



Loran Lines

September 2005

Newsletter of the International Loran Association

Volume 2005-2

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Modernization of CONUS Loran stations completed

The modernization of the 18 Loran station in the Continental United States was completed on June 10, 2005 with installations at the Las Cruces NM site. In line with this effort it was reported that the modernization of the control station at NAVCEN in Alexandria was complete in early June with the installation of the New Loran Consolidated Control System (NLCCS) developed at the Loran Support Unit (LSU). As reported by Capt John Macaluso, CO of USCG LSU, this complex operation was a major team effort. NAVCEN personnel contributed to the development and advanced testing and during the installation carried out the required operational acceptance tests of the new equipment and its interaction with all monitor sites and Loran stations. Personnel from the Loran station remained on board throughout this tremendous effort and in each case supported their end of the base line.

This new equipment will allow the improvement of Loran system performance to act as a GPS backup system. The feasibility of such improvement in Loran navigation accuracy has been demonstrated in 2003 in the Chesapeake Bay with accuracy of within 25 meters for 95% of the time and in May 2005 in Boston Harbor with accuracies of 16.4 meters 95% of the time.

ILA-34 in Santa Barbara to highlight system applications and the future role of enhanced Loran.

The 2005 Convention and Technical Symposium of the International Loran Association, this year, organized around the theme "Enhanced Loran – When Sole Means is not Enough," meets in Santa Barbara at the Fess Parker Double Tree Resort October 17 – 19. The international standardization group (GAUSS) will meet in conjunction with the ILA-34 on Monday morning, October 17.

As it has in the past, this Convention and its associated Technical Sessions will provide a significant platform for the interchange of ideas and will facilitate the discussion of both technical and administrative matters of interest to the navigation community.

The program will serve to stress the interest and active involvement of the ILA in the development of a diverse world-wide mix of satellite and terrestrial-based systems conditioned to provide dependable service under all conditions. Program speakers will explore the organizational and policy aspects of currently operational navigation systems and state of the art equipment as well as system management and mutual coordination. The Final Session will conclude with a Panel Session involving many of the Symposium speakers and guests seeking to identify and characterize topics that should be the focus of future action.

In its announcement, ILA-34 welcomes all interested participants, either as authors, speaker or audience. In addition, this year's meeting in Santa Barbara is an encouragement to arrive early and stay late and to augment your time in California to explore the beauties

★ **ILA34 Convention and Technical Symposium** ★

October 17 – 19, 2005, in Santa Barbara, California

Be there!

International Loran Association

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A complete listing of the Board Membership, addresses and phone/fax numbers can be found on the ILA website: www.loran.org

MEMBERSHIP

NOW is the time to renew your membership! There is an on-line membership form at www.loran.org for your convenience. Renew your own membership or encourage your corporate member to renew and include you!

PLEASE use this secure online method if at all possible to save time and cost for the ILA. Of course you may print the on-line form and fax or mail it back to the ILA Operations Center if you wish to use alternate forms of payment. Please remember that wire transfers require prior approval from the Operations Center and an additional fee.

ILA members who have not yet paid this year's dues are asked to do so now. Membership forms can be downloaded from ILA's website:

<http://www.loran.org/Membership/Formindividual.htm>

Please note ILA's web site address: <http://www.loran.org>
and e-mail address: ila@loran.org

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Loran Lines is an official publication of the International Loran Association (ILA).

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The ILA encourages readers to submit material for publication. Any and all news related to Loran and ILA members is welcome. Send information (with pictures, if possible) to either of the co-editors:

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Current advertising rates per insertion:

1/2 page: \$100 (4 for \$300)
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Langhorne Bond elected ILA President for 2005-2006

Mr. Bond is currently a member of the Board of Directors of ILA. He has operated Bond Associates in Washington DC since 1986 representing a number of aviation-related clients. Previously he served in a wide variety of government roles beginning as Special Assistant to the Undersecretary of Commerce for Transportation and later as Special Assistant to the Secretary of Transportation. During this time he participated in the process in which the Department of Transportation was formed. Later he was to serve in the Urban Mass Transportation Administration as Assistant Administrator for Public Affairs. As Executive Director and CEO of the National Transportation Center in Pittsburgh he was concerned with the development of high-capacity and non-polluting buses. He was appointed by President Carter in 1977 to head the FAA (Federal Aviation Administration) where he

served until 1981. A past President of the American Association of State Highway Officials, he was Chairman of the US Delegation of the 1980 ICAO Assembly.



