# Form 312 Schedule S (NGSO example) screenshots

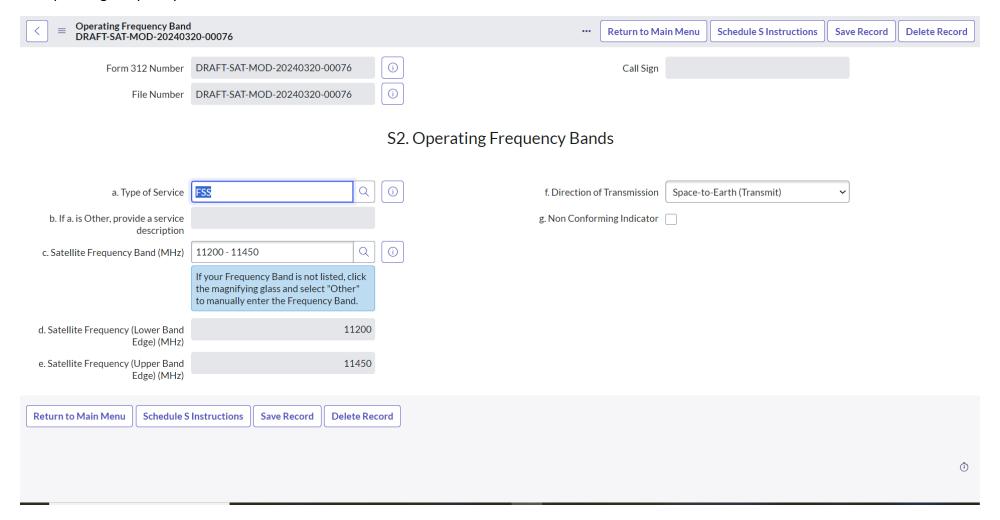
#### Estimated Time Per Response: 0.5-80 hrs S1. Satellite Information April 2024 OMB Control Number 3060-0678 Satellite DRAFT-SAT-MOD-20240320-00076 Schedule S Review Form 312 Schedule S Instructions Save Recor (i) File Number Call Sign S1. Satellite Information 30 a. Space Station or Satellite c. Estimated Operational Lifetime Network Name of Space Station(s) From Date of Launch (yrs) b. Orbit Type Geostationary (GSO) d. Will the space station(s) operate on a Common Carrier basis? Just another test e. Application Description **Schedule S Instructions** Schedule S Review Form 312 Save Record S2. Operating Frequency Bands (2) S3. GSO Orbital Information (1) S4. Earth-to-Space (Receive) Beams (1) S5. Space-to-Earth (Transmit) Beams (1) S6. Space-to-Space (Receive) Beams S7. Space-to-Space (Transmit) Beams S8. Attachments (5) $\equiv$ 6 Actions on selected rows... New a. Type of Service A b. If a. is Other, provide a service description c. Satellite Frequency Band (MHz) d. Satellite Frequency (Lower Band Edge) (MHz) e. Satellite Frequency (Upp **FSS** 11700 - 12500 11700

