

**International Loran Association**  
**152<sup>nd</sup> Board of Directors Meeting, Thursday, January 22, 2010**  
**Board teleconference**

**1. Call to Order**

The meeting was called to order by President Dr. Sally Basker at 11:30 AM Pacific Time, using “GoToMeeting” computer-based interconnection. There was an informal agenda:

1. Welcome and introductions
2. Summary of current US status
3. US outlook (US colleagues)
4. Proposal for what the ILA should do

**2. Attendance**

Present were Board members Sally Basker, Robert Lilley, Zachariah Conover, Erik Johannessen, Charles Schue, Sherman Lo, David Last. Observer Mitchell Narins joined the group for part of the meeting.

**3. Quorum**

A quorum was not present.

**4. Summary of US Status**

Sally Basker asked for each member’s opening comment on the status of Loran in the US.

**Chuck Schue:** Knows of no one in power who has “moved” or changed position. US Department of Defense representatives have met with the US Coast Guard (USCG) and parent agency the US Department of Homeland Security (DHS), but no results are known.

**Erik Johannessen:** A DHS-sponsored MITRE study of backup is underway and the report is taking shape. We do not know to whom the analysts are talking. The expectation is that it will reinforce the customer’s position, and then take the position that further study is required. Erik described this as the classic consulting report:

*It will be “fair and balanced” and the gist can be described as “Yes GPS backup is needed. Loran-C is not it. Terminate that signal; hopefully no one will die as a result. eLoran could probably do it. We’re not sure yet.*

**Sherman Lo:** Talked to Coast Guard station Middletown and confirmed that the staff there is “on message” -- All (most) transmitters are expected to go off on February 8<sup>th</sup> – some follow-on signals will persist for about 8 days. There was discussion of USCG comments (Thiedeman at NAVCEN and others) that clocks and time/frequency equipment will remain on for a period to allow quick response to unexpected user problems, to fulfill agreements with Russia and Canada, or for special (read, US DoD) requests.

**Mitch Narins:** The Chief of Staff of the US Air Force makes the best case. His statement should be disseminated and explained to Congresspeople. The Chief of Staff recommended alternatives which were pseudolites and atomic clocks. Note that Loran projects time based on ensembles totaling 90 cesium clocks, and each of the transmitters are essentially “pseudolites.”

**Erik Johannessen:** Note that the USAF was talking of cutting 5 GPS satellites to save money. We don’t want to look as though that money was cut to support Loran. Don’t talk about funding Loran on the back of GPS. He said the USAF statement was given to Senators Lautenberg and LoBiondo this week.

***Consensus: The US situation re: Loran is 90% political and only 10% technical. Note however, that a better semi-technical education for Congresspeople on just what the system is could help. Past statements in the House have reflected ignorance or misunderstanding of the basics, and of the distinction between Loran-C and eLoran.***

## 5. US Outlook

Discussion turned to comments from, and possible contacts with, “usual suspect” user and government organizations.

Referring back to the “need for education” comment: **Jim Doherty** took the Independent Assessment Team report to the MITRE study lead. The response was, “We’ve read it and there’s no need for a briefing, thank you.”

**Erik Johannessen:** Sprint Nextel Regulatory Affairs representatives went to the USCG and said that their older Motorola network (a key Locus customer for Loran timing units) would go down. They requested six months to change over to another alternate timing source. USCG reiterated that signals would go off on February 8.

**Mitch Narins** concurred, saying Nextel did not get a warm reception at the USCG. He noted Nextel are in Kansas/Missouri, which means there are four Senators and a number of Congresspeople who are potential targets for education. **Erik Johannessen** mentioned that Horizon Analog (chipset Loran receivers, designed in response to the DHS “announcement” of February 2008) went to Kansas Senator Sam Brownback, who was lukewarm, but could be heated up getting Sprint in the talks also.

**Sally Basker** displayed a screen with an e-mail quoting USCG’s Wayne Muilenberg in remarks to IALA. He says (for the first time it has been seen on paper) that Loran-C signals will indeed go off, but *eLoran* could go forward based on the current infrastructure elements, if the ongoing study shows a need. The study is expected to conclude “toward the end of calendar year 2010.

***After discussion, the recommendation was that the ILA should make the Muilenberg statement very public.***

**David Last** asked about the outlook for USCG authorization language remaining in the US Congress.

**Erik Johannessen** said the FY 2010-2011 USCG Authorization bills in the Senate and House which originally dealt with Loran plus other matters of importance to the USCG Commandant (USCG reorganization and some acquisition matters). These bills were not passed earlier and were trumped for FY 2010 by passage of the DHS Appropriations bill. The House language was originally very good – it should be resurrected if a move to deal with authorization for 2011 is set in motion. The Lobiondo amendment took out all the good language, leaving only a reflection of the appropriation language. The Senate bill is still in committee.