Langhorne Bond

He was selected by the Board of Directors of the Air Traffic Controllers Association (ATCA) to receive the Glenn A. Gilbert award

at the 44th Annual Convention in September, 1999. This award, created by the ATCA, honors Glen A. Gilbert, one of the fathers of air traffic control, and is intended to recognize and honor individuals who have made significant contributions to aviation, especially in the field of air traffic control. The trophy, inscribed with the names of the recipients is on permanent display in the National Air and Space Museum in Washington DC.

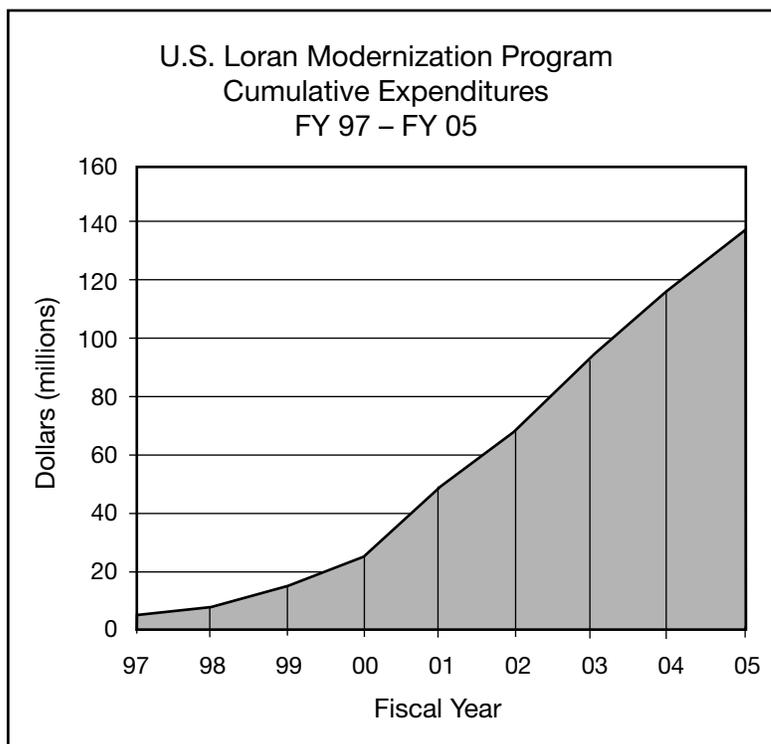
Langhorne has been a vigorous and articulate long-time supporter of the inclusion of Loran in a mixed navaid system using both ground based and satellite signals thereby providing alternative back up capabilities to ensure safety and the wider acceptance of Global Navigation Satellite Systems.

Mr. Bond received a law degree from The University of Virginia and attended McGill University and the London School of Economics.

Congress continues to support Loran modernization

While final action on the long term role of Loran as a backup to the navigation and timing resources of provided by GPS has not yet been taken by the Federal agencies involved, Congress has continued to demonstrate its sustained support for LORAN modernization. This is evident in the attached plot showing the cumulative expenditures authorized by the Congress since 1997.

During the spring 2005 session, the House version of the FY 2006 Appropriations Bill included \$25M for Loran while the Senate version provided \$10M. After the August recess the difference will be resolved (as in the past) in Committee sometime in mid-September or later.



eLoran Timing demonstrates the ability to provide backup to GPS timing services

In the widespread concern over the national consequences if GPS services might not be available either locally or over an extended area, substantial attention has been paid to the need to enhance the capability of Loran to provide navigation support to supplement or substitute for that provided by GPS.

