

AREAS OF OPERATIONS EXHIBIT

Maps showing areas of operation for Astrium Earth Station on Vessels (ESV) operated pursuant to the WB36 license ESV authorization.

Exhibit

T-11N



US Beam EIRP Contours



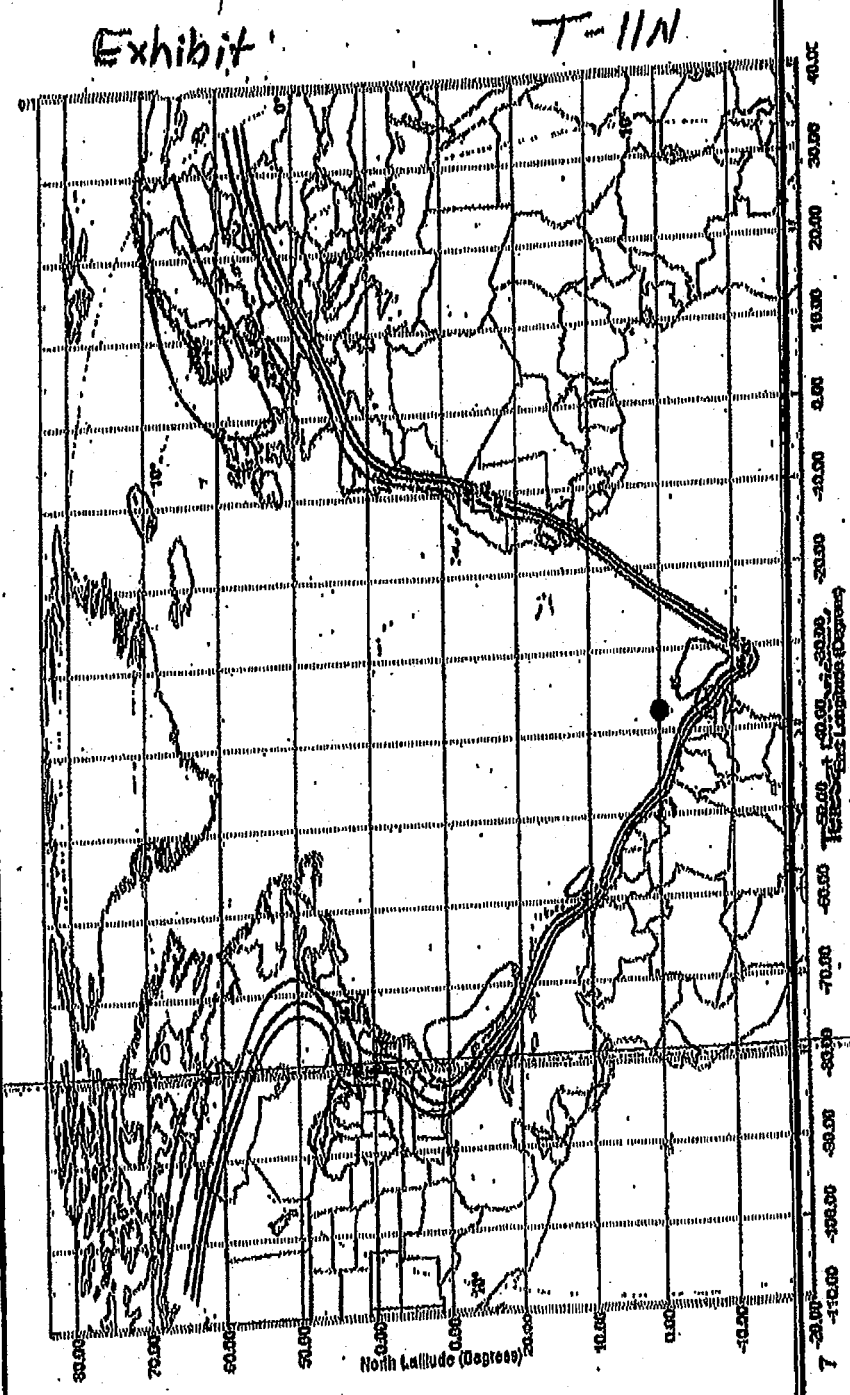
Telesat Proprietary

Telesat

MAORINAOR Beam EIRP Contours

Exhibit

T-11N



7

Exhibit AMC-21

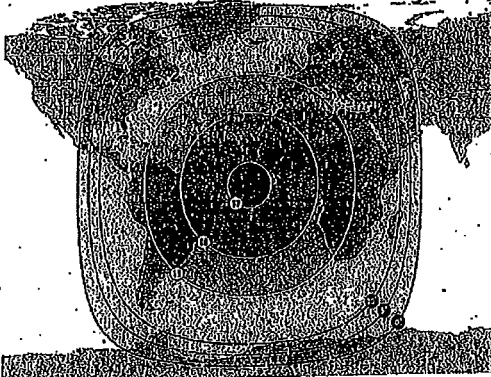


