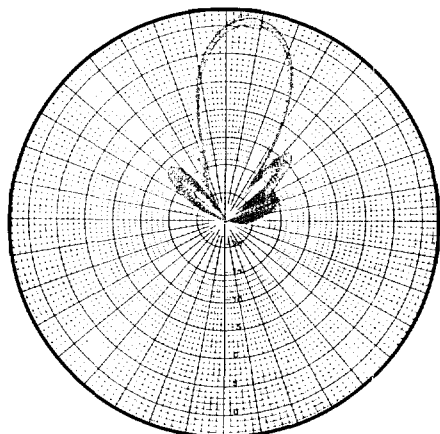


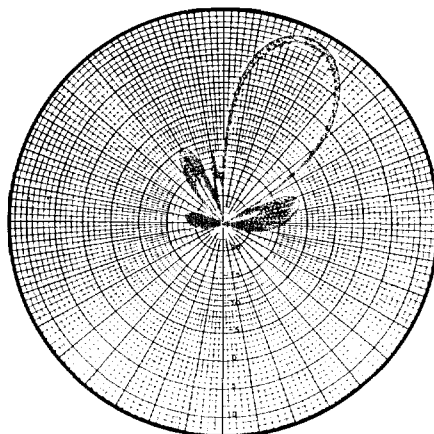


T-4000 INMARSAT High-Gain Antenna System

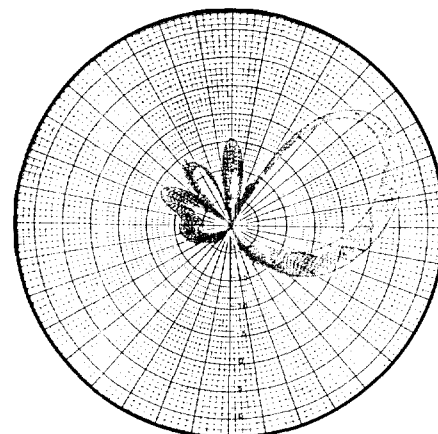
INMARSAT ANTENNA PERFORMANCE ELEVATION vs. ANGLE



HIGH POINTING ANGLE



MID POINTING ANGLE



LOW POINTING ANGLE

BEAM STEERING UNIT:

- Continuous built-in test.
- Digital readout of fault codes.
- Port for remote readout.
- Standard 2 MCU configuration.

DIPLEXER/LNA:

- Proven, off-the-shelf component.
- Small, compact, light weight.
- Mounted inside the airframe near the HGA.
- Approved by FAA and INMARSAT for numerous commercial and general aviation aircraft types.

ENVIRONMENTAL SPECIFICATIONS:

Temperature	
Operating	-55°C to +70°C
Survival	-55°C to +85°C
Altitude	
Operating	70,000 Feet
Survival	70,000 Feet
Humidity	Category C, 95% Min.
Lightning	Category 2A, Zone 2A
Other Environmental Specifications	Other tests are conducted using RTCA/DO-160C Test Procedures
Finish	Stock radome is painted with white teflon paint; other colors may be applied.
Interface Connectors	
RF	Type N Jack
Control	MS 3126F12-10S

For More Information Contact Dick Radawicz



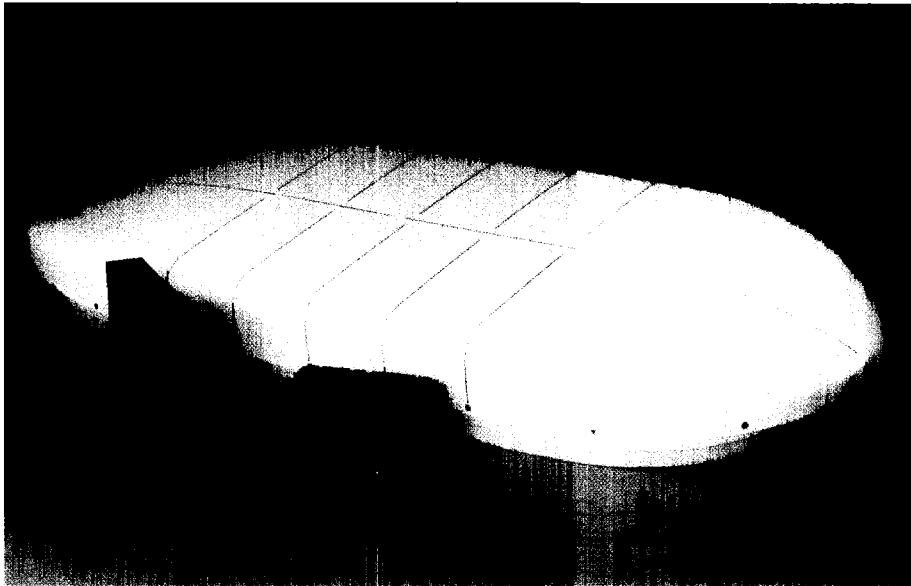
TECOM INDUSTRIES, INC.
 9324 Topanga Canyon Boulevard • Chatsworth, CA 91311-5795
 PHONE: (818) 341-4010 • FAX: (818) 718-1402



TCHS003



T-4000 INMARSAT High-Gain Antenna System



- Exceeds INMARSAT and ARINC 741 performance specifications.
- Compatible with all INMARSAT approved terminals; multi-channel, voice and data.
- Excellent performance under all route conditions-including polar.
- Low profile, low drag design.
- Continuous built-in test with remote read-out capability.
- High MTBF (16,000 hours); Low MTTR (less than one hour).
- Simple, low-cost installation.
- System includes complete engineering/installation package.

HIGH GAIN ANTENNA (HGA):

ELECTRICAL SPECIFICATIONS

Operating Frequency Band	
Receive	1530-1559 MHz
Transmit	1626.5-1660.5 MHz
Antenna Coverage	>75% of upper hemisphere 5° above the horizon, excellent low-angle coverage.
Beam Steering	Antenna beam can be steered to 5,000 discrete positions. Beam to beam spacing is approximately 2°
Receive System Figure of Merit	Greater than -13 dB/°K (Antenna Combined with Diplexer/LNA)
Satellite Discrimination	Greater than 13 dB
Polarization	Right Hand Circular
Axial Ratio	Less than 6 dB over antenna coverage
VSWR	Less than 1.8:1
RF Input Power	60 Watts Max.
Prime Power Requirements	15 Watts Nominal (Provided by BSU)

MECHANICAL SPECIFICATIONS

Dimensions	5.4" H x 23.0" W x 67.8" L, includes base-plate adapter (137mm x 584mm x 1722mm)
Weight	
Antenna	47 Lbs. (21.3 Kg.)
Radome	12 Lbs. (5.4 Kg.)
Adapter Plate	43 Lbs. (19.1 Kg.)
Total Antenna Assembly	102 Lbs. (45.8 Kg.)

For More Information Contact Dick Radawicz



A Tech-Sym Company

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