Loran Update From the Hill

Presented to:

ILA 38

Portland, ME 14 October, 2009 PRESENTED BY:

Megapulse---

Erik Johannessen

Loran Legislative History (up to now)

- The Early Years FY96-99
 - Working to reverse Dec 2000 termination
 - PCCIP/Delaney report/BAH Study/Sole Means GPS
 - Get a little \$, deliver results
- Development of eLoran FY00-05
 - Defining a future role
 - Volpe Report/Loran Technical Evaluation
 - Higher \$ with greater results
- Going Forward FY06-09
 - Quest for a decision
 - Alternative viewpoints
 - The issues of funding
- A New Administration FY10-

Legislative Primer

- Budget Requests and Cycle
- What is an Authorization?
- What is an Appropriation?
- House, Senate, and Conference Reports

Coast Guard Authorization Act For FY 1996

(S.1004) (Statutory provision signed into law by President as Public Law 104-324)

SEC. 308. REPORT ON LORAN -C REQUIREMENTS.

- Not later than 6 months after the date of enactment of this Act, the Secretary of Transportation, in cooperation with the Secretary of Commerce, shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a plan prepared in consultation with users of the LORAN C radionavigation system defining the future use of and funding for operations, maintenance, and upgrades of the LORAN -C radionavigation system. The plan shall provide for--
- mechanisms to make full use of compatible satellite and LORAN -C technology by all modes of transportation, the telecommunications industry, and the National Weather Service;
- (2) an appropriate timetable for transition from ground-based radionavigation technology after it is determined that satellite-based technology is available as a sole means of safe and efficient navigation and taking into consideration the need to ensure that LORAN -C technology purchased by the public before the year 2000 has a useful economic life; and
- (3) agencies in the Department of Transportation and other relevant Federal agencies to share the Federal Government's costs related to LORAN -C technology.

Coast Guard Authorization Act of 1998

(H.R.2204) (Statutory provision signed into law by President Public Law 105-383)

SEC. 103. LORAN -C.

- (a) FISCAL YEAR 1999- There are authorized to be appropriated to the Department of Transportation, in addition to the funds authorized for the Coast Guard for operation of the LORAN -C System, for capital expenses related to LORAN -C navigation infrastructure, \$10,000,000 for fiscal year 1999. The Secretary of Transportation may transfer from the Federal Aviation Administration and other agencies of the department funds appropriated as authorized under this section in order to reimburse the Coast Guard for related expenses.
- (b) COST-SHARING PLAN- Not later than 6 months after the date of the enactment of this Act, the Secretary of Transportation shall develop and submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a plan for cost-sharing arrangements among Federal agencies for such capital and operating expenses related to LORAN -C navigation infrastructure, including such expenses of the Coast Guard and the Federal Aviation Administration.

DEPT OF TRANS. APPROPRIATIONS BILL, FY00 (Senate Committee Report 106-055)

... the Committee is somewhat heartened by the FAA decision to retain Loran -C for a minimum of at least eight more years. The Committee continues to be concerned about the confusion that surrounds the WAAS program. While the navigation system of the future is clearly primarily satellite based, it may be equally clear that it is not exclusively satellite based--or that that should be the goal. Fortunately, the slavish preoccupation that the FAA and some in the industry had with `sole means' appears to have been replaced with the recognition that a more probable option includes some form of ground-based navigation aids, notably Loran -C or inertial navigation systems. Further, what is increasingly clear is that the navigational system of the future in developing required navigation performance should address the concerns expressed about jamming, intentional or unintentional interference with satellite based signals, radio propagation, satellite or ground-based system failure, the to-date undefined risks associated with the ionosphere, and the cost effectiveness of the system. ...

The Committee continues to support steps to ensure that <code>loran_will</code> be available to meet ongoing user navigation safety and efficiency requirements. <code>Loran_provides</code> important multimodal navigation capabilities, well-proved, cost-effective, and significant safety and efficiency benefits. The Committee continues to be convinced that support of the <code>loran_infrastructure</code> is prudent to meet continuing requirements for the technology, particularly in light of the difficultly the FAA is experiencing with WAAS. failure to maintain the investment in <code>loran_infrastructure</code> at this time would be irresponsible.

Coast Guard Authorization Act of 2000

(H.R.820) (Engrossed Amendment as Agreed to by Senate)

SEC. 103. LORAN -C.

- (a) Fiscal Year 2001- There are authorized to be appropriated to the Department of Transportation, in addition to funds authorized for the Coast Guard for operation of the LORAN -C system, for capital expenses related to LORAN -C navigation infrastructure, \$20,000,000 for fiscal year 2001. The Secretary of Transportation may transfer from the Federal Aviation Administration and other agencies of the department funds appropriated as authorized under this section in order to reimburse the Coast Guard for related expenses.
- (b) Fiscal Year 2002- There are authorized to be appropriated to the Department of Transportation, in addition to funds authorized for the Coast Guard for operation of the LORAN -C system, for capital expenses related to LORAN -C navigation infrastructure, \$40,000,000 for fiscal year 2002. The Secretary of Transportation may transfer from the Federal Aviation Administration and other agencies of the department funds appropriated as authorized under this section in order to reimburse the Coast Guard for related expenses.

DHS APPROPRIATIONS FOR FY07 (H.R. 5441) (House Conference Report 109-699)

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.