29500 - 30000

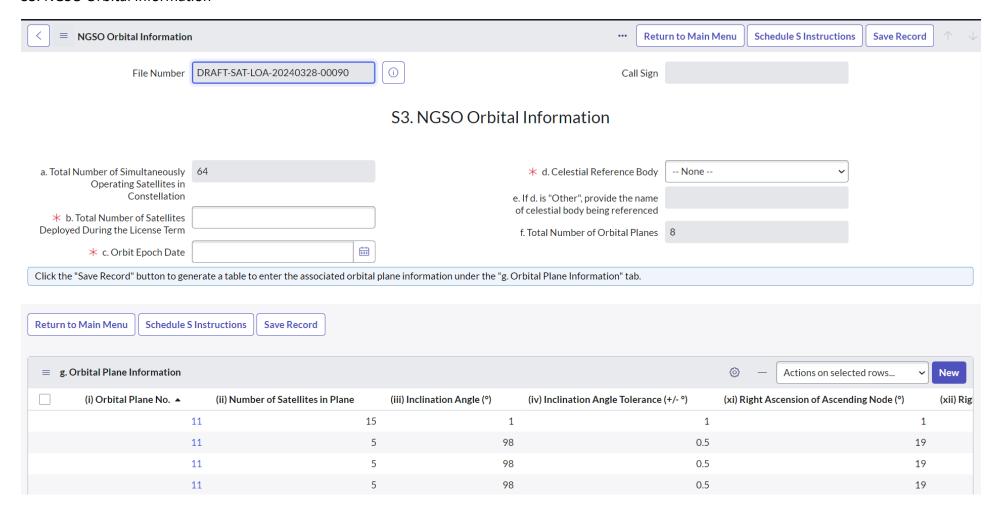
FSS

Not Yet Approved by OMB

## S2. Operating Frequency Bands



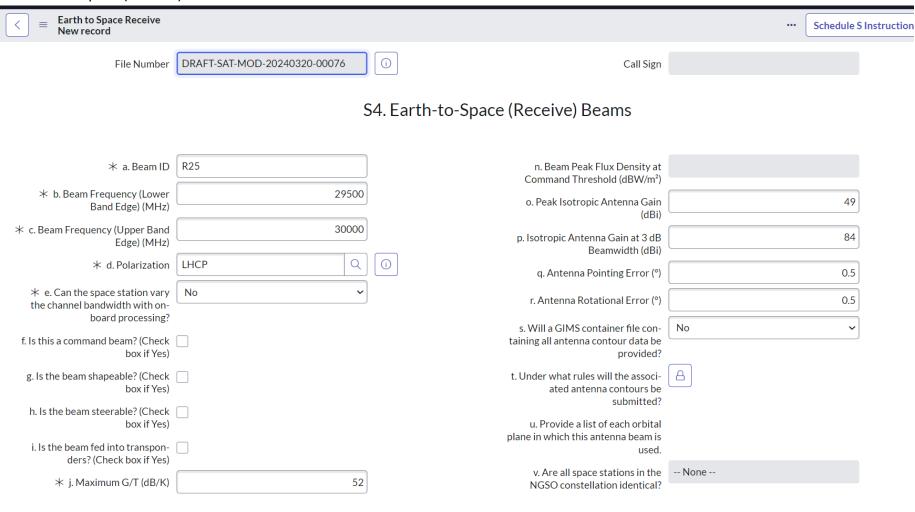
#### S3. NGSO Orbital Information



# S3g. Orbital Plane Information

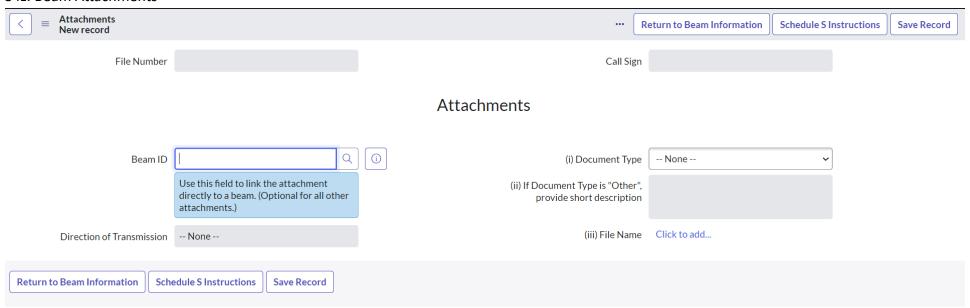
| Orbital Plane<br>New record   |  | ··· Return t   | o NGSO Orbital Information | Schedule S Instructions | Save Record |
|---|--|--|----------------------------|-------------------------|-------------|
| File Number   |  | Call Sign  |                            |                         |             |
|   | g.   | . Orbital Plane Information  |                            |                         |             |
| (i) Orbital Plane No.  * (ii) Number of Satellites in Plane   |  | <ul><li>(x) Argument of Perigee (°)</li><li>(xi) Right Ascension of Ascending Node (°)</li></ul>                                       |                            |                         |             |
| * (iii) Inclination Angle (°)  * (iv) Inclination Angle Tolerance (+/- °)  * (v) Orbital Period (seconds) |  | * (xii) Right Ascension of<br>Ascending Node Tolerance (+/- °)<br>* (xiii) Active Service Arc Begin<br>Angle with Respect to Ascending |                            |                         |             |
| <ul><li>(vi) Apogee (km)</li><li>★ (vii) Apogee Tolerance (+/- km)</li></ul>                              |  | Node (°)  * (xiv) Active Service Arc End Angle with Respect to Ascending Node (°)  |                            |                         |             |
| (ix) Perigee Tolerance (+/- km)   |  | * (xv) Is additional info on the active service arc provided in the application?   | None                       | ·                       |             |
|   |  | * (xvi) Satellite Spacing  (xvii) Phase Angle Spacing (°)  (xviii) First Satellite Initial Phase  Angle (°)                            | None                       |                         |             |
| Click the "Save Record" button to gen   | erate a table to enter the associated initial phase an | * (xix) Maximum Orbital Eccentricity  ngle information under the "h. Initial Phase Angle Information                                   | n" tab."                   |                         |             |
| Return to NGSO Orbital Information  | Schedule S Instructions Save Record                    |  |                            |                         |             |