Shortly, the Congress will be dealing with the US FY 2011 budget. Authorization can be skipped again without major damage to the process, but it will disappoint the USCG, again. The 2011 appropriation will be interesting, given that the USCG appears to be asking for no funding related to Loran decommissioning or further operation.

The Massachusetts election alters the dynamics – no more super-majority for the Democrats and the current Administration. This may “open up” the discussion somewhat.

Zachariah Conover: Just returning from Washington briefings with Sen.Collins, Sen Snowe's staff, and a representative of the Congressional Budget Office office. Conclusion is that Loran-C turnoff is inevitable, although the USCG may keep timing equipment hot for a while. Among supporters the emphasis is on the reuse of infrastructure for *eLoran*.

Zach's contacts report they are at wits' end, and cannot come up with any action to save Loran-C or *eLoran*, from the Congressional side. The only chance *eLoran* has in the short-term, is a US Air Force or other US DoD approach to the National Security Council, "that would solve it."

The USCG CG was preparing for the upcoming IMO meeting. Loran was a hot topic. USCG budget budget folks are looking for shutdown -- getting their tasking from outside the CG -- read, DHS. USCG will not be able to slow down the process for *eLoran*. The DHS is pressing to tear down the infrastructure right now.

**Sally Basker** presented quotes from non-US sources. Screen shots are attached to these minutes.

**Chuck Schue:** Do we need another round of pressure from outside the US on US decision-makers? **Erik Johannessen:** The US does not care about the rest of the world, or it would not be where it is. Are we trying to reverse the decision? That is not helpful. If we're trying to convince them to move forward with *eLoran* -- yes! That's helpful.

**David Last:** Perhaps we don't have a problem with the US decision. Loran-C closure was always part of the plan. The real objective is to build *eLoran*. This is not helped by removal of Loran-C infrastructure in the US. The fight is now to implement *eLoran* as stated in the 2008 statement of the DHS.

**Erik Johannessen:** There will be pain. Zach Conover makes user equipment, and will have trouble developing and demonstrating it, since the signal will be off until the DHS / MITRE study is done at the end of the year. But it's hopeful.

**Erik Johannessen:** We need clarification of decision -- Loran-C and infrastructure not needed was not the full story.

**David Last:** The US President wants Loran-C out of the way -- clear the decks -- the Administration got what it wanted. Now we have a different question: *eLoran*. **Erik Johannessen:** ...and voters in Massachusetts said to the Administration this week "you are not getting everything you want." Loran-C is gone. We are OK with that. The Loran-C *signal* is not required. The infrastructure *is* needed. There is now room for *eLoran* (we don't want Loran-C back). We will applaud you (the Administration) when it happens. [Note the Federal Register and its comments from associations representing millions of boaters, aviators, ... voters(?) -sec'y]

**Chuck Schue:** The Muilenberg quote was a surprise. No other release refers to *eLoran*. We should applaud turn-off, because it forces the government to reduce cost, take people off stations. Bring up *eLoran* without those costs.

**Sherman Lo:** We need the *eLoran* prototype signal on air. **Chuck Schue:** The US DoD encourages USCG to keep some stations plus a data channel hot.

**Bob Lilley:** Loran-C has to be turned off to keep the President honest. But it needs to be reused. That's one of the things USCG was advised to do. So do it. Reuse it for *eLoran*! Avoid remediation costs!

#### 4. Proposals for what the ILA should do

**David Last:** Note the disconnect between Muilenberg and Zach's assessment related to Loran-C infrastructure and *eLoran* deployment. **Erik Johannessen:** That is all the more reason to make it public ASAP! **David Last:** "Feet to the fire."

**Zach Conover:** There is still room for Brad Parkinson or other luminaries to do Op Ed pieces connecting the dots – this could help the transition.

**David Last:** James Schlesinger is head of the US PNT Office, and **Jim Doherty** says he is at a high enough level to have influence. **Bob Lilley** reported Jim Doherty's previous comment about providing information to Mr. Schlesinger, with the comments that Jim Doherty is smart enough not to try to tell James Schlesinger what to do, but am keeping him informed in hopes that he will take up the issue.

*Sally will look into sending the Wayne Muilenberg quote to Mr. Schlesinger.*

**Erik Johannessen asked:** What of Russia, Canada, the French, others? We've heard nothing. Can we also get letters from the UK? **Chuck Schue** agreed with the concern, saying that ILA needs to get buy-in (quotations, etc. for the record) from non-US members. The US Industry Council can't help a lot here due to perception of just wanting to sell. Draw in IMO and IALA.

**Bob Lilley** recommended emphasis on PNT, not entirely *eLoran*; insist that the DHS MITRE study be independent. Stress the independence of the IAT study and report.

