

JANUARY 12, 2000

FROM: INTELSAT WASHINGTON DC

TO: COMSAT: BETHESDA

ATTN: MESSRS. COTNER/BROWN/FOGG

SUBJECT: AMENDMENT TO THE TYPE APPROVAL FOR THE PRODELIN CORPORATION KU-BAND,  
STANDARD K-2 ANTENNA MODEL, IA005A00, EQUIPPED WITH A 2-PORT FEED

REFERENCE: CWS SUPPLEMENTAL REPORT DATED DECEMBER 15, 1999

WE ARE PLEASED TO INFORM YOU THAT EFFECTIVE 12 JANUARY 2000 THE TYPE APPROVAL FOR THE PRODELIN CORPORATION ANTENNA MODEL (IA005A00) IS AMENDED TO INCLUDE MEASURED TRANSMIT ISOLATION. BASED ON THIS NEW MEASUREMENT THE RESTRICTED STATUS ON THIS ANTENNA MODEL HAS BEEN LIFTED AND THE ANTENNA IS NOW FULLY APPROVED AS A STANDARD K-2 AND ALSO AS A STANDARD G.

ANTENNA MODEL CERTIFIED BY THE SIGNATORY OF THE UNITED STATES:

1. MANUFACTURER : PRODELIN CORPORATION
2. MODEL #'S : 1184-110, 111, 131, 133, 240, 241, 250, 251, 300,  
301, 320, 321, 334, 335, 360, 361, 500, 501
3. APPROVAL CODE : IA005A00
4. APPROVAL DATE : 31-JAN-1990
5. ANTENNA SIZE : CIRCULAR 1.80 meters (Ku-BAND)
6. STANDARD : K2 or G
7. RESTRICTIONS :

- 7.1. THE G/T FOR ALL NEW INDIVIDUAL EARTH STATIONS USING THIS TYPE APPROVED ANTENNA MODEL MUST BE TESTED ON SITE PRIOR TO STANDARD K2 or G QUALIFICATION.
- 7.2. ALL NEW INDIVIDUAL EARTH STATIONS USING THIS TYPE APPROVED ANTENNA MODEL AS STANDARD G MUST BE TESTED FOR EIRP STABILITY.
- 7.3. OPERATION OF EARTH STATIONS USING THIS TYPE APPROVED ANTENNA MODEL WITHIN A LEASED TRANSPONDER MUST BE IN ACCORDANCE WITH AN APPROVED TRANSMISSION PLAN.
- 7.4. ALL NEW INDIVIDUAL ANTENNA MODELS INTENDED FOR OPERATION UNDER THIS TYPE APPROVAL MUST BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
- 7.5. ALL NEW INDIVIDUAL EARTH STATIONS UNDER THIS TYPE APPROVAL MUST BE EQUIPPED WITH THE FOLLOWING PARTS:

	PART DESCRIPTION	MANUFACTURER	PART NUMBER
7.5.1	1.8M ANTENNA REFLECTOR W/SUPERHYDROPHOBIC COATING	PRODELIN	P/N 0179-182

W/O SUPERHYDROPHOBIC  
COATING

P/N 0179-188

7.5.2

2-PORT TX/RX  
FEED ASSEMBLY

PRODELIN

P/N 0800-309

8. PERFORMANCE CHARACTERISTICS FROM TEST RESULTS:

- 8.1. TRANSMIT GAIN ( HLP ) (Normalized)  
VALUE AT 14000 MHz: 46.5 DBI  
EFFICIENCY: 64.14 % (PERCENT)
- 8.2. TRANSMIT ISOLATION ( HLP )  
AVERAGE: -29.85 DB  
MINIMUM: -26.53 DB
- 8.3. TRANSMIT GAIN ( VLP ) (Normalized)  
VALUE AT 14000 MHz: 46.31 DBI  
EFFICIENCY: 61.4 % (PERCENT)
- 8.4. TRANSMIT ISOLATION ( VLP )  
AVERAGE: -29.64 DB  
MINIMUM: -26.77 DB
- 8.5. RECEIVE GAIN ( VLP ) (Normalized)  
VALUE AT 11000 MHz: 44.2 DBI  
EFFICIENCY: 61.09 % (PERCENT)
- 8.6. RECEIVE GAIN ( HLP ) (Normalized)  
VALUE AT 11000 MHz: 44.2 DBI  
EFFICIENCY: 61.09 % (PERCENT)
- 8.7. SIDE LOBE LEVEL : BELOW 29 - 25 LOG THETA DBI

Sincerely,

Calvin C. Harriott  
Sales Support

cc: J. Jankowski  
S. Gordon