#### S4. Earth-to-Space (Receive) Beams

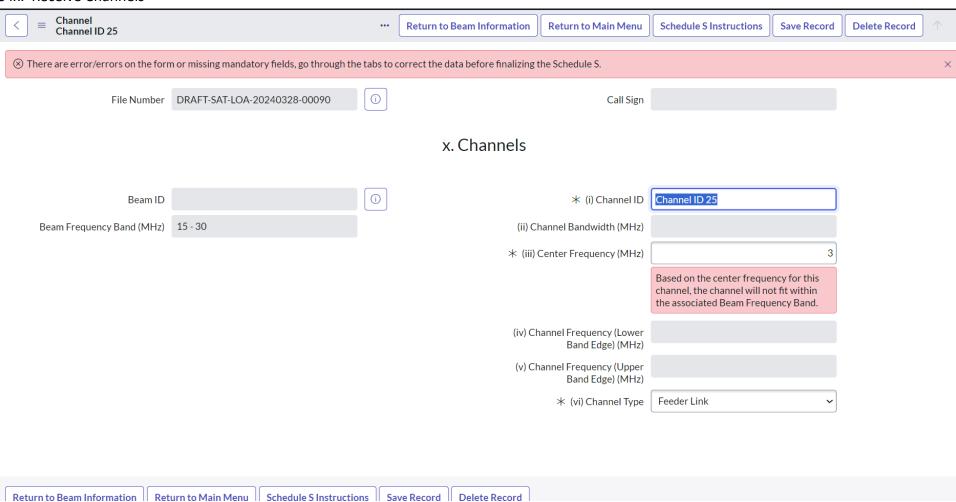




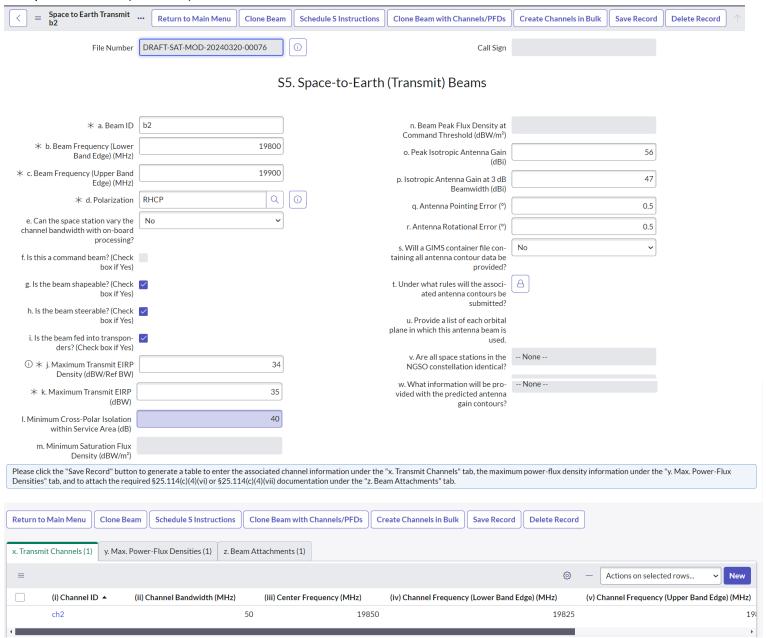
#### S4z. Beam Attachments



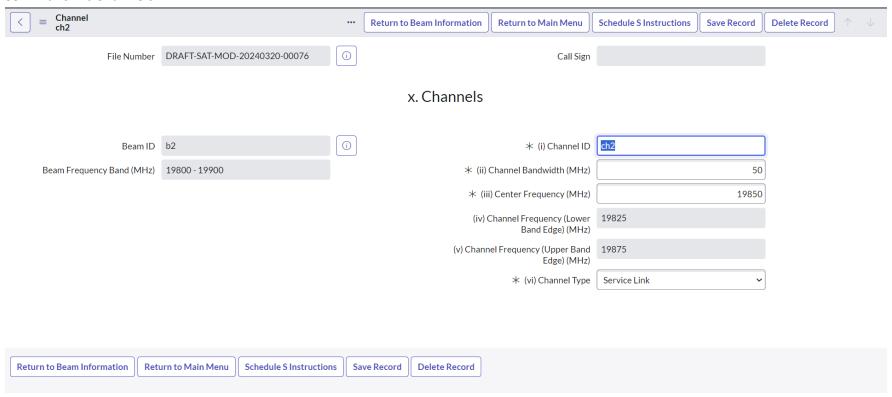
#### S4x. Receive Channels



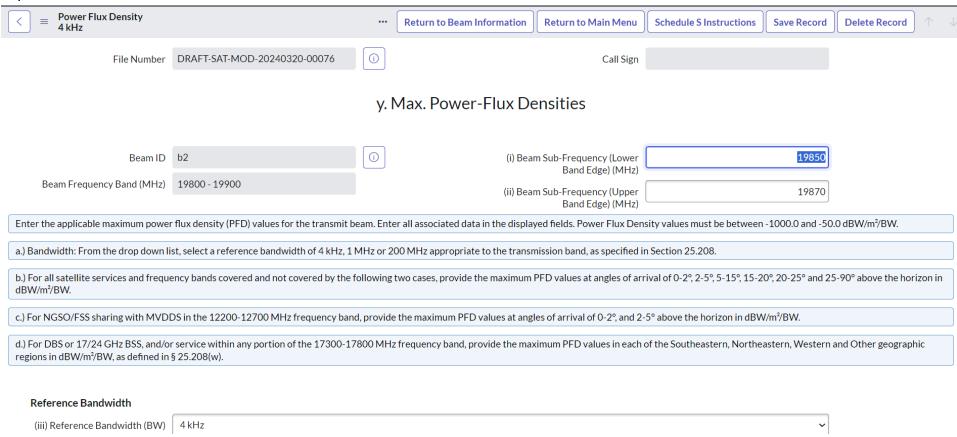
### S5. Space-to-Earth (Transmit) Beams



# S5x. Transmit Channels

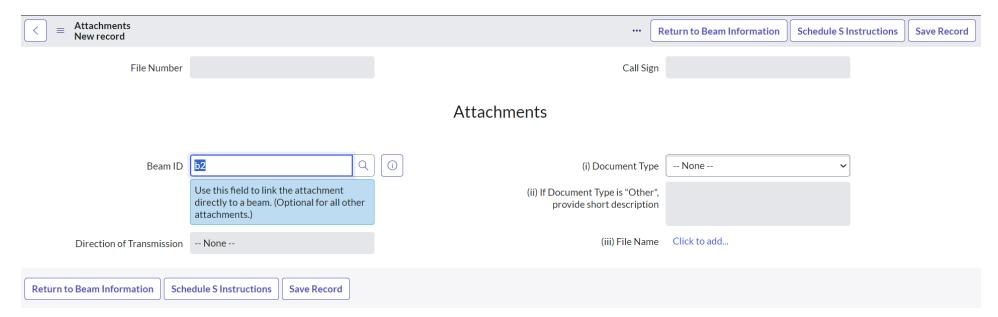


## S5y. Max. Power-Flux Densities



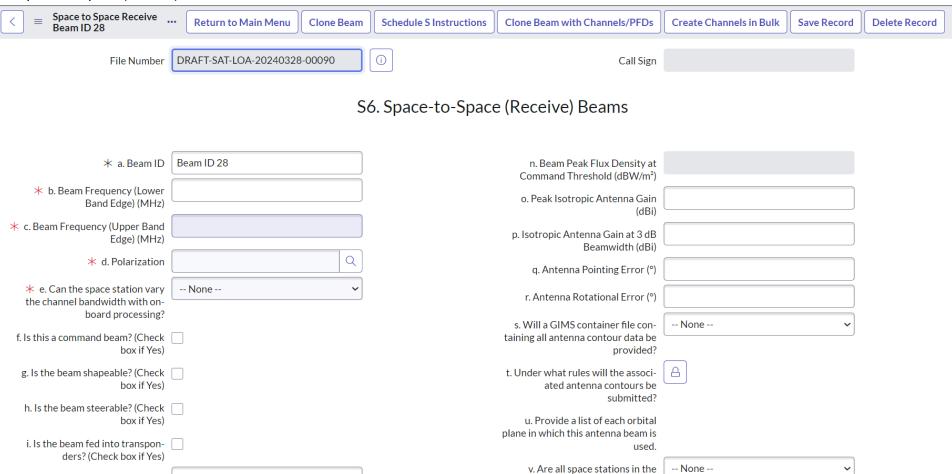
| Angles of Arrival PFD              |                     |                         |             |               |  |      |
|------------------------------------|---------------------|-------------------------|-------------|---------------|--|------|
| (iv) 0-2° (dBW/m²/                 | BW)                 |                         |             |               |  | -100 |
| (v) 2-5° (dBW/m²/                  | BW)                 |                         |             |               |  | -105 |
