Grey Eagles

The National Institute for Aviation Research (NIAR) in Wichita, Kan., is using its human factors laboratory to compile a report to determine if existing information supports higher insurance premiums charged to general aviation pilots over the age of 60. The program is part of an aging pilot study by the Aircraft Owners and Pilots Assn. to assess whether the higher premiums are justified. Alex Chapparo, director of the lab, says the research is focusing on documentation regarding age-related changes in sensory, cognitive and motor abilities. He says aging pilots often perform better than expected, in part because they use their expertise and experience to help compensate for age-related changes, and that age alone is a poor predictor of accident risk. Daniel McConnell, assistant professor of psychology, says older general aviation pilots tend to be more affluent, well-educated and have access to better medical care, all of which may mitigate the magnitude of age-related changes. He says the absence of data makes interpretation of “any increase in accident rate with age difficult to interpret.”

NIAR has also found there is “no clear established relationship between any specific test” (perceptual, sensory-motor and cognitive) and accident risk, and that more basic research is needed to identify risk factors for older pilots. NIAR enlisted the help of the United Flying Octogenarians in the study.

War Games

Boeing has released BattleScape 3.4 Standard and BattleScape Developer Option—two new versions of its off-the-shelf visualization software that allows warfighters to track and monitor late-night skirmishes and view weather patterns. The program provides operators with model data of existing ground, air and space assets and simulates the addition of new assets into an environment. The tool also allows users to recognize and respond to risks as they develop. The Developer Option is a Windows-based whole-Earth 3D visualization tool that allows users to create applications that require visualizing the entire environment, including sensory imagery, terrain, aircraft tracks and terrain maps. These can be mixed with space-based data, such as the position of satellites and weather patterns.

Sea Change

U.S. Navy officials have unveiled plans to eliminate paper nautical charts throughout the fleet in favor of interactive electronic navigation systems under development by Northrop Grumman. The Electronic Chart Display and Information System operates using a global database of digital charts produced by the National Geospatial-Intelligence Agency. Early this summer, an Aegis-class guided missile cruiser became the first ship to navigate with the system, following its certification. Users can see their ship’s precise, real-time position and movement superimposed on a display.

Sanctions Ahead?

The World Trade Organization (WTO) has again sided with the European Union in its dispute with the U.S. over the Foreign Sales Corporation and successor tax benefit regimes Washington has drawn up. In the latest ruling, the WTO upheld a challenge by the EU of 2004 congressional legislation that phases out the tax benefit. The tax relief was challenged previously and ruled a violation of the trade agreement. Washington has yet to decide whether to appeal the ruling or comply. If there is no action, the WTO could authorize the EU to impose sanctions against U.S. companies, which has occurred before.

Fire Fly

Sagem and French defense research agency Onera have begun a test campaign to demonstrate the usefulness of unmanned aerial vehicles in detecting and combating forest fires. The trials involve the Busard, a long-endurance, optionally-manned aircraft acquired earlier this year to certify LAAs for civil applications (AW&ST Apr. 11, p. 18). The vehicle is equipped with a Sagem visible/IR sensor designed to transmit images that are overlaid directly onto detailed contour maps. The demonstrations will provide high-resolution data to locate fires and fire patterns as well as accurately assess fire damage. In related news, Sagem says it has completed test flights of its Spertur tactical UAV modified to Greek army requirements. The alterations allow the aircraft to be controlled by a ground-based system more than 180 km. from the launch site, in real time and in rough terrain similar to that found in Afghanistan, where Spertur has seen operational service. The new capability is obtained by handing off control to a secondary station for image acquisition and target localization in the final phases of the mission. Control is returned to the ground station for aircraft recovery.

No Static

The European Commission has given approval for EADS to acquire Nokia’s professional mobile radio (PMR) business. The proposed sale, announced in April, has been under anti-trust scrutiny. A central element of the deal is the Tetra-based secure communications system used by security forces. The commission determined the sale would not “significantly impede” competition. By acquiring the PMR activity, EADS will be able to compete more effectively, according to the commission.