# New Advanced Boeing Test Unit Aids Apache Longbow Operators

The first advanced mission avionics test and development system for AH-64D Apache Longbow helicopters is making it easier for operators to understand just how Apache Longbows will perform in combat.

The test and development system - a complete avionics integration laboratory - contains all the systems and avionics on a flyable Apache Longbow. It was developed by The Boeing Company in Mesa, Ariz., to help engineers test and evaluate how components and subsystems react in various operational environments - including combat.

Boeing delivered the first unit of its kind late last year to GKN Westland Helicopters, Ltd., of Yeovil, England. GKN Westland is calling its new integration lab the Mission Avionic Systems Rig, or MASR. The MASR will be used to support WAH-64 Apache Longbow production at GKN Westland. The WAH-64 is based on the AH-64D Apache Longbow multi-role combat helicopter, developed and produced by Boeing in Mesa.

The multi-million-dollar lab, which can be used by all current and future AH-64D operators, took Boeing three years to develop. However, because the design and documentation packages are reusable, follow-on orders will take less time to complete.

The design has been so well received that Boeing already has started design of a new avionics integration lab based on the MASR.

The lab, which contains the entire aircraft avionics suite for the Apache Longbow, also enables operators to determine the best ways to keep aviators and maintainers trained and ready when called into action.

The MASR provides GKN Westland Helicopters with the ability to study how avionics subsystems work, and to test software in a complete system environment without requiring the use of an aircraft. A system of computers within the MASR allows engineers to monitor and simulate thousands of signals to support the investigations.

The MASR incorporates numerous features, including innovative wire harness interfaces, a flight control system computer test set similar to the one used for comprehensive flight control system tests. It also employs advanced electrical design and documentation techniques previously used only for aircraft installations.

GKN Westland Helicopters, as prime contractor, will deliver 67 WAH-64 Apache Longbow helicopters to the United Kingdom Ministry of Defence. Boeing is a major subcontractor to GKN Westland on the U.K. Apache program.

###

00-07

For further information:
Hal Klopper
(562) 496-8515