In the same context it is evident that the provision of timing references available from GPS for all computer networks is an equally essential component in the operation of nationwide data and communications systems vital to the governmental and industrial community. The possibility of the degradation or loss of GPS time signals for any cause requires a robust backup. With current improvement in all aspects of the coordination and synchronization of station and chain operations throughout the Loran system, including new state-of-the-art reference clock oscillators and overall improvements in timing protocol strategies, it has been demonstrated that eLoran can, in the future, provide timing accuracy over its entire service area equal to that available now using GPS.

Presidents Awards at ILA 33 Tokyo

Japan Coast Guard

The Japan Coast Guard has demonstrated both leadership and a strong tradition in Loran in its program for the evaluation, testing and installation of a new receiver and transmitter technology and in its continuing efforts in support of FERNS the Far East Radionavigation Service.

Erik Johannessen

Erik Johannessen has provided leadership and dedication for many years in the development of new technology Loran transmitters in support of Loran systems and the continuation of Loran on a global basis.

(continued from page 1)

of the Central Coast region. The Convention venue at the Fess Parker is located on the shore with views of the Pacific Ocean and East and West Beaches. It is convenient to the many amenities afforded by Santa Barbara. Only a short walk away you will find Stearns Wharf, the oldest working wharf on the West Coast, filled with restaurants, galleries and shops; the Santa Barbara Zoo; a Maritime Museum with exhibits of whaling days, ship-models and the oil resources of the Channel; a Sunday Arts and Crafts fair and for the active, beach volleyball courts across the boulevard. In Town you find a wide variety of restaurants, The Santa Barbara Art Museum, the Karpeles Manuscript library and the El Paeso shopping area.

ILA 2005 Election results

President: Hon. Langhorne Bond; Bond and Associates

Directors: (Elected to three year terms)

Mr. Erik Johannessen; Megapulse Inc.

Capt(ret) Tom Gunther; Booz-Allen and Hamilton

Dr. Sherman Lo; Stanford University

When Mr. Bond becomes President his position as Director becomes vacant and the candidate next in line fills the vacancy for one year.

Director: (Elected to one-year term)

Dr. Paul Williams; Trinity House

The new president and directors take office at the close of the 2005 Convention and Technical Symposium to be held in Santa Barbara, CA, USA, October 17-19 2005.

The ILA expresses its thanks for all who participated in the election either as candidates or voters.

Meetings

2005 Convention and Technical Symposium – ILA-34 Fess Parker's Doubletree Resort Hotel, Santa Barbara, CA USA October 17-19, 2005

“eLoran -- When sole-means is not an option”

----- Hotel Reservations -----

This special Doubletree page gives you the conference rate, with free high-speed Internet and free parking (a \$20 per day benefit!).

Visit the special ILA reservations page: http://doubletree.hilton.com/en/dt/groups/private_groups/sbamc_act/index.jhtml

Or

Tel: +1-805-564-4333

Fax: +1-805-56

----- Conference Registration -----

Visit <http://www.loran.org/events.html> for the online reservation form

Complete and submit online, or print/mail or fax to:

ILA Operations Center
742 Cathedral Pointe Lane
Santa Barbara, CA 93111
Fax +1-805-967-8471

The 2005 Conference and Technical Symposium will be held at Fess Parker's Doubletree Resort Hotel in Santa Barbara, CA USA! This early notice includes an outline of events which are planned for the meeting. More details and meeting registration materials will be coming soon:

- | | |
|------------------------------|---|
| Saturday, October 15 | On your own in beautiful Santa Barbara! |
| Sunday, October 16 | Early-arrival social at Ellen and Robert Lilley's Santa Barbara home |
| Monday, October 17 | ILA Global Augmentation of Satellite Systems (GAUSS) Working Session
The 144th Meeting, ILA Board of Directors
Icebreaker Reception |
| Tuesday, October 18 | Morning and Afternoon Technical Sessions, Luncheon, Speaker
Light Reception and Santa Barbara Art Exhibit |
| Wednesday, October 19 | Morning and Afternoon Technical Sessions, Luncheon, Membership Session
The 145th Meeting, ILA Board of Directors
Reception and Banquet, Awards, Speaker |

Mark your calendars and contact Fess Parker's to reserve space. Plan to come early to enjoy the weekend in Santa Barbara! Be sure to identify yourself as an ILA conference participant.