| (vi) 5-15° (dBW/m²/                | BW)                 |                         |             |               |  | -106 |
| (vii) 15-20° (dBW/m²/              | BW)                 |                         |             |               |  | -107 |
| (viii) 20-25° (dBW/m²/             | BW)                 |                         |             |               |  | -108 |
| (ix) 25-90° (dBW/m²/               | BW)                 |                         |             |               |  | -109 |
| Geographic Region PFD              |                     |                         |             |               |  |      |
| (x) Southeastern Re<br>(dBW/m²/    | gion<br>BW)         |                         |             |               |  |      |
| (xi) Northeastern Re<br>(dBW/m²/   |                     |                         |             |               |  |      |
| (xii) Western Region (dBW/m²/      | BW)                 |                         |             |               |  |      |
| (xiii) Other Region (dBW/m²/       | BW)                 |                         |             |               |  |      |
| Energy Dienercal Pandud            | 4+15                |                         |             |               |  |      |
| Energy Dispersal Bandwi            | uui                 |                         |             |               |  |      |
| (xiv) Energy Dispersal Bandw<br>(I | ridth<br>kHz)       |                         |             |               |  | 40   |
|                                    |                     |                         |             |               |  |      |
| Datum to Boam Information          | Poturn to Main Monu | Schodulo S Instructions | Savo Docord | Doloto Pocord |  |      |

