INFORMATION PAPER

ON

AN/APN-241 LOW POWER COLOR RADAR for C-130 E/H2 and MC-130P

- 1. Background. The APN-59 radar currently installed on C-130 E/H2 and MC-130P aircraft is suffering from deteriorating reliability, maintainability, and sustainability (RM&S). The current Mean Time Between Failures (MTBF) is 50 hours for the APN-59, while the AN/APN-241 installed on the C-130H2.5/H3 is demonstrating up to 1,300 hours MTBF. The AN/APN-241 has flight safety-enhancing capability of wind shear prediction and is certified for all-weather precision airdrop, a critical shortfall in current fielded mission capability. The ANG currently has a funded program delivering AN/APN-241 radars to AK, NV, NY, TN, MO, and TX Air National Guard units.
- **2. Requirement.** Mission Need Statement AMC/CAF/AETC/AFSOC/AFMC 301-97. This requirement is incorporated in the C-130 Avionics Modernization Program System Requirement Document, dated 31 March 2000. This early installation of the APN-241 is an "AMP-enabling" modification approved by HQ AMC and Warner Robbins ALC/LBR.
- 3. Impact If Not Funded. Operational mission effectiveness will continue to deteriorate. The C-130 AMP Program deliveries are anticipated to begin in early 2008. This will result in less than continuous production, which will necessitate closing the production line. Additionally, without this radar the ability to maintain the operational tempo required by Operation IRAQI FREEDOM and Operation ENDURING FREEDOM will be severely impacted due to increased equipment failures and high maintainability and sustainability costs.

4. Units Impacted.

129 RQW Moffet, CA

165 AW Savannah IAP, GA

166 AW Wilmington, DE

5. Contractors. Northrop Grumman Corporation, Electronic Sensors and Systems Sector, Linthicum, MD

6. Cost.

Units Required	Unit Cost	Program Cost
20**	\$800K*	\$16.00M*

^{*} Includes required spares, support equipment, and technical orders

^{**} Total units required will equip entire ANG C-130 H2 and MC-130P fleet