



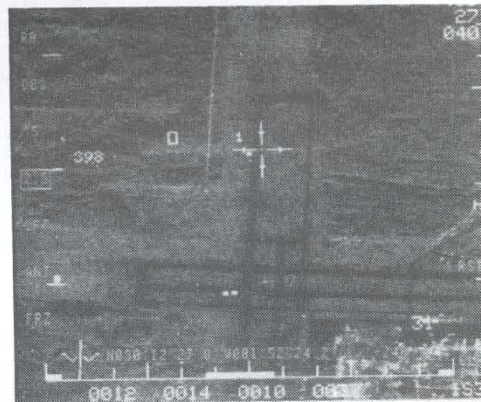
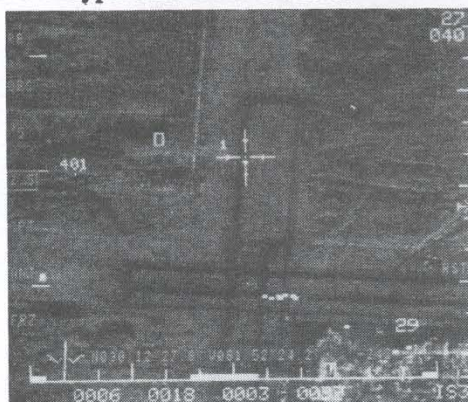
The Spirit of '76 Pod Newsletter

March 1995 Issue 5

Gray Wolf Demonstrations

A Westinghouse Norden Systems publication

In January, the Gray Wolf S-3, with the AN/APG-76 high resolution SAR/GMTI radar pod, participated in several successful operational demonstrations at NAS Cecil Field, NS Mayport and NAS Oceana.



AN/APG-76 SAR/GMTI image of F-18s during takeoff at NAS Cecil Field from a range of 40 nmi.

The first demonstration was conducted on January 12 for Major General Israel, Director, Defense Airborne Reconnaissance Office (DARO), at NAS Cecil Field, Florida. After viewing the real-time, high-resolution SAR/GMTI images being retransmitted from Gray Wolf to the Norden Ground Station, MGen Israel flew back to Andrews AFB in Gray Wolf with the VS-30 crew and experienced first hand the on-board capability of the APG-76. Most impressive were high-quality radar images simultaneously tracking a slow-speed truck on the off-duty runway, along with the high-speed takeoff of F-18s. Other images, both in the local Jacksonville area and north into Georgia, were selected and viewed in real time as directed by Commodore Voss (CSCWL) on the voice net from the Ground Station.

A similar demonstration was requested and conducted the following week for RADM Wright, COMCRUDESGRU 12, and RADM Bowman, COMCARGRU 6 at NAS Mayport. On their strong joint recommendation, Gray Wolf's capabilities were further demonstrated at NAS Oceana on February 2 to VADM Allen, COMNAVAIRLANT, and several Norfolk area Battle Group Commanders and Staffs.

Gray Wolf Participates In JTF-95-2



AN/APG-76 10-foot resolution SAR image of LCACs coming on shore from a range of 25 nmi

Immediately following the afternoon demonstration at NAS Oceana, the ground station arrived at Camp Lejeune, NC, by 0600 the following morning to support Gray Wolf's participation in the JTF-95 landing, which had been accelerated due to an approaching winter storm. Despite the short notice, the Gray Wolf was on station providing real-time reconnaissance of the assault both in the air and for analysis on the ground (see photo). Significant features were the detection of the LCACs coming ashore, movement of the vehicles off the beach, and helicopter traffic in and out of the landing zones. These images were then replayed at Marine Headquarters for MGEN Jones, CG 2nd Marine Division and LGEN Johnston, CG Marine Forces Atlantic.

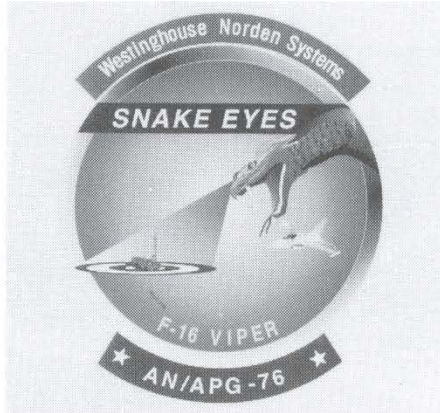
**JTF-95-2
(Continued)**

All the demonstrations were conducted using the operational APG-76 Radar with 10-foot resolution; ranges were from 15-75 nmi. Funding for Gray Wolf's participation in these operational demonstrations and exercises was provided by DARO and Commander Sea Control Wing, Atlantic.

**Norden Systems
Continues to
Expand the
Capabilities of
APG-76**

The APG-76, installed in the Westinghouse Norden Systems Gulfstream II test bed, is now at Eglin AFB, Florida, supporting ARPA and WRDC projects investigating Moving Target Imaging and Polarimetric SAR capabilities. Early reports indicate a highly successful mission. These features will ultimately be incorporated into the system to further enhance its capabilities.

**U.S. Air Force
Pod System
Code-named
"Snake Eyes"**

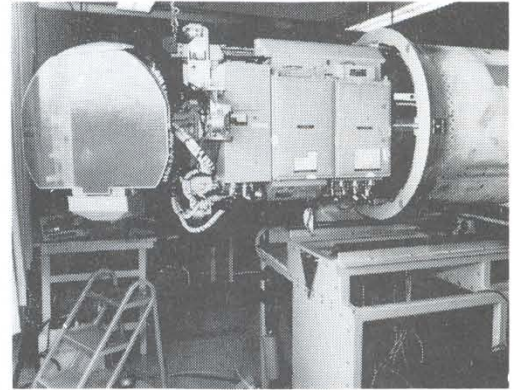


The U.S. Air Force pod has been named "Snake Eyes" by members of the Air Combat Command test team at Langley AFB, VA. The "Snake" is derived from the pilots' name for the F-16, which will be the first Air Force platform for this pod. The "Eyes" comes from the ultra-high-resolution mapping, slow-speed moving target detection, and precision targeting capabilities of the AN/APG-76 radar.

**Snake Eyes Pod
Integration
Completed
January 28**



Proud members of the "Pod Squad" beside the pod after completing system integration of the pod, radar, controls/displays, and test equipment



Close-up view of the pod's radar and radome removed and radar rack extended

The Snake Eyes project team completed laboratory integration and checkout of the APG-76 radar in the F-16, 600-gallon tank on schedule at the end of January. Mechanical modifications to the pod will be completed this month, and the system will be delivered to Eglin AFB, FL, for installation on the Air Warfare Center F-16. First Snake Eyes flights are scheduled for late March.

**Carrier Qual for
Gray Wolf**

NAWC PAX River has been tasked to determine what additional analysis and tests will be required to qualify Gray Wolf for full carrier operation. Carrier suitability was not previously required in order to expedite the time to first flight and reduce the initial cost of the Gray Wolf demonstration program.