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February 7, 2007

Mr. Greg Wheeler
Office of Navigation and Spectrum Policy
Department of Transportation

Lt. Michael Herring
Project Officer, Office of Navigation Systems
Coast Guard

Submitted Electronically via DOT Document Management System

Re: DOT Docket Number USCG-2006-24685 (Loran)

Dear Mr. Wheeler & Lt. Herring:

On behalf of the more than 410,000 members, the Aircraft Owners and Pilots Association (AOPA) supports the continued availability of the Long Range Navigation system (Loran) for aviation applications. If the Department of Transportation (DOT) and Department of Homeland Security (DHS) retain Loran, the Federal Aviation Administration (FAA) should immediately begin analyzing the use of a modernized Loran system as a Global Positioning System (GPS) backup for both Required Navigation Performance (RNP) and Automatic Dependant Surveillance– Broadcast (ADS-B).

Given the fact that the future navigation and surveillance elements of the air traffic control system are based on positioning and navigation provided by GPS, it is important that there is a seamless backup navigation and positioning source should be available for airspace users at all altitudes in the continental United States.

In May 2006, AOPA urged the FAA to carefully consider retaining Loran, and our letter is enclosed. AOPA encouraged the FAA to consider retaining Loran as a GPS backup due to 1) the relatively low maintenance costs, 2) the broad geographic coverage and availability at low altitudes, 3) the FAA's assertion that a modernized Loran system supports en route, terminal and non-precision RNP procedures, and 4) the need for Loran as a source of ADS-B positioning.

In preparation to submit comments to this docket, AOPA surveyed our members to determine whether they use electronic navigation when GPS is unavailable. The vast

majority indicates that they currently rely on the Very High Frequency Omni Range (VOR) for their primary navigation or backup to GPS navigation. With FAA's plans to have a dramatically reduced VOR network, general aviation pilots need a viable backup in the future. Potential backup navigation systems such as the Distance Measuring Equipment (DME) do not have adequate geographical or low-altitude coverage for piston engine general aviation aircraft. And, AOPA has found inertial navigation systems remain prohibitively expensive.

In order for the FAA and the aviation community to have the full benefits of ADS-B, general aviation pilots will need a backup. It appears that Loran could be a backup to GPS for ADS-B applications. Given the low cost of retaining Loran, and the FAA's initial research that validates its performance, Loran stands to offer pilots a nationwide GPS backup that is independent of the FAA's decisions on both VOR and radar decommissioning.

However, the future of Loran should not be exclusively based on the needs of general aviation. Today, there is literally no equipage with Loran systems that could support RNP and ADS-B. Some have estimated that Loran avionics will not be ready for five or more years. It seems unreasonable to upgrade and maintain Loran for five years without any users.

The Government's retention of Loran should not lead to the FAA's acceleration of VOR or radar decommissioning. The DOT and DHS must recognize that keeping Loran is the first of several hurdles before general aviation will transition to Loran. Without development of affordable avionics that incentivize equipage, the transition to Loran will not occur. However, a strategic decision to develop Loran as a backup to GPS will likely result in the development of systems that ensure the continuation of RNP and ADS-B operations during periods when GPS is not available.

AOPA supports a government commitment to retain Loran. If the DOT and DHS find that retaining Loran benefits America, the FAA should support Loran's use in aviation too. We appreciate the opportunity to comment on this important policy issue.

Sincerely,

Randy Kenagy
Senior Director Strategic Planning
Government Affairs

Enclosure

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Phil Boyer
President

May 1, 2006

The Honorable Marion Blakey
Federal Aviation Administration
800 Independence Ave., SW
Washington, DC 20591

Dear Administrator Blakey: Marion

Representing the more than 408,000 members of the Aircraft Owners and Pilots Association (AOPA), I am writing to urge the FAA to continue operating the Long Range Navigation (LORAN) system beyond fiscal year 2006 (FY2006). As you know, there are on-going discussions about the necessary positioning and navigation components of the aviation system, including using Global Positioning System (GPS) exclusively. And, with recent decisions to deploy Automatic Dependant Surveillance-Broadcast (ADS-B), the requirement for backup positioning becomes much more critical. Since GPS appears to require a backup with similar performance characteristics, the FAA and aviation industry are looking at various technology options. To keep LORAN available as an option for this role, LORAN should not be decommissioned.

The Department of Homeland Security (DHS) currently funds the operation of LORAN in the United States Coast Guard (USCG) budget. LORAN's infrastructure has been modernized and the enhanced LORAN navigation signals may be a viable positioning and timing signal for aviation in the role as a backup for satellite positioning, at no cost to the FAA or Department of Transportation.

Historically AOPA has supported LORAN because it was the first technology to provide general aviation pilots with a high performance area navigation (RNAV) capability. With the arrival of low-cost GPS, LORAN usage in aviation predictably declined. And as general aviation pilots began using GPS, AOPA members have continued use of the network of VOR's as their electronic navigation source. However, technical and financial limitations affect the viability of VOR as a long-term backup. In recent years the aviation landscape has changed significantly, and LORAN may still be necessary.

While the airlines have supported the DME/DME network as a backup for its operations, this is an unusable option for low-altitude operations. The proposal to retain, or even increase the DME network may make sense for high-altitude operators, but DME/DME alone will be useless to aircraft that operate at all 5,400 airports, or seldom fly higher than 18,000 feet.

It is with this background that we are disturbed by the Coast Guard's recent proposal to shut down LORAN. Its surprise proposal to terminate LORAN at this juncture is shortsighted and would waste substantial FAA and taxpayer investment. The Coast Guard tack also ignores the existing agreement between Secretaries Mineta, Chertoff and others to jointly decide LORAN's future in 2006. It also ignores President Bush's, November 2004 Presidential Directive that restructured the management of GPS and gave the lead role for the civil uses of GPS to DOT. That charge includes GPS, its augmentations, *and* backups.

Therefore, AOPA urges the FAA to: (1) support the continuation of LORAN until a long-term backup strategy that adequately meets the needs of all aviation users is identified; (2) Direct RTCA to evaluate and validate LORAN's performance and viability as a backup navigation signal that supports RNP 0.3 performance and ADS-B requirements; and (3) Propose a LORAN oversight council consisting of DOT/FAA, DHS, DOC, DOD, and stakeholders (including AOPA) to guide the future development and operation of LORAN..

Given the apparent need for an affordable, robust GPS backup that has similar performance, and supports the positioning and timing needs of aviation, the decommissioning of LORAN by the U.S. Coast Guard is premature. Once gone, LORAN will no longer be an option, and any other suitable alternative for aviation would likely be more costly, take longer to implement, and would be the responsibility of the FAA exclusively. Let's look before we leap on this issue.

Sincerely,

Phil Boyer
President