You *know* you want to be here!

Original 3/13/05 – Update 5/05/05

International Loran Association

34th Convention and Technical Symposium

October 17-19, 2005

Santa Barbara, CA USA

... at Fess Parker's Doubletree Resort Hotel



ILA Operations Center

741 Cathedral Pointe Lane

Santa Barbara, California USA

805-967-8649 | fax 805-967-8471 |

ila@loran.org

ILA-34 Registration - 2005 Convention and Technical Symposium

This form is processed using a secure server to protect credit card and personal data. Please visit the Meeting 2005 Call for Papers on www.loran.org for hotel information.

Paid-Up ILA Member? No Yes

Member Number (if known)

E-mail address

(Mr. Ms., Dr.)

Name

Title / Affiliation

Mailing Address

City

State or Province

COUNTRY

Postal Code / ZIP

Telephone

Fax

Spouse / Guest Names

Pre-Registration fee prior to September 17, 2005: US \$485 for ILA members, **US \$540** for non-members. Fee includes all session attendance, Continental breakfast, receptions, luncheons, banquet and a CD copy of the Proceedings.

Banquet Meal: Combination Chicken and Fish Plate

Members \$485, others \$540. After Sep 17, everyone enter \$540

One-day fee: US \$250 -- Includes daily sessions, Proceedings and lunch

Enter \$250 per day attending

Guest fee: US \$155 -- Includes receptions and banquet. Does not include technical sessions.

Enter \$155 per guest

GAUSS Registration: US \$35 -- Monday October 17. Includes breakfast and light refreshment.

Enter \$35 per participant

Wire Transfer Fee: US \$45 -- For wire transfers, contact the ILA Operations Center at ila@loran.org before registering or initiating the transfer. Thank you.

Enter \$45 for wire-transfer

TOTAL: Enter total in U.S. Dollars

Credit card payment: (If paying by check, mail this form along with your check.)

All items below are required for online registration

Credit Card: Visa  MasterCard M/C

Credit Card

Number:

Enter all 16 digits (e.g. 1111222233334444).

Expiration Month /Year:

 /

Name exactly as it appears on the credit card:

President's Message

August, 2005

Dear colleagues,

As I believe most are aware, Loran continues to make positive progress around the globe. France held a GNSS-Loran User Information Day in July, the new transmitter in Rugby, England is now operational, the US Congress will continue funding the eLoran modernization program in FY2006, and new roles are being explored for eLoran (e.g. as a backup to automatic dependence surveillance – broadcast systems for aviation, or ADS-B).

With this backdrop, the ILA's 34th Annual Convention and Technical Symposium is approaching. I would like to take this opportunity to remind people to make plans to attend and present new information at this important international forum. The conference will be held on the California coast in beautiful Santa Barbara, and will include presentations from Europe, Asia, North America, and Russia. Please see details at www.loran.org and make your reservations early.

As we move into an era where eLoran is widely acknowledged as a necessary - and the best - multimodal complement to GNSS, your interest and participation in ILA34 is vital. I look forward to a terrific meeting and seeing all of you in Santa Barbara.

Best regards,

G. Linn Roth, Ph.D., FRIN
President

Positioned for the future

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Eurofix Reference Station/ Integrity Monitor (RSIM)

This Eurofix System allows conversion of any Accufix Loran transmitter to enable Eurofix service. Manufactured in partnership with, and utilizing the algorithms and software of **reelektronika, b.v.** The RSIM is designed for autonomous operation with either local or remote control interface. Broadcast message types include dGPS, dLoran, and SMS. Single RSIM as shown is also available in fully redundant configuration.



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