Exhibit

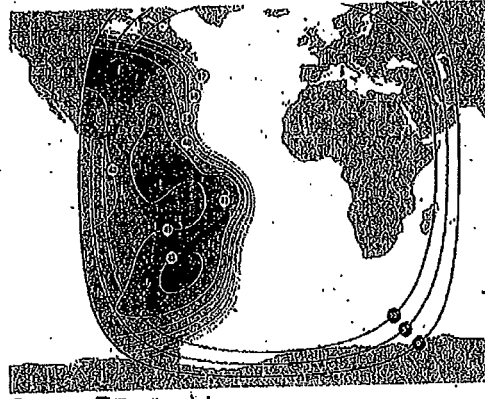
SES-4
338°E

Orbital location

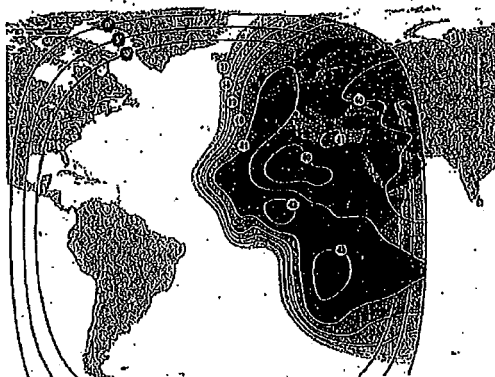
Global C-band beam



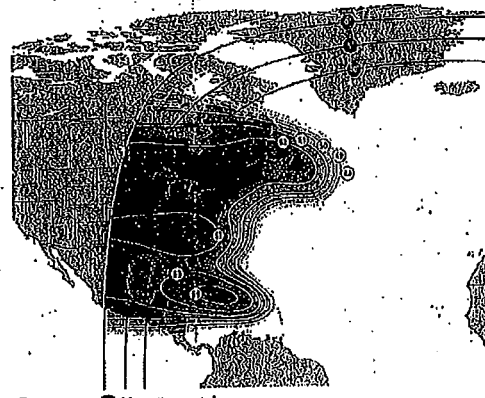
West Heml C-band beam



East Heml C-band beam



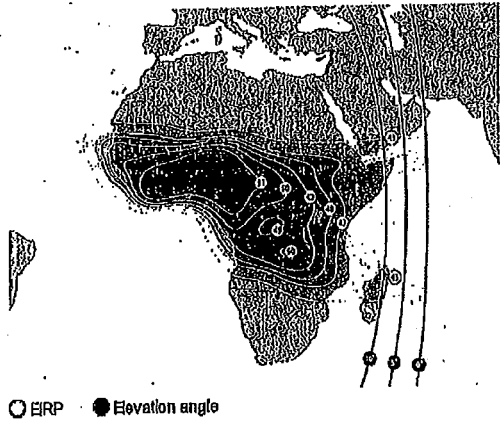
North America Ku-band beam



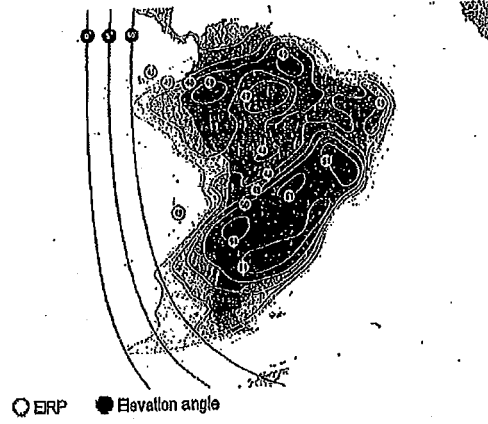
