SCIENCE SCOPE •®

Germany has upgraded portions of its air traffic control systems with a new state-of-the-art system built by Hughes Aircraft Company. These TracView systems give air traffic controllers a real-time, full-color digitized display of aircraft detected by multiple radars that feed into air towers and centers Installed in former West and East German sites, TracView provides automated identification and beacon code correlation and networked beacon code allocation. The systems draw sensor data fro wide range of old and new radars built by Western and Eastern Bloc companies.

In the aftermath of the Persian Gulf War. Kuwait will beef up its defense with 40 F/A-18 Hornet aircraft equipped with Hughes-built APG-65 radars. This state-of-the-art, multi-mode radar system has excellent air-to-ground and air-to-air capability; and its proven reliability and effectiveness will help the McDonnell Douglas-built Hornets perform missions day or night, in adverse weather, over land and sea.

A new and better way of testing missile target seekers is possible, now that an Air Force laboratory simulation system will use an advanced infrared image projector. This tactical infrared projection system (TIPS) was developed by Hughes. It is based on Hughes' liquid crystal light valve technolog TIPS projects TV-like images of changing infrared scenes, testing the target detection and tracking performance of seeker sensor systems. The high spatial and temperature resolution of these image provides capabilities not possible with current simulation systems. Using laboratory simulations rath than launching test missiles to test target seekers is expected to save the Air Force considerable m

The 23rd nation in 25 years will benefit from a Hughes-built air defense system. This advanced, state-of-the-art system will provide Iceland and the surrounding Nato-protected North Atlantic with improved air defense command, control, and communications capability. Hughes will use a new generation of technology to build Iceland's system, which has an overall open system architecture that allows for additional hardware and growth. Its data processing equipment is based on the Digi Equipment Corporation's line of commercial computers, and it is the world's first major air defense system using Ada software language.

A new solid-state broadband transmitter operates at considerably lower cost and reduced power consumption, while having performance equivalent to a 200-watt "brute force" system. This HIBT-118 — the latest in the Hughes family of AML© solid-state broadband transmitters — uses high-power FET amplifiers and unique microwave circuitry to achieve state-of-the-art performance in solid-state equipment. The inherent flexibility associated with its broadband l-to-80 channel design, plus its increased power, provides for supertrunking applications well in excess of 20 miles.

For more information write to: P.O. Box 45068, Los Angeles, CA 90045-0068 USA s

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