DSN Hourly Rate [4]:

“AF = RB [AW (0.9 + FC / 10)] (equation 6-1)

Where:

AF = weighted Aperture Fee per hour of use.

RB = contact dependent hourly rate ($1057/hr. for FY10, with adjustment for appropriate inflation rate)\* for FY 2019 dollars: FY10\*1.16 [23]

AW = aperture weighting:

= 1.00 for a single 34-meter station (i.e., 34 BWG and 34 HEF).

= 2.00 for a two 34-meter station array.

= 3.00 for a three 34-meter station array.

= 4.00 for a four 34-meter station array.

= 4.00 for 70-meter stations.

FC = number of station contacts, (contacts per calendar week).”

Max contact time: 12 hrs

For contact hrs add 1 hr setup and breakdown time [4].

Delta DOR time: 1-2 hrs per contact

Normal communication: 1 34m station

Two way doppler tracking: 1 34m station

Three way doppler tracking: 2 34m stations

Beacon monitoring: 1 34m station, 20 min setup/teardown + 40-60 min contact

Delta-DOR: 2 34m stations

Critical events: 70 m stations

Estimated cost USCM8 (thousands of FY 2010 dollars) [14]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Non recurring | Recurring X band | Recurring UHF band | Total FY10 | Total FY19 |
| 26,916 | 883.7(mX)^(0.491) | 883.7(mU)^(0.491) | 38.427 | 44.576 |
|  | mX = 34.916 | mU = 57.4 |  |  |

FY 2019 = FY10 \* 1.16 = 44,576

Time periods based heavily off of [29]

2 way doppler: 2 weeks after launch