SES-4 338°E

Orbital location

West Africa Ku-band beam



Southern Cone Ku-band beam



Europe Middle East Ku-band beam

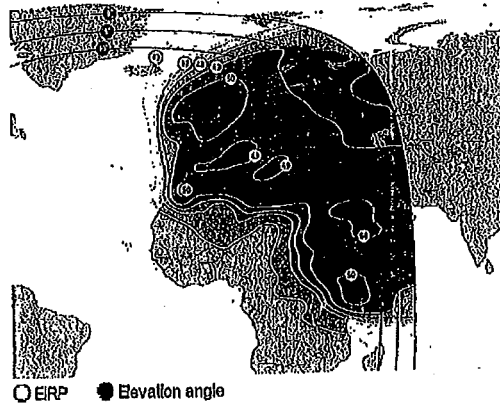
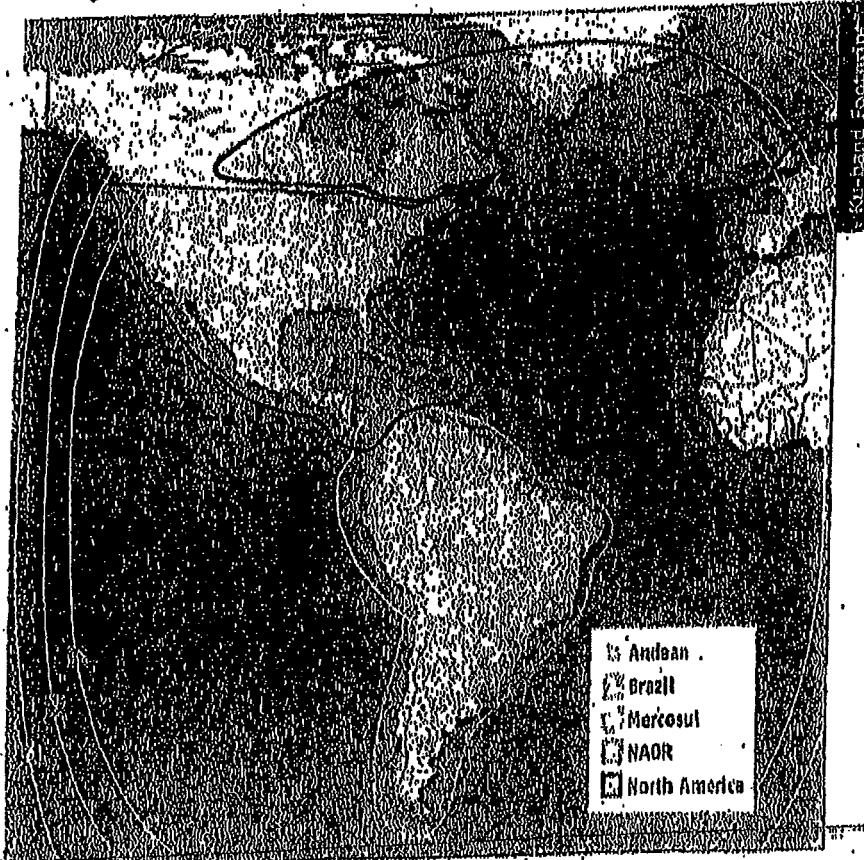


Exhibit NSS-7



Exhibit

ESTRELLA DO SUL 1



U-band Payload

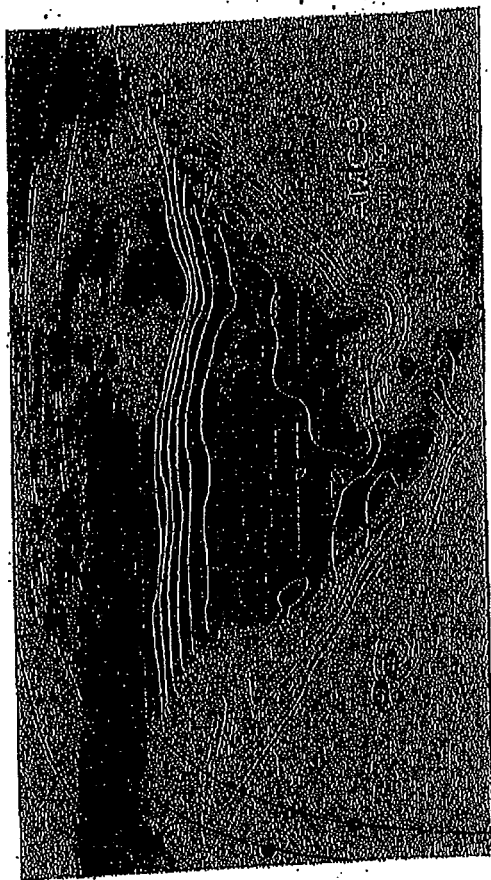
1 payload
14 MHz and 36 MHz
2 payload
18 MHz and 36 MHz