### S5z. Beam Attachments



## S6. Space-to-Space (receive) Beams

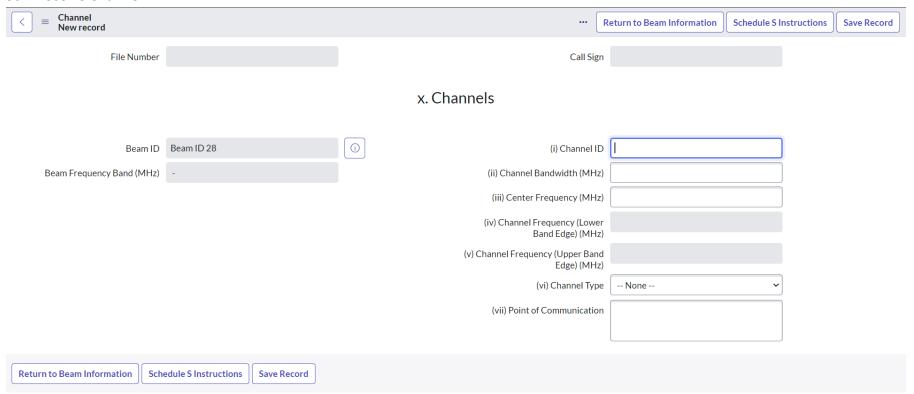
\* j. Maximum G/T (dB/K)



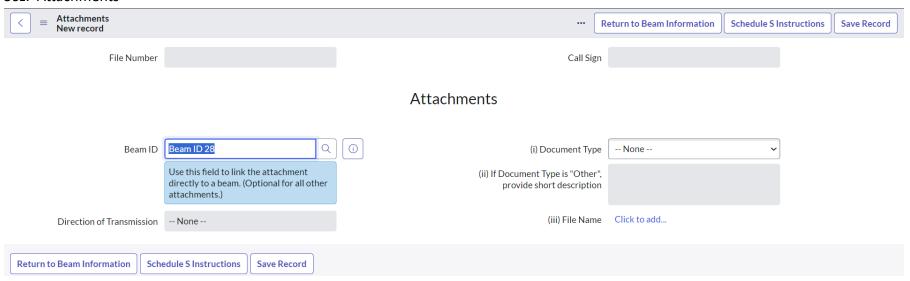
NGSO constellation identical?

| k. Minimum G/T (dB/K)                           |                                    |                                       | w. What information will be pro-<br>vided with the predicted antenna |   |  |  |
|---|------------------------------------|---------------------------------------|--|---|--|--|
|   | aturation Flux<br>sity (dBW/m²)    |                                       | gain contours?   |   |  |  |
| m. Minimum Sa<br>Den                            | aturation Flux<br>sity (dBW/m²)    |                                       |  |   |  |  |
| Please click the "Save<br>under the "z. Beam At | _                                  | the associated channel information un | der the "x. Receive Channels" tab, and to atta                       | ch the required §25.114(c)(4)(vi) or §25.114(c)(4)(vii) documentation |  |  |
|   |                                    |                                       |  |   |  |  |
| Return to Main Menu                             | Clone Beam Schedule S Instructions | Clone Beam with Channels/PFDs         | Create Channels in Bulk Save Record                                  | Delete Record   |  |  |
| x. Receive Channels                             | z. Beam Attachments                |                                       |  |   |  |  |
| ≡   |                                    |                                       |  | ⊚ – New   |  |  |
| (i) Channel ID 🔺                                | (ii) Channel Bandwidth (MHz)       | (iii) Center Frequency (MHz)          | (iv) Channel Frequency (Lower Band Edge)                             | MHz) (v) Channel Frequency (Upper Band Edge) (MHz)                    |  |  |

