From: Hunter, Daryl
To: Jae Lim
Subject: Re: [EXTERNAL]: Re: SES-LIC-20210719-01082; Call Sign: E210128
Date: Thursday, August 5, 2021 3:45:19 PM
Attachments: image001.png

Yes, it looks like whatever algorithm IBFS is using is generating the correct values.

Regards,

Daryl

From: Jae Lim <Jae.Lim@fcc.gov>
Date: Thursday, August 5, 2021 at 12:37 PM
To: "Daryl T. Hunter" <daryl.hunter@viasat.com>
Subject: RE: [EXTERNAL]: Re: SES-LIC-20210719-01082; Call Sign: E210128

Hi Daryl,

I will check with my colleagues and get back to you.

Do you accept all IBFS calculated Azim numbers for all 300+ applications you filed?

Thanks.

Jae Lim
FCC/IB

From: Hunter, Daryl <daryl.hunter@viasat.com>
Sent: Thursday, August 5, 2021 3:28 PM
To: Jae Lim <Jae.Lim@fcc.gov>
Subject: [EXTERNAL]: Re: SES-LIC-20210719-01082; Call Sign: E210128

Hi Jae Lim,

This had me scratching my head for a while because I'm using the same macros that I've used for years which have always given good results. So, I double checked the input to the macros. Unfortunately I found that I had entered 89.9 for the satellite instead of 88.9.

When I plug in the correct 88.9 deg value I get: 192.4 42.6, the same thing you are computing.

Unfortunately, this entry was made on the first row of the spreadsheet and copied for all 300+ sites. So the azimuth and elevation angles will be off for all the SAN applications we filed. However, because the antenna pattern is basically the same toward the horizon for this small az and el change, at least the EIRP density toward the horizon value doesn't change for any given site.

How would you like me to proceed to get this corrected?

Regards,

Daryl

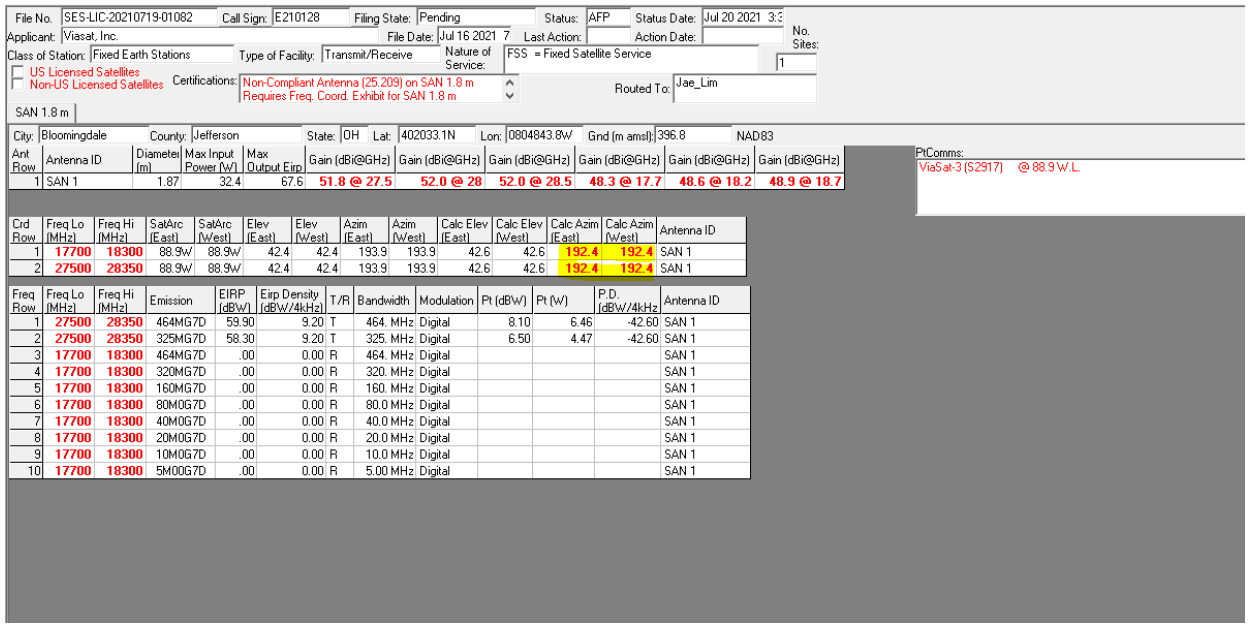
From: Jae Lim <Jae.Lim@fcc.gov>
Date: Thursday, August 5, 2021 at 11:41 AM
To: "Daryl T. Hunter" <daryl.hunter@viasat.com>
Subject: SES-LIC-20210719-01082; Call Sign: E210128

