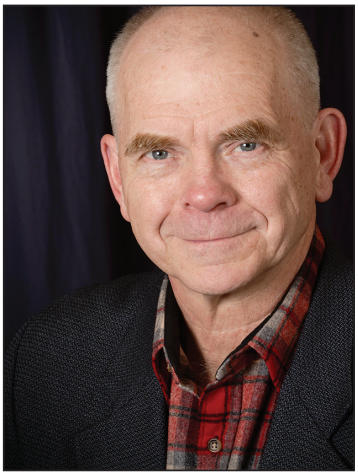
Flying Blind



It's 10 p.m. somewhere over the vast oceans that comprise three-quarters of the Earth's surface. Do you know where your airplane is?

Well, you could, but maybe you don't.

The anniversary of the disappearance of Malaysia Airlines flight MH370 came and went in March with the fate of the Boeing 777 still unknown.

It didn't have to happen.

Although they were inherent in the program from the get-go, civilian applications of GPS trace their origin to President Reagan's September 16, 1983, announcement — after a Soviet pilot shot down an off-course Korean airliner — that the United States would make its nascent (and still-classified) GNSS system available for civil aviation worldwide.

The problem in that case appears to have resulted from navigation error — human or mechanical — but could also have been remedied by a suitable surveillance and tracking regime. Indeed, the interface with airliner autopilots, suspected of contributing to the 1983 tragedy, was subsequently modified to reduce the chance of such mishaps.

In 1994, the International Civil Aviation Organization (ICAO) Council approved a policy on implementation and operation of communications/navigation/surveillance/air traffic management systems that stated "GNSS should be implemented as an evolutionary progression from existing global navigation satellite systems . . . towards an integrated GNSS over which Contracting States exercise a sufficient level of control on aspects related to its use by civil aviation."

The policy continues: "ICAO shall continue to explore, in consultation with Contracting States, airspace users and service providers, the feasibility of achieving a civil, internationally controlled GNSS."

That same year, the United States renewed and refined Reagan's pledge, promising ICAO that the GPS Standard Positioning Service would be made available on a continuous worldwide basis, free of direct user fees, for the "foreseeable future." Russia followed in 1996 with a similar commitment for GLONASS, and both offers were accepted by the ICAO Council.

In the intervening years, as GNSS service providers have repeated their vows to ICAO, the latter organization has shaped a multitude of standards and recommended practices (SARPs) and minimum operational performance specifications (MOPS) that support applications of the GNSS technology along with satellite-based communications.

Thirty years after GPS was made available for civil aviation we still have not reached the Promised Land of mandatory, real-time tracking of airliners over the oceans.

Nonetheless, the search for an integrated GNSS for civil aviation has not gone well, because we still have not reached the Promised Land of mandatory, real-time tracking of civil airliners over the oceans.

To paraphrase journalist/provocateur John Oliver, "Why is this still not a thing?"

Here is an industry that can squeeze another row of seats into the economy sections of its entire fleet in six months, but it can't implement a fundamental safety measure that's been technically feasible for nearly 20 years?

Who's at fault? Culprits abound: The air transport industry that wants to avoid equipage costs. The unenforceable ICAO measures pending "voluntary" adoption by carriers and member-states. The national civil aviation authorities that, appearing to have abandoned any regulatory role except the narrowest and most pressing of safety issues, continue to punt on the increasingly obvious lack of surveillance.

Meanwhile, the people financing this fiasco — travelers held hostage by an ever more oligopolistic airline industry — continue to get a bad deal.

Perhaps we need to turn this problem over to the National Security Agency or the CIA, who seem to know where everybody is in the world at every moment. Or maybe the people and institutions with the power to remedy the situation need to step up and fulfill their responsibilities.

GLEN GIBBONS, JR.
Editor