**Zach Conover** emphasized the incompleteness of the US announcement. Stress that Loran-C is gone – *eLoran* is important.

**Erik Johannessen** noted the activities of Shad Nygren, an entrepreneur who is angry and contemplating legal action – a preliminary injunction against termination of Loran. He has talked with several of those present.

**Sherman Lo:** It looks gloomy, but RTCM *eLoran* maritime work continues for now. Recommendations?

**Sally Basker:** Keep pushing it, The rest of world will keep going on Loran.

**Sally Basker** summarized:

*A Statement from ILA is needed*

*Express disappointment and bring in quotes (see attached screenshots) from IALA, others*

*Emphasize the IAT report and PNT with eLoran as the best example -- short and direct.*

*By denying systemic backup, decision makes it more expensive for user at a time when it is least affordable.*


*ILA should amplify the Wayne Muilenberg quote – emphasizing that eLoran is not dead just because Loran-C signals will be turned off. Reuse it as eLoran.*

*We need to draw in our non-US member organizations*


*Continue to support the RTCM SC-127 efforts on signal specification and marine receiver standards*

**Bob Lilley**, the secretary, was asked to summarize the meeting promptly and provide copies to the ILA Board of Directors, asking that comments be sent to **Sally Basker** and **David Last**.

The meeting was adjourned at 13:55 Pacific Standard Time.

  
Position fixing relies more and more on GPS, resulting in common mode failure, a terrestrial alternative is an important priority


Peter Hinchliffe, Marine Director, International Chamber of Shipping, RIN NAV09, Southampton

  
GNSS (in particular GPS) has become the primary means of navigation in many maritime applications. However, the vulnerability of GNSS to accidental or deliberate interference is well known and the need for more than one position input to e-Navigation is recognised

It is noted that Loran/Chayka is the only wide area terrestrial radio-navigation system currently available

Members of IALA with Loran/Chayka facilities within their jurisdiction are encouraged to retain them in operation and make plans to upgrade them to eLoran capability, so that they can form part of the VWRNP

IALA A World Wide Radio Navigation Plan

  
I agree with David [Last] that we do need other systems, he cites eLoran, some say there's no business case, but that doesn't mean it isn't needed

It is important that we discuss and agree on backup solutions [to GNSS] and this debate is urgent

Paul Verhoef, Head Galileo, EC DG TREN, IAIN, Stockholm, 2010

**From:** Marie-Hélène Grillet [mailto:mariehelene.grillet@wanadoo.fr]  
**Sent:** January 11, 2010 5:56 AM  
**To:** National Member Korea; Satoru Osanai; Sergei Kozlov; Breton, Daniel; Jeremy de Holpert; Arve Dimmen; Jacques Manchard; Liu Gongchen; Svend Eskildsen; Forst, Christian; Singh Suman  
**CC:** 'Mike Hadley'  
**Subject:** US Loran-C - Message from Wayne Mullenburg

Dear JALA Councilors,

The following message was received from Wayne Mullenburg regarding US approach to Loran-C and we have been requested to forward it to you

#### Quote

Given your previous interest in the U.S. approach to LORAN-C and following my brief at the 46<sup>th</sup> Council meeting, I would like to provide you with this latest official statement.

On Oct. 28, 2009, the President signed the 2010 Department of Homeland Security Appropriation Act. <sup>1</sup> The Act allows for the termination of Loran-C subject to the Commandant of the Coast Guard certifying that termination of the Loran-C signal will not adversely impact the safety of maritime navigation, and subject to the Secretary of the Department of Homeland Security certifying that the Loran-C system infrastructure is not needed as a backup to the GPS system or to meet any other federal navigation requirement. Those certifications have been made and a public announcement of the Coast Guard's intent to begin planning for termination of the Loran-C Signal broadcast on or about February 8, 2010 has been made via a Federal Register Notice (dated January 7, 2010, link attached below). The Coast Guard is now commencing an aggressive outreach plan prior to the February 8, 2010 termination of the signal and subsequent phased decommissioning of the Loran-C infrastructure.

While the phased decommissioning takes place over the course of Fiscal Year 2010, the Department of Homeland Security continues to conduct a critical infrastructure analysis to determine whether the nation requires a systemic backup to GPS. If that analysis determines that a systemic backup is indeed required, the Department will then conduct an Analysis of Alternatives to investigate what system or systems would be best suited to act as that backup. eLoran is certainly one of the alternatives that would be considered, in that case. Consequently, those elements of the current Loran-C infrastructure that could or would likely be used in an eLoran scenario, will be maintained until the completion of that analysis. The estimated timeline for completion of the analyses at this point is toward the end of calendar year 2010.

<http://edocket.access.gpo.gov/2010/pdf/2010-84.pdf>

#### Unquote

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