Frequency
Standard
Uplink: 14 to 16 GHz
Downlink: 11.7 to 12.7 GHz
Retarded
Uplink: 11.75 to 14 GHz
Downlink: 11.4 to 11.7 GHz

Service from 2.0 to 10.0 GHz
OR 1.0 to 10.0 GHz

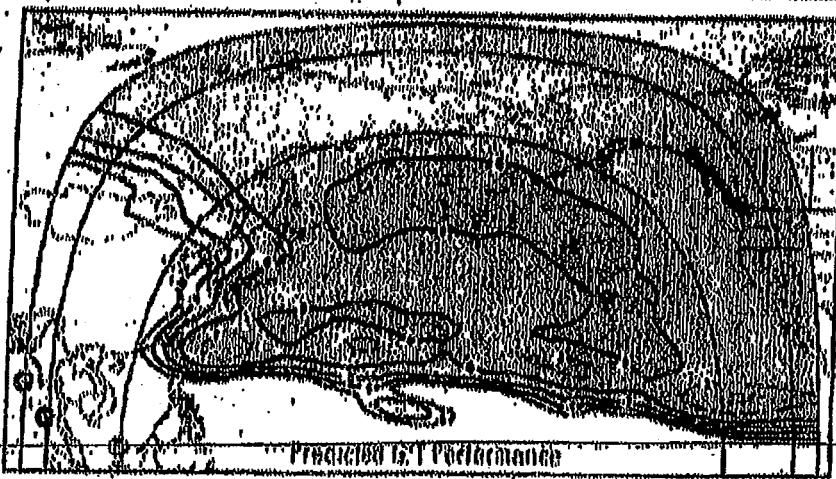
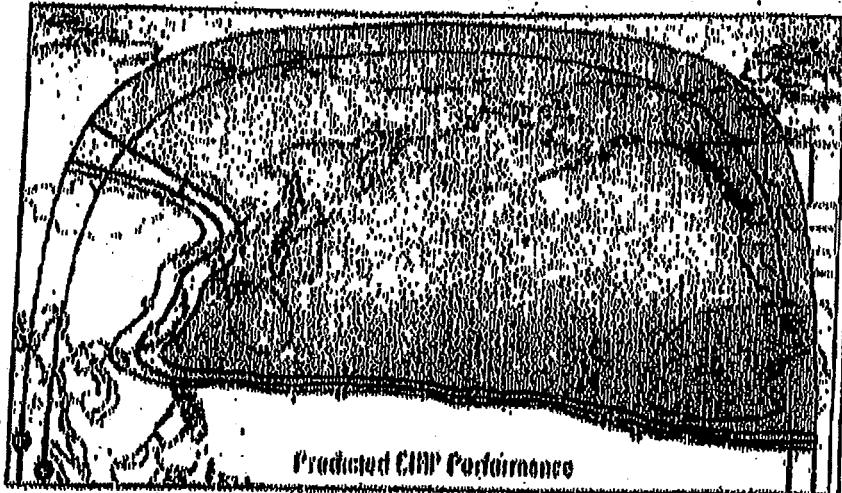
Exhibit

