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## FOR IMMEDIATE RELEASE

### SUBJECT: QUAD BAND TRANSPORTABLE GROUND ANTENNA

**Encinitas CA October 16 2007**-THIS IS A REQUEST FOR INFORMATION (RFI) AND NOT A SOLICITATION. The US Government –US AIR FORCE (USAF) is requesting information from companies with antennas for tactical ground Satellite Communication (SATCOM) systems. The Government wishes to determine potential sources for the procurement of a Quad-Band Transportable Ground Antenna. INTRODUCTION: The application is to support quad-band (X-, C-, Ku-, and Ka- band) communications for a ground capability for ground-to-space communication. The antenna will be used to interface a tactical ground SATCOM terminal with the Wideband Global SATCOM (WGS) system, the Defense Satellite Communications System (DSCS), and commercial C-, X-, and Ku- band satellites. The quad-band transportable ground antenna is expected to be controlled by and monitored from a variety of existing and future DoD SATCOM terminals. It must also support multiple carrier operations. Desired minimum performance parameters for this antenna are listed in Table 1. The Government is looking to evaluate potential for quad-band antennas in FY08, with production deliveries beginning in FY09. SCOPE: The objective of this RFI is to determine existing Industry solutions to assist in developing preliminary acquisition planning to support a potential RFP release for such an antenna in FY08. DATA SUBMISSION REQUIREMENTS: The Information package should include the following items: 1. Statement of interest, either as a Prime- or a Sub-contractor/partner/team member. 2. Description of company qualifications: Projects, Products, and Applicable experience. 3. Description of applicable antenna design along with its specifications and programmatic. Specifically: a) Gain characteristics in each band (including bandwidth and sidelobe performance) b) Transportability, including packaging, shipping and volume requirements c) Set-up and tear down 1. Times 2. Number of people needed 3. Any additional equipment required d) Existing certifications (if available) e) Environmental performance f) Maintenance concept g) External interfaces h) ACU/PDU compatibility i) Safety Controls/Interlocks j) Cost k) Availability l) Current users/applications (if available) m) Any existing DoD contract vehicle(s) that may have similar capabilities to include a POC 4. Risks and risk mitigation strategies. 5. Obsolete parts strategy. 6. Any issues or concerns not identified above. POINT OF CONTACT: Responses to this RFI are due to Ms Kathleen Munroe by COB 26 October 2007. Respondents should identify their company's name, address, telephone number, point of contact, and whether they are a large or small business. Proprietary information should be clearly marked and will be safeguarded appropriately by the Government. Response packages to be mailed shall contain four (4) paper copies as well as four (4) electronic copies on CDROM. The electronic format may be in Adobe Acrobat Portable Document Format (PDF) or compatible with Microsoft Office 2003 suite of software.

The information received will not obligate the Government in any manner, nor will the Government reimburse contractors for any costs associated with submittal of the requested information. This request does not constitute an Invitation For Bid or a Request For Proposal.



Table 1: Antenna System Performance Parameters Performance Parameter Minimum Parameter  
Perform RF Band (Transmit/Receive) Receive Transmit C-band 3400 - 4200 MHz 5850 - 6650  
MHz X-band 7250 - 7750 MHz 7900 - 8400 MHz Ku-band 10950 - 12750 MHz 13750 -14500  
MHz Ka-band 20200 - 21200 MHz 30000 - 31000 MHz Nominal Mid-band Gain (dBi) Receive  
Transmit C-band 41.2 45.5 X-band 47.1 47.8 Ku-band 51.1 52.6 Ka-band 55.9 59.3 Polarization  
C-band - Linear horizontal and vertical, orthogonal and reversible, RHCP and LHCP reversible X-  
band - RHCP and LHCP, reversible Ku-band - Linear horizontal and vertical, cross polarized and  
co-polarized. Ka-band - RHCP and LHCP, reversible Axial Ratio MIL-STD-188-164A, Par  
3.1.3.3 Sidelobe Performance C and Ku-bands - IAW IESS-601, Par 3.1.1 & Appendix A X and  
Ka-bands - MIL-STD-188-164A, Par 5.1.3.1 Tx/Rx Isolation MIL-STD-188-164A, Par 5.1.2.13  
Feed Change Allowable Antenna Tracking/Pointing Accuracy W/ Wind-loading Accuracy  
Requirements Less or equal 0.5 dB loss with no wind. &lt; 2 dB unanchored w/ winds up to 25  
MPH, or anchored with winds of 40 MPH Antenna Pointing +5 to +85 deg elevation and +-15 deg  
azimuth Transmit Power Handling Capability 300 Watts Thermal Operation Requirement -30 deg  
C to +55 deg C with added solar loading Transportable - Packaged to fit on one standard 463L  
pallet without exceeding its size and weight limitations Safety - Lightning Protection, Emergency  
Shut Off

*For more information on this new release, contact directly MDF Technologies with Ref: 58-OCT 2007*

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