

THE FUTURE OF E-LORAN

by

Earl M. Waesche  
Legislative Director  
National Boating Federation

before the

International Loran Association  
35<sup>th</sup> Annual Convention  
October 22, 2006

“2006: The Year of Loran”

The National Boating Federation (NBF) is pleased to speak before this convention on an issue of major importance to us, the continuation of eLoran for maritime navigation and personal safety. NBF is a non-profit alliance of boating organizations including associate and yacht club memberships with a total of two million boatmen nationwide. We support boating safety, boating education and the best and responsible use of our waterways. We support our members in a number of venues but principally in the halls of Congress where we strive to effect legislation consistent with our objectives.

Needless to say we were distressed and alarmed to learn the U.S. Coast Guard did not include funding for Loran operations in its FY07 budget submission, citing savings by decommissioning Loran operations nationwide. If unopposed, this would have caused a shutdown by January 1, 2007. The Coast Guard did this in spite of the fact that Congress had previously appropriated \$160M to modernize the Loran stations, improving its performance and making it less manpower intensive. In response to this, an NBF resolution was prepared and sent to the Secretaries of the Departments of Homeland Security, Transportation and the Federal Aviation Administration and the relevant Congressional committees. We managed to get language in the Coast Guard (DHS) appropriations bill in the House for the continuation of Loran. But as the bill continued through Congress, Senator Coburn of Oklahoma introduced an amendment that would prohibit use of any FY 07 funding to operate the Loran system. Fortunately, Senators Stevens (Alaska) and Murray (Washington) opposed his amendment and offered compromise language that would allow some areas, including Alaska, the Pacific Northwest and the Atlantic Northeast to continue. Unfortunately this would still eliminate the Atlantic coast, the Gulf of Mexico and the Great Lakes. At this point, our only opportunity to reverse this would be when the House/Senate conferees met to work out differences in the two bills. Faxes were sent to all 21 conferees, along with phone calls and visits, making the case for Loran continuation. The conferees accepted the House position, rejected the Coburn amendment and assumed continuation of Loran nationwide until there is written agreement and coordination among the Executive Branch on any termination (see enclosure). Congress approved the Conference Report and sent the measure to the President. The President signed the DHS Appropriations bill on October 4.

Why is the boating community concerned with the continuation of Loran? Experienced boatmen have learned to employ back-up systems in the event of failure of critical mechanical and electrical components on board their vessels. Certainly our GPS navigational system fits this category. Most understand the reality of GPS signal loss from unintentional electrical interference, but all do not realize the risk of signal loss by intentional jamming. We learned of the attempted jamming of GPS at the outset of the Iraq war. The Iraqis were using some Russian equipment to jam GPS but it was detected and destroyed by our military. More surprising, at least to me, was to learn,

from various sources, that China is using powerful laser equipment to disable American satellites. This was reported in the Telegraph.co.uk under the headline: "Beijing secretly fires laser to disable US satellites." It went on to say that American satellites have come under attack "several times" in recent years. Further, that "satellites are especially vulnerable to attack because they have predetermined orbits, allowing an enemy to know where they will appear." As a former DOD employee, I can testify to the availability of technology from various sources that can disrupt GPS signals.

So the question is: what is the future of eLoran and how do we ensure its continuation? There is no doubt that, given the vulnerability of GPS and the lingering possibility of terrorist attacks, we need a back-up for our navigational and timing services provided by GPS. With the recent technical improvements that have produced eLoran, its different carrier network and frequency and signal levels, it remains a perfect back-up to GPS. As I indicated earlier, we have acted, along with others, to eliminate the latest threat to continued Loran operations through our legislative efforts. And, if followed literally, the terms and conditions spelled out in the Conference Report will provide additional control over any unilateral Loran termination. But for those of us who know how Congress operates and the propensity of Government to change their minds, constant vigilance is required.

Further, I believe greater understanding by industry, Government and the general public on the risk of losing GPS is needed. Many in the boating community are not aware of the potential for loss. Perhaps we should encourage a risk assessment be conducted by the Department of Homeland Security on the loss of GPS. If the risk is what we suspect and the results published, this would raise the visibility of the problem, generate greater demand for back-up by the user community and motivate industry. Ideally, an integrated GPS/Loran receiver would be available with the ability to switch modes, automatically or manually in the event either signal fails. To our knowledge there is only one manufacturer that, just recently, offers such a unit. Nonetheless, the decline in use of Loran continues due to the reasons cited, plus the lack of repair facilities and the paucity of Loran equipment available.

In conclusion I can say that we at NBF will continue to monitor all aspects of this and actively pursue the continuation of Loran. But more importantly, the public must be informed of the risk, the need for back-up and let their feelings be known to the Government so that a favorable outcome can be reached.

**CONFERENCE REPORT (H. REPORT 106-699) ON H.R. 5411  
THE FY 07 DHS APPROPRIATIONS BILL**

**LONG RANGE AIDS TO NAVIGATION (LORAN) C**

The President's budget proposed terminating the LORAN-C program. The conferees assume the continuation of the LORAN-C program until: (1) the appropriate entities within the Executive Branch have agreed in writing to the termination, (2) the public has been notified, (3) and the appropriate countries have been notified under existing international agreements.

Within 15 days of a coordinated Executive Branch decision to terminate LORAN-C, the Coast guard is directed to provide a report to the Committees on Appropriations on the entities within the Executive Branch that agreed to the termination, the date such entities agreed to the termination, and names of the officials who agreed to the termination.

Further, the report shall also include the date and methods used to notify the public and foreign countries, as appropriate under existing international agreements, of the program's termination.