-0.50	
(dBW)/MHz)	21.30	23.50	
Max. EIRP (dBW)/4 kHz)	51.30	53.50	
(dBW)/MHz)	75.30	77.50	
Max permissible Interference Power			
4.0 GHz, 20% (dBW/1 MHz)	-168.0		
4.0 GHz, 0.0100% (dBW/1 MHz)	-156.0		
6.0 GHz, 20% (dBW/4 kHz)	-154.0		
6.0 GHz, 0.0025% (dBW/4 kHz)	-131.0		
Range of Satellite Arc (Geostationary)			
Degrees Longitude	2.0 W / 144.0 W		
Azimuth Range (Min/Max)	102.6 / 257.0		
Corresponding Elevation Angles	5.3 / 5.7		
Radio Climate	A		
Rain Zone	2		
Max Great Circle Coordination Distance (Mi/Km)			
4.0 GHz	453.8 / 730.4		
6.0 GHz	203.5 / 327.6		
Precipitation Scatter Contour Radius (Mi/Km)			
4.0 GHz	394.0 / 634.2		
6.0 GHz	99.0 / 159.3		

Table of Earth Station Coordination Values
07/12/2002

Earth Station Name SOUTHURY CT
 Owner TELENOR SATELLITE SERVICES
 Latitude (DMS) (NAD83) 41 27 6.3 N
 Longitude (DMS) (NAD83) 73 17 21.4 W
 Ground Elevation (Ft/m) 120.0 / 36.58 AMSL
 Antenna Centerline (Ft/m) 22.0 / 6.71 AGL
 Antenna Model SCIENTIFIC-ATLANTA 8007
 Objectives: Receive -168.0 (dBW /1 MHz)
 Transmit -154.0 (dBW /4 kHz) TX Power -0.5 (dBW/4 kHz)

Azimuth (Deg)	Horizon Elevation Angle (Deg)	Antenna Disc. Angle (Deg)	4.0 GHz		6.0 GHz	
			Antenna Gain (dBi)	Coordination Distance (Km)	Antenna Gain (dBi)	Coordination Distance (Km)
0	8.39	102.62	-10.00	141.4	-10.00	100.0
5	8.07	97.63	-10.00	144.5	-10.00	100.0
10	7.67	92.64	-10.00	149.1	-10.00	100.0
15	7.17	87.64	-10.00	155.5	-10.00	100.0
20	6.75	82.64	-10.00	161.0	-10.00	100.0
25	6.36	77.64	-10.00	166.5	-10.00	100.0
30	5.92	72.64	-10.00	174.4	-10.00	100.0
35	5.53	67.64	-10.00	179.1	-10.00	100.0
40	4.86	62.64	-10.00	187.9	-10.00	100.0
45	4.71	57.64	-10.00	190.3	-10.00	100.0
50	4.74	52.64	-10.00	189.8	-10.00	100.0
55	4.89	47.64	-9.95	187.7	-9.95	100.0
60	5.04	42.64	-8.75	192.2	-8.75	100.0
65	5.18	37.64	-7.39	198.1	-7.39	100.0
70	5.31	32.64	-5.84	205.3	-5.84	100.0
75	5.37	27.64	-4.04	212.7	-4.04	100.0
80	5.41	22.64	-1.87	226.2	-1.87	100.0
85	5.44	17.64	0.84	244.7	0.84	100.0
90	5.45	12.64	4.46	272.8	4.46	100.0
95	5.44	7.64	9.92	322.6	9.92	117.1
100	5.41	2.64	21.44	436.4	21.44	170.4
105	5.37	1.66	26.49	706.3	26.49	319.4
110	5.31	5.25	13.99	362.7	13.99	133.4
115	5.23	8.83	8.35	310.9	8.35	112.8
120	5.14	12.32	4.73	279.8	4.73	100.0
125	5.05	15.73	2.08	259.8	2.08	100.0
130	4.94	19.02	0.02	246.1	0.02	100.0
135	4.82	22.17	-1.65	236.4	-1.65	100.0
140	4.71	25.15	-3.01	228.8	-3.01	100.0
145	4.57	27.92	-4.15	223.5	-4.15	100.0
150	4.46	30.43	-5.08	219.4	-5.08	100.0
155	4.37	32.64	-5.84	216.3	-5.84	100.0
160	4.28	34.52	-6.45	214.1	-6.45	100.0
165	4.19	36.04	-6.92	212.9	-6.92	100.0
170	4.08	37.18	-7.26	212.6	-7.26	100.0
175	4.01	37.89	-7.46	212.7	-7.46	100.0
180	3.99	38.12	-7.53	212.7	-7.53	100.0