Hi Daryl Hunter,

Please confirm the IBFS calculated E/W Azim values you see below.

Thanks.

Jae Lim
FCC/IB



File No. SES-LIC-20210719-01082 | Call Sign: E210128 | Filing State: Pending | Status: AFP | Status Date: Jul 20 2021 3:3
Applicant: Viasat, Inc. | File Date: Jul 16 2021 7 | Last Action: | Action Date: | No. Sites:
Class of Station: Fixed Earth Stations | Type of Facility: Transmit/Receive | Nature of Service: FSS = Fixed Satellite Service | 1
US Licensed Satellites
Non-US Licensed Satellites
Certifications: Non-Compliant Antenna (25.209) on SAN 1.8 m
Requires Freq. Coord. Exhibit for SAN 1.8 m
Routed To: Jae_Lim

SAN 1.8 m

City: Bloomingdale | County: Jefferson | State: OH | Lat: 402033.1N | Lon: 0804843.8W | Gnd (m amsl): 396.8 | NAD83

PtComms: ViaSat-3 (S2917) @ 88.9 W.L.

Ant Row	Antenna ID	Diameter (m)	Max Input Power (W)	Max Output Eirp	Gain (dBi@GHz)	Gain (dBi@GHz)	Gain (dBi@GHz)	Gain (dBi@GHz)	Gain (dBi@GHz)	Gain (dBi@GHz)
1	SAN 1	1.87	32.4	67.6	51.8 @ 27.5	52.0 @ 28	52.0 @ 28.5	48.3 @ 17.7	48.6 @ 18.2	48.9 @ 18.7

Crd Row	Freq Lo (MHz)	Freq Hi (MHz)	SatArc (East)	SatArc (West)	Elev (East)	Elev (West)	Azim (East)	Azim (West)	Calc Elev (East)	Calc Elev (West)	Calc Azim (East)	Calc Azim (West)	Antenna ID
1	17700	18300	88.9W	88.9W	42.4	42.4	193.9	193.9	42.6	42.6	192.4	192.4	SAN 1
2	27500	28350	88.9W	88.9W	42.4	42.4	193.9	193.9	42.6	42.6	192.4	192.4	SAN 1

Freq Row	Freq Lo (MHz)	Freq Hi (MHz)	Emission	EIRP (dBW)	Eirp Density (dBW/4kHz)	T/R	Bandwidth	Modulation	Pt (dBW)	Pt (W)	P.D. (dBW/4kHz	Antenna ID
1	27500	28350	464MG7D	59.90	9.20	T	464. MHz	Digital	8.10	6.46	-42.60	SAN 1
2	27500	28350	325MG7D	58.30	9.20	T	325. MHz	Digital	6.50	4.47	-42.60	SAN 1
3	17700	18300	464MG7D	.00	0.00	R	464. MHz	Digital				SAN 1
4	17700	18300	320MG7D	.00	0.00	R	320. MHz	Digital				SAN 1
5	17700	18300	160MG7D	.00	0.00	R	160. MHz	Digital				SAN 1
6	17700	18300	80M0G7D	.00	0.00	R	80.0 MHz	Digital				SAN 1
7	17700	18300	40M0G7D	.00	0.00	R	40.0 MHz	Digital				SAN 1
8	17700	18300	20M0G7D	.00	0.00	R	20.0 MHz	Digital				SAN 1
9	17700	18300	10M0G7D	.00	0.00	R	10.0 MHz	Digital				SAN 1
10	17700	18300	5M00G7D	.00	0.00	R	5.00 MHz	Digital				SAN 1