INFORMATION PAPER

ON

APG-68(V)10 WITH SYNTHETIC APERTURE RADAR (SAR)

- 1. Background. Addition of the APG-68(V)10 with Synthetic Aperture Radar (SAR) capability on ANG F-16s will significantly increase pilot's survivability and lethality in every mission area. In the air-to-air arena, the APG-68(V)10 will increase detection range against adversarial weapon platforms. This increases pilots' standoff range, reduces the likelihood of undetected threats, and maintains the F-16's air superiority. In the air-to-ground arena, the ability to detect, target, and destroy mobile targets with precision weapons is an absolute necessity. The USAF currently fields multiple weapon systems that can accomplish this task, until inclement weather becomes a factor. The addition of SAR on the F-16 will bring the ability to target mobile threats, on the modern battlefield, in all weather conditions, 24 hours a day. The APG-68(V)1 is currently installed on all Block 25/30/32/42 F-16s. This radar faces diminishing manufacturing source issues and consistently tops the list of highest failure rate items in the fleet. The USAF is developing the APG-68(V)10 for integration on Block 40/50 Common Configuration Implementation Program (CCIP) aircraft. Funding is required for integration of the APG-68(V)10 on the Block 25/30/32 F-16.
- 2. Requirement. CAF ORD 301-01-B, F-16 C/D Block 25/30/32 MSIP ORD (Draft)
- **3. Impacts If Not Funded.** Future adversaries will safely operate under the weather in future conflicts, and the APG-68(V)1 radar will become unsupportable.

4. Units Impacted.

113WG Andrews AFB, MD	144FW Fresno, CA	178FW Springfield, OH
114FW Sioux Falls, SD	147FW Ellington, TX	180FW Toledo, OH
115FW Truax, WI	148FW Duluth, MN	181FW Terre Haute, IN
120FW Great Falls, MT	149FW Kelly AFB, TX	183FW Springfield, IL
122FW Ft Wayne, IN	150FW Kirtland AFB, NM	187FW Dannelly Fld, AL
127WG Selfridge, MI	158FW Burlington, VT	188FW Ft Smith, AR
132FW Des Moines, IA	162FW Tucson, AZ	192FW Richmond, VA
138FW Tulsa, OK	174FW Syracuse, NY	
140WG Buckley, CO	177FW Atlantic City, NJ	

5. Contractor. Northrop Grumman, Baltimore, MD

6. Cost.

Units Required	Unit Cost*	Program Cost
RDT&E (3600)	\$64,769,000	\$64,769,000
339	\$1,325,590	\$449,375,010

^{*} Based on F-16 Block 50/52 CCIP integration