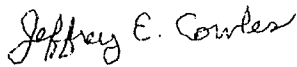
Table of Earth Station Coordination Values
07/12/2002

Earth Station Name SOUTHBURY CT
 Owner TELENOR SATELLITE SERVICES
 Latitude (DMS) (NAD83) 41 27 6.3 N
 Longitude (DMS) (NAD83) 73 17 21.4 W
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 Antenna Model SCIENTIFIC-ATLANTA 8007
 Objectives: Receive -168.0 (dBW /1 MHz)
 Transmit -154.0 (dBW /4 kHz) TX Power -0.5 (dBW/4 kHz)

Azimuth (Deg)	Horizon Elevation Angle (Deg)	Antenna Disc. Angle (Deg)	4.0 GHz		6.0 GHz	
			Antenna Gain (dBi)	Coordination Distance (Km)	Antenna Gain (dBi)	Coordination Distance (Km)
185	3.96	37.93	-7.48	213.5	-7.48	100.0
190	3.98	37.27	-7.29	214.2	-7.29	100.0
195	4.02	36.20	-6.97	215.4	-6.97	100.0
200	4.07	34.71	-6.51	217.3	-6.51	100.0
205	4.16	32.83	-5.91	219.5	-5.91	100.0
210	4.36	30.52	-5.11	221.0	-5.11	100.0
215	4.60	27.90	-4.14	223.1	-4.14	100.0
220	4.87	25.01	-2.95	226.3	-2.95	100.0
225	5.24	21.85	-1.49	231.1	-1.49	100.0
230	5.62	18.50	0.32	238.5	0.32	100.0
235	6.00	15.02	2.58	249.7	2.58	100.0
240	6.40	11.42	5.56	266.7	5.56	100.0
245	6.77	7.72	9.81	297.2	9.81	102.8
250	7.13	3.97	17.02	358.0	17.02	128.0
255	7.47	0.47	40.17	730.4	40.17	327.5
260	7.76	3.69	17.83	353.9	17.83	124.7
265	8.13	8.41	8.88	266.4	8.88	100.0
270	8.50	13.34	3.87	222.9	3.87	100.0
275	8.83	18.31	0.43	201.1	0.43	100.0
280	9.11	23.29	-2.18	182.5	-2.18	100.0
285	9.36	28.27	-4.28	164.2	-4.28	100.0
290	9.55	33.25	-6.04	151.4	-6.04	100.0
295	9.71	38.23	-7.56	141.5	-7.56	100.0
300	9.83	43.21	-8.89	135.1	-8.89	100.0
305	9.90	48.19	-10.00	129.4	-10.00	100.0
310	9.92	53.16	-10.00	129.2	-10.00	100.0
315	9.90	58.14	-10.00	129.4	-10.00	100.0
320	9.92	63.13	-10.00	129.2	-10.00	100.0
325	9.95	68.11	-10.00	129.0	-10.00	100.0
330	9.88	73.09	-10.00	129.5	-10.00	100.0
335	9.72	78.08	-10.00	130.9	-10.00	100.0
340	9.46	83.06	-10.00	133.2	-10.00	100.0
345	9.15	88.05	-10.00	134.5	-10.00	100.0
350	8.91	93.04	-10.00	136.6	-10.00	100.0
355	8.66	98.04	-10.00	138.9	-10.00	100.0

5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



JEFFREY E. COWLES
SENIOR FREQUENCY COORDINATOR
COMSEARCH
19700 JANELIA FARM BOULEVARD
ASHBURN, VIRGINIA 20147

DATED: September 18, 2002