

OLF old before its time?

By BILL SANDIFER, Staff Writer

Picture a pleasant cross-country commercial flight, followed by a perfect landing. As attendants assist passengers leaving the plane, passengers notice the chief flight attendant awaking the flight crew which had dozed off midway in the flight. An absurd scene? Not at all.

Many airliners are equipped with autopilots capable of scoring perfect landings, free of pilot control. But a crew asleep? Yes.

Ground controllers, several years ago, remotely awakened a flight crew on a domestic flight to Los Angeles. The entire crew had, indeed, dozed off at the controls. The plane, according to news accounts, flew on past the coast and out over the Pacific before controllers triggered an alarm, waking the crew.

"The pilot's just there as a monkey in case something goes wrong," remarked an anonymous former flight crew member. "He's a backup."

As amazing as such technology is, it has become commonplace in guiding commercial aircraft.

Even more amazing is a supercharged version of the same technology used in military fighter aircraft. Both the Navy's Hornets and Super Hornets, as well as F-14 Tomcats, are equipped with an autopilot and automatic carrier landing system, or ACLS, notes Jane's All the World's Aircraft. The military continually refines and updates such systems.

"Flight test of the new ACLS flight control (system) was completed in April 2000 onboard the USS Enterprise (CVN-65) for both the F-14D and F-14A aircraft with very favorable results," reports globalsecurity.org.

Add a liberal dose of satellite technology -- the Global Positioning System, or GPS -- and carrier-based pilots can ease those white knuckles a bit. In April 2001, the newest Joint Precision Approach and Landing System handled the chores for an F/A-18 pilot landing on the deck of the USS Theodore Roosevelt -- hands-off.

The system recently landed even the challenging AV-8 Harrier vertical take-off and landing fighter on the deck of a carrier -- automatically.

"The new landing system was recently tested at sea," reported the July 2005 edition of *Machine Design*, an engineering publication. "Besides reducing risk, the automated landings will let pilots fly day or night missions in weather that previously have made such landings impossible."

About two years ago, an unmanned prototype stealth fighter took off, flew around a test site, "dropped its tailhook, slowed to 110 (knots), and executed a near-perfect aircraft-carrier-style landing," reported *Aerospace America* in 2003.

A variation on the Unmanned Aerial Vehicle theme (see the July 10 Daily News), the Unmanned Combat Air Vehicle marked "the birth of the shipborne UCAV, a new breed of pilotless aircraft the U.S. military desires for unmanned missions including surveillance, strike, and suppression of enemy air defenses at the start of future battles." The automated system that flew the UCAV was the same one that guided the F/A-18 to a hands-off carrier landing.

Will an OLF become OBE?

With the ever-accelerating pace of technological advances, one might reasonably foresee an OLF as obsolescent, "overcome by events" in Navy parlance, parlance used in private communications to revise OLF strategies derailed by a shifting landscape.

The Navy's original projections, regardless of court delays, had anticipated an OLF would become fully operational only in 2010 when East Coast basing of all Super Hornet squadrons is complete.

By then, shifting military needs and the economy -- as in America's space program -- may dictate a heavier reliance on unmanned missions.

A former House Armed Services Committee staffer, Jeremiah J. Gertler, was recently quoted in The Virginian-Pilot: "The real challenge to the future of the Navy is relevance."

Gertler suggested lower-cost weapons, including Air Force bombers and unmanned aircraft, reduce risks to pilots and are taking over many missions the Navy has traditionally considered its own.

In the meantime, automated landing training is being conducted at both Naval Air Stations Oceana in Virginia and Patuxent River, or Pax River, in Maryland, according to Navy Web documents.

Of note is an accompanying Navy statement that practice carrier landings, using one of Pax River's runways, are "flown completely over water, providing excellent training for night approaches to the ship." The Navy, in arguing for its preferred Washington County site, has argued just the opposite. Using the existing Atlantic Marine Corps OLF on Core Sound, the Navy contends, is undesirable precisely because it requires pilots to approach the runway over water.