AMC-9



AMC-23 / CE-23
North Pacific Ku-band Zone Beam

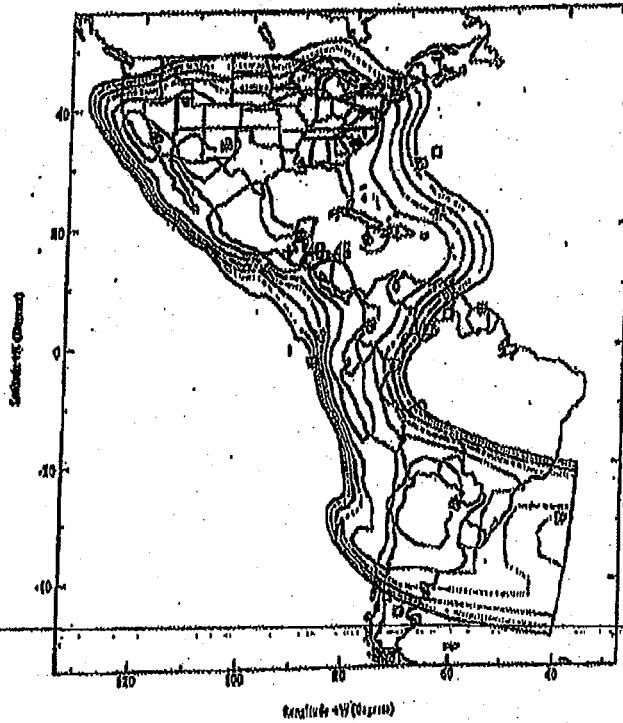
Exhibit



Exhibit

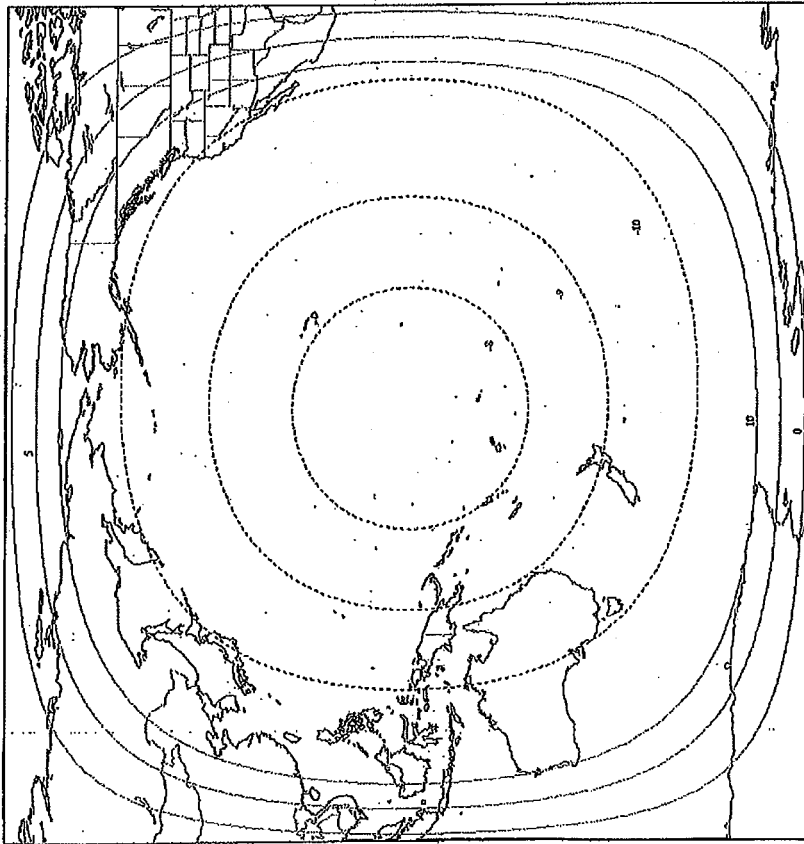


Satmex 5 (116.8° W)
EIRP
Region KU-2 Even Xponder
(Pol. Hor/Ver)



SATMEX PROPRIETARY INFORMATION

C-Band Global Beam G/T



| Contours Shown | | Max SFD | Min. SFD |
|----------------|--------|-----------------------|-----------------------|
| G/T | [dB/K] | [dBW/m ²] | [dBW/m ²] |
| -7.3 Beam Peak | | | |
| -8 | | -93 | -78 |
| -9 | | -92 | -77 |
| -10 | | -91 | -76 |

Notes
 The adjacent plot shows the predicted performance of a typical satellite transponder. Small performance differences should be expected between individual transponders.

Exhibit

NSS-9

SES NEW SKIES

IS-21 at 302°E – Ku-Band Mobility*

