

We intend to use STA 0757-EX-ST-2024 for launch and on-orbit operations for the upcoming non-Federal Polaris Dawn mission.

The spacecraft will radiate from T-7 hours as specified below until splashdown approximately 5 days later.

<u>Frequency</u>	<u>Emissions Designator</u>	<u>Expected TX Duration</u>	<u>Range of TX</u>
<u>Altitudes</u>			
2216 MHz	2M69G1D	Only active during freeflight when we are over a ground station	0 – 1400 km
2216 MHz	4M60G1D	Only active during ascent and descent	0 – 1400 km
2287.5 MHz	4M80G1D	Always active depending on TDRS availability	0 – 1400 km

RX Locations:

SITE NAME	COORDINATES
bmda1_bermuda	32.3143, -64.7487
cape1_j6	28.6240, -80.6865
cape3_ppf	28.5435, -80.5901
dbai1_dubai	25.2258, 55.4652
gbon1_gabon	0.3864, 9.5971
gnhy1_goonhilly	50.0476, -5.1823
guam1_inarajan	13.2823, 144.7554
htbk5_hartebeesthoek	-25.8865, 27.7056
kodk1_kodiak	57.4560, -152.3741
mrts1_mauritius	-20.5014, 57.4506
nwfn1_newfoundland	47.5431, -52.7933
sing1_singapore	1.3962, 103.8343
tasm1_tasmania	-42.4307, 147.2882
vndy1_llc	34.7192, -120.5311
wasc1_western_australia	-29.0458, 115.3487
hwii1_hawaii	19.0139, -155.6633
mlnd1_malindi	-2.9956, 40.1945
sxhq1_hawthorne	33.9206, -118.3282
ptar1_punta_arenas	-52.938125, -70.857221
mdvs1_maldives	-0.6143, 73.09665

Additional RX Locations that might be ready in time to support Polaris Dawn:

SITE NAME	COORDINATES
gstn21_groundstation --> Oman Gateway	23.566443, 58.162079
gstn22_groundstation --> Kenya Gateway	1.349995, 36.749642
gstn23_groundstation --> Sri Lanka Gateway	7.9365, 79.745417
gstn25_groundstation --> dply10 1.8m dish in fortaleza	-3.735322, -38.461674
gstn26_groundstation --> Oahu Gateway	20.8171430, -156.4542956
gstn29_groundstation --> ctwn1_johannesburg	-25.8881457, 27.7095662
gstn30_groundstation --> xmas1_christmas_island	-10.553735, 105.65120