



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF NAVAL OPERATIONS
2000 NAVY PENTAGON
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IN REPLY REFER TO:
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From: Chief of Naval Operations (N78)
To: Director, Command, Control, Communications and
Computer (C4) Systems, J6, Joint Staff
Subj: NAVY AIRBORNE JOINT TACTICAL RADIO SYSTEM (JTRS)
OPERATIONAL REQUIREMENTS
Ref: (a JTRS Operational Requirements Document (ORD)
Version 3.2 of 9 Apr 03
Encl: (1 HQMC Letter of 21 Jul 03

1. AN/ARC-210(V) and other legacy systems currently satisfy Naval Aviation's operational requirements for tactical VHF/UHF communications. To comply with the OSD(C3I) mandated Software Communication Architecture (SCA) without loss of functionality, the Cluster 4 Joint Tactical Radio System (JTRS) must at a minimum provide legacy capability, including:

- a. All waveforms and modes
- b. Mechanical and electrical interfaces
- c. Weight, size cooling and power constraints
- d. Federated and embedded CRYPTO capabilities

2. In addition to reference (a) requirements for waveforms WF#1 - WF#32, JTRS must also provide the following legacy waveforms and modes to meet current and emerging operational requirements:

- a. Maritime Channels
- b. Dedicated Guard
- c. Automatic Direction Finder (ADF)
- d. Carrier Aircraft Inertial Navigation System (CAINS)/Align
- e. Simultaneous Voice and Data in Variable Message Format (VMF)
- d. TACAN
- e. Plain Text Data Transfer
- f. 4-Channel Scan
- g. 100 Channel pre-sets per waveform,
- h. Automatic Relay Voice/Data

Subj: Navy Airborne Operational Requirements for the
Cluster 4 Joint Tactical Radio System (JTRS)

- i. Joint Precision Approach Landing System (JPALS)
- j. Bandwidth Efficient Advanced Modulation (BEAM)
(IMAGERY - 100 KBPS)
- k. CASS/DICASS/OPTI
- l. COPAS - SARSAT
- m. VHF Digital Link (VDL) Mode 2 and 3
- n. Data Transfer Device AN/CYZ-10AV3)

3. As requested in enclosure (1) and to meet Congressional commitments for Marine Corps Link-16 requirements, a reduced size and weight (from that of a MIDS) JTRS Link-16 terminal will be required starting in Fiscal Year 2006.

4. To avoid significant fiscal, integration and operational impacts, it is critical that the JTRS intended to satisfy Naval Aviation tactical airborne requirements does not exceed the weight, size and power specifications of the existing AN/ARC-210(V) and fully maintains existing mechanical and electrical interfaces.

5. My point of contact is Mr. Tom Malicke, Aviation Communications and Networks Requirements Officer (N780G3 at DSN 664-7702, commercial (703) 604-7702 or e-mail at thomas.malicke@navy.mil.



M. P. Fitzgerald
Rear Admiral, United States Navy
Director, Air Warfare

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