

Question 7

This authorization request is in support of the NGTS (Next Generation Targeting System) IR&D program. The NGTS is a multi-sensor targeting system being developed by the Lockheed Martin Missiles and Fire Control Company in Orlando, FL. The system includes a Pod mounted Ku band RADAR. The principle components of this RADAR system are:

Modular Electronics Unit (MEU) – responsible for the generation and reception of the RADAR signals and system control.

Processor Unit for RADAR signal processing

Transmitter / Ku-Band RF amplifier

Antenna/RF Front End

Gimbal Assembly used to steer the antenna

Internal Navigation System (INS)

The objective of this project is the demonstration of a Synthetic Array Radar (SAR) RADAR integrated with a high precision navigation system. The SAR images resulting from the system will provide high precision targeting information. The POD containing the system would be mounted on a Saberliner Jet and used to collect RADAR returns, which would be processed with the aid of the INS platform navigation data to form a high resolution SAR image. The initial system integration and testing could be performed at test towers located at the Orlando locations. The system would then be moved to the Phoenix/Goodyear area for final system integration and flight testing later in 2004. Additional flight data collection could be at and around the Eglin Air Force Base.