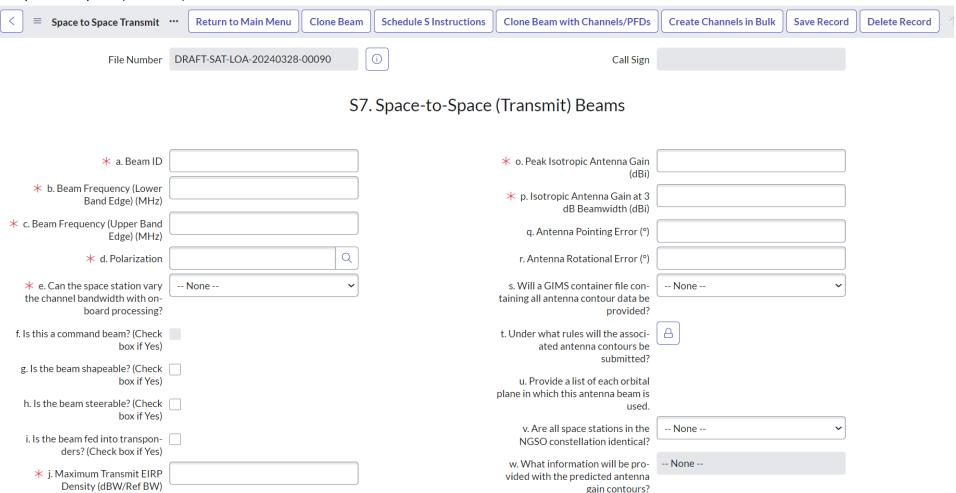
### S6x. Receive Channel



### S6z. Attachments

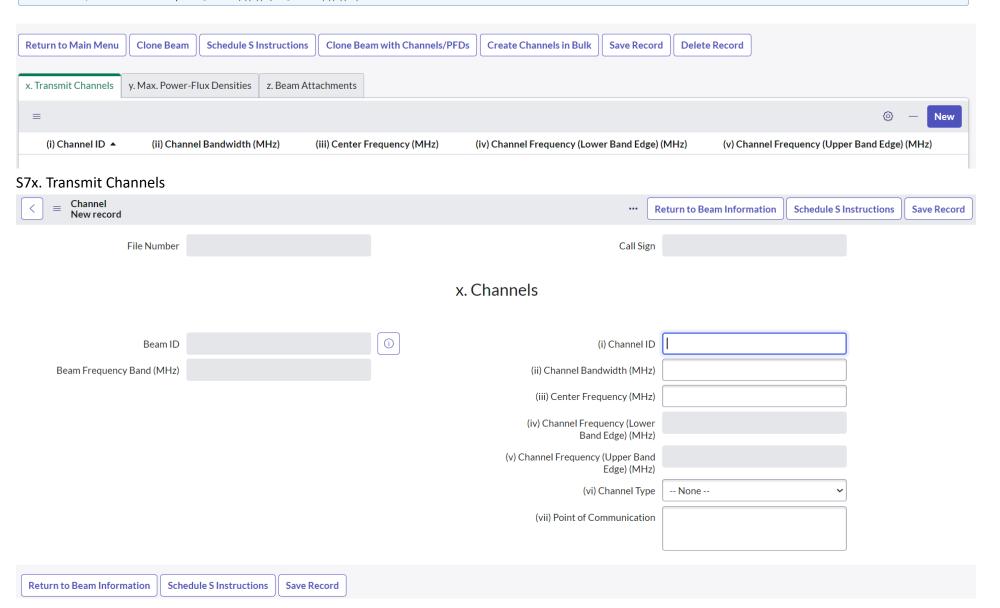


## S7. Space-to-Space (Transmit) Beams

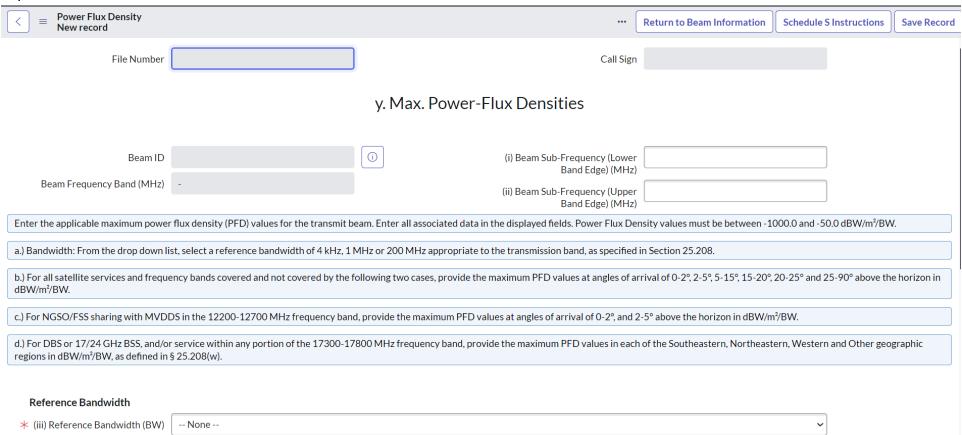


m. Beam Peak Flux Density at Command Threshold (dBW/m²)

Please click the "Save Record" button to generate a table to enter the associated channel information under the "x. Transmit Channels" tab, the maximum power-flux density information under the "y. Max. Power-Flux Densities" tab, and to attach the required \$25.114(c)(4)(v) or \$25.114(c)(4)(v) documentation under the "z. Beam Attachments" tab.

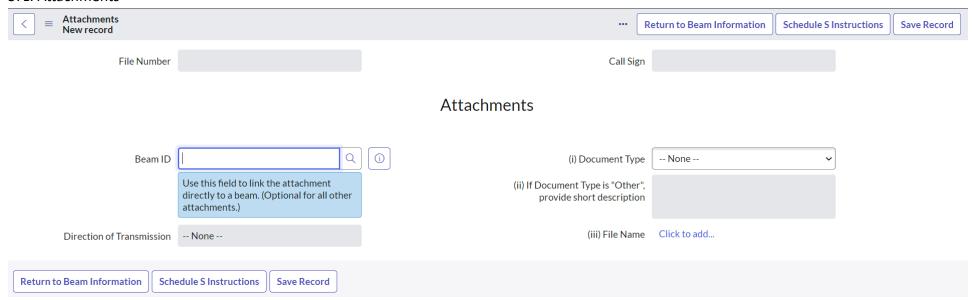


# S7y. Max. Power-Flux Densities



| Angles of Arrival PFD                     |                                  |  |
|---|----------------------------------|--|
| (iv) 0-2° (dBW/m²/BW)                     |                                  |  |
| (v) 2-5° (dBW/m²/BW)                      |                                  |  |
| (vi) 5-15° (dBW/m²/BW)                    |                                  |  |
| (vii) 15-20° (dBW/m²/BW)                  |                                  |  |
| (viii) 20-25° (dBW/m²/BW)                 |                                  |  |
| (ix) 25-90° (dBW/m²/BW)                   |                                  |  |
|   |                                  |  |
| Geographic Region PFD                     |                                  |  |
| (x) Southeastern Region<br>(dBW/m²/BW)    |                                  |  |
| (xi) Northeastern Region<br>(dBW/m²/BW)   |                                  |  |
| (xii) Western Region (dBW/m²/BW)          |                                  |  |
| (xiii) Other Region (dBW/m²/BW)           |                                  |  |
|   |                                  |  |
| Energy Dispersal Bandwidth                |                                  |  |
| (xiv) Energy Dispersal Bandwidth<br>(kHz) |                                  |  |
|   |                                  |  |
| Return to Beam Information Scho           | edule S Instructions Save Record |  |

### S7z. Attachments



### S8. Attachments

