## International Loran Association 26<sup>th</sup> Annual Convention and Technical Symposium October 5-9, 1997; Ottawa, Canada

## **Resolution**

## **Background**

A year has passed since the 1996 ILA Convention and Technical Symposium held in San Diego, CA. During this period a number of events have taken place and some anticipated actions have not happened. It is worthwhile to review this activity or inactivity as the case may be. These are listed in no particular order.

**Omega:** In compliance with U.S. Department of Transportation policy as defined in the 1994 Federal Radionavigation Plan, the low frequency global Omega radionavigation system ceased operation on September 30, 1997.

**Federal Radionavigation Plan**: The 1996 Federal Radionavigation Plan was signed and was made electronically accessible in July of 1997. As of the end of September a hard copy was unavailable. Of significance is no change to the termination policy for Loran-C, VOR/DME and ILS. A User Conference for the 1998 FRP was announced for January 1998 in Long Beach, CA.

**Eurofix:** Live, on air tests of the transmission of differential GPS corrections using Loran-C transmissions (Eurofix) were conducted in Europe with successful results. Corrections to within 1-2 meters at ranges of 400-500 km were achieved.

**GPS Vulnerability:** The vulnerability of GPS from natural causes and from interference, both unintentional and intentional received substantial publicity. The ease with which GPS can be jammed and the ready availability of jamming devices became an issue of open debate.

**Loran Congressional Language:** The FAA plan required by Congress by March of 1996 has not been delivered. An unreleased draft became available and was criticized for its misleading and inaccurate statements. To provide the plan required by the later U.S. Coast Guard Authorization Bill, a contract was awarded to Booz Allen & Hamilton by the Department of Tranasportation. A user conference took place in September of 1997 in the Washington DC area.

**NELS:** The Northwest Europe Loran-C System Coordinating Office held a two day symposium and workshop in conjunction with a NELS Steering Committee meeting. This was considered a productive event and has led to some positive actions including the initiation of GPS/Loran receiver technology and the promotion of the NELS system.

**Government Positions**: Transportation Secretary Pena was replaced by Rodney Slater, FAA Administrator Hinson was replaced by Jane Garvey, and Assistant Secretary for Transportation Policy Kruesi is to be replaced. These and other government position changes may have an impact on DOT policy.

With this background, the International Loran Association at its 26<sup>th</sup> Annual Convention and Technical Symposium, at Ottawa, Canada issues this

## Resolution

**Noting** that the 1996 Federal Radionavigation Plan adheres to the policy of total transition to GPS as the sole United States federally provided radio positioning system and continues to specify a termination date for the United States Loran-C service in the year 2000;

**Noting** also that the international Omega global radio positioning service ceased transmissions on September 30, 1997, the date published in the 1996 Federal Radionavigation Plan for discontinuing the Omega service;

**Recalling** that the Presidential Decision Directive concerning the civil national/international use does not specify GPS to be used sole-means or for there to be a termination or a transition plan from existing terrestrial radionavigation systems;

**Recognizing** the vulnerability of GPS service to interruption from natural causes and from unintentional and intentional interference, including jamming by rogue nations and terrorists;

**Recognizing** also loran technological advances that provide a data link for the transmission of GPS differential corrections (Eurofix), and in the development of combined Loran-C/GPS receivers;

**Noting** that GPS and Loran-C are dissimilar complementary systems exhibiting different weaknesses and failure modes, but that in combination they provide the availability and integrity that GPS alone cannot provide;

**Noting** also that GPS and Loran-C together provide the extremely reliable and traceable time and frequency references required by the communications and power distribution infrastructure and that Loran-C provides integrity to this service that GPS alone does not provide;

**Whereas** the language contained in Bills passed by the 104<sup>th</sup> Congress call for Loran-C system upgrades and operation beyond the year 2000,

Whereas the user community has overwhelmingly expressed its requirements that Loran-C service be continued beyond the year 2000,

Whereas having GPS as the only system to provide positioning and timing puts the United States critical infrastructure at risk,

Whereas the published termination date of the year 2000 is having a negative and deleterious effect on the international implementation of Loran-C technology,

Be it **RESOLVED** that every effort should be made to convince the United States government to revisit the loran termination date of 2000 and introduce appropriate language into the Federal Radionavigation Plan, the DOT Authorization and other pertinent legislation, to extend the Loran-C service indefinitely.