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May 23, 2008

Mr. Steve Zaidman
Vice President, Technical Operations
Air Traffic Organization
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Re: FAA Plans to Reduce VOR Services

Dear Mr. Zaidman:

For more than a decade, the 415,000 members of the Aircraft Owners and Pilots Association (AOPA) have embraced the concept of satellite-based navigation and the Federal Aviation Administration (FAA) strategy to transition the airspace system from one designed around hundreds of ground-based navigation aids to one that is based on the Global Positioning System (GPS). General aviation has made great strides, but is not yet midway through this transition to satellite navigation, and the FAA is already planning widespread reductions in the network of Very high frequency OmniRange (VOR) navigation aids. A reduction in the VOR network would be premature because existing regulations require GPS equipped aircraft to retain their VOR equipment, existing FAA training requirements include VOR navigation, and the presence of many operational barriers prevents pilots from operating exclusively with GPS on instrument flights.

Since 1995, general aviation has pioneered the use of GPS for instrument navigation, predominantly as a supplement to ground based navigation. Embracing the technology quickly because of the increased safety, access and efficiency benefits, 71 percent of the instrument rated AOPA members surveyed said they use GPS as their preferred source of navigation. In addition, three fourths ($\frac{3}{4}$) of AOPA members who own aircraft use some form of portable or panel-mounted GPS as their preferred navigation.

Despite these high levels of GPS use, FAA regulations require pilots using GPS to also carry a primary navigation system and for general aviation, the only system available for regulatory compliance is VOR. Albeit equipage with second-generation GPS systems that incorporate Wide Area Augmentation System (WAAS) do not require VOR to be carried, equipage with WAAS systems in the general aviation fleet remains less than 15 percent. Therefore, unless the FAA approves a non-WAAS GPS to be operated without the VOR

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system onboard, it will be many more years before WAAS equipage reaches a point where the FAA can develop plans to reduce the VOR network.

Other barriers preventing general aviation from reducing or eliminating the reliance on VOR include pilot confidence in the GPS signals. Member surveys show that more than 80 percent want some sort of electronic navigation backup. Research reveals that while other backup options may emerge over the next decade, VOR is currently the best performing, most affordable electronic backup system for general aviation.

Another barrier preventing general aviation pilots from reducing their reliance on VOR is the lack of systematic implementation of area navigation and required navigation performance operations. In addition to the continued proliferation of near-precision WAAS LPV approaches, the FAA should broaden their focus to ensuring that all IFR flights can be conducted from takeoff to touchdown with an IFR GPS, regardless of the airports involved. When GPS equipped pilots no longer need to fly on Victor or Jet airways, when they can be cleared to fly "direct" from departure to destination instead of from point to point along a series of VOR's, when they are no longer assigned to fly arrivals and departures designed years ago to be flown with a VOR, and when pilots do not need to rely on a VOR instrument approach to access an airport, many of the operational barriers found today will be gone. But for now the barriers remain, and it further proves that the effort to reduce the VOR network is premature.

AOPA remains dedicated to working along side the FAA during this ongoing transition from ground based navigation to GPS and WAAS. The FAA should terminate efforts to design a reduction in VOR because it is premature, and takes the focus off the primary goal of fully implementing GPS based navigation nationwide. We look forward to discussing this issue with you in greater detail at your earliest convenience.

Sincerely,


Randy Kenagy
Chief of Staff
Government Affairs