USCG Budget in Brief FY08

Terminate the LORAN-C Program

Based on numerous studies, solicitations to modal partners, and public comment, all of which found LORAN-C is neither necessary, nor cost effective, to meet the nation's positioning, navigation, or timing requirements. With no requirement or clear need for LORAN-C, disestablishing the system demonstrates sound stewardship of the nation's resources. This base reallocation will redirect funding to support the completion of Phase 1 of a four-year project to decommission the LORAN-C radio-navigation system. The personnel and Operating and Maintenance (O&M) savings will be reinvested in the Coast Guard base funding to apply towards closure costs for this project over the next four years.

House DHS and House Trans Approp Bills for FY08

LORAN C – Coast Guard has proposed terminating the Loran C program in the budget because it believes this system is no longer necessary for a secondary means of navigation. The Committee understands that a decision to terminate Loran C is dependent upon agreement by DOT, which has not occurred. The Committee also understands that in late 2006, DOT convened an Independent Assessment Team, in cooperation with DHS, to complete yet another evaluation of Loran C. The Team concluded that Loran C should be retained and modernized to serve as a long term back up for GPS. The Committee assumes continuation of Loran C in fiscal year 2008.

S. 1644 DHS FY 08 Appropriations

LONG RANGE AIDS TO NAVIGATION-C – The Committee denies the request to terminate operations at Long Range Aids to Navigation loran-C stations nationwide and directs the Secretary to refrain from taking any steps to reduce operations at such stations. The Committee understands that a group composed of officials from the Departments of Homeland Security and Transportation, and other Federal agencies met earlier this year and unanimously agreed that the United States should maintain the loran system. Therefore, the Committee assumes the continuation of funding for the loran-C program until the requirements detailed in the joint explanatory statement of managers accompanying the fiscal year 2007 conference report (Report 109-699) have been met.

S. 1892 (Reported Aug 2007) (Statutory provision as approved by Senate Commerce Committee)

SEC. 503. COAST GUARD TO MAINTAIN LORAN-C NAVIGATION SYSTEM.

- (a) IN GENERAL.--The Secretary of Transportation shall maintain the LORAN-C navigation system until such time as the Secretary is authorized by statute, explicitly referencing this section, to cease operating the system.
- (b) AUTHORIZATION OF APPROPRIATIONS.--There are authorized to be appropriated to the Secretary of Transportation, in addition to funds authorized under section 101 of this Act for the Coast Guard for operation of the LORAN-C system, for capital expenses related to the LORAN-C infrastructure, \$25,000,000 for each of fiscal years 2008 and 2009. The Secretary of Transportation may transfer from the Federal Aviation Administration and other agencies of the Department of Transportation such funds as may be necessary to reimburse the Coast Guard for related expenses.

Among DHS views provided to Senate Commerce Committee in response to S. 1892 (Sept 2007)

Sec. 503. Coast Guard to maintain LORAN-C navigation system. The Department has no objection to Section 503. The Spaced-Based Positioning, Navigation and Timing (PNT) Executive Committee, co-chaired by the Deputy Secretaries of the Department of Defense (DOD) and the Department of Transportation (DOT), concurred with à joint Department of Homeland Security (DHS)-DOT policy recommendation to pursue "enhanced" LORAN (e-LORAN) as a national PNT backup to the Global Positioning System (GPS) for the U.S. homeland. As a result, DOT and DHS are jointly preparing proposed transition plans to move operations, maintenance, construction, and funding for the LORAN system from DHS/Coast Guard to another government agency so that e-LORAN may be implemented, upon which the Secretary of Homeland Security and the Secretary of Transportation can base a final decision on the future of the current LORAN system. DHS and DOT are in the process of completing these actions and are scheduled to make a joint announcement of a decision on LORAN by the end of this year.



February 7, 2008 Contact: (202) 282-8010

STATEMENT FROM DHS PRESS SECRETARY LAURA KEEHHNER ON THE ADOPTION OF NATIONAL BACKUP SYSTEM TO GPS

Today the U.S. Department of Homeland Security will begin implementing an independent national positioning, navigation and timing system that complements the Global Positioning System (GPS) in the event of an outage or disruption in service.

The enhanced Loran, or eLoran, system will be a land-based, independent system and will mitigate any safety, security, or economic effects of a GPS outage or disruption. GPS is a satellite-based system widely used for positioning, navigation, and timing. The eLoran system will be an enhanced and modernized version of Loran-C, long used by mariners and aviators and originally developed for civil marine use in coastal areas.

In addition to providing backup coverage, the signal strength and penetration capability of eLoran will provide support to first responders and other operators in environments that GPS cannot support, such as under heavy foliage, in some underground areas, and in dense high-rise structures. The system will use modernized transmitting stations and an upgraded network.

Obama's First Budget Cycle

- Typical
 - Budget released early Feb
 - Committee HearingsMar-May
 - Individual Bills Jun-Jul
 - Conference Sept

- This Year
 - Budget Overview Feb 26,
 Budget Released May 7
 - Committee HearingsMar-Jun
 - Individual Bills Jun-??
 - Conference Oct-??

Terminations, Reductions, and Savings

The Administration is proposing to terminate the terrestrial-based, long-range radionavigation system (Loran-C) operated by the U.S. Coast Guard because it is obsolete technology. Accounting for inflation, this will achieve a savings of \$36 million in 2010 and \$190 million over five years.

Funding Summary

(III IIII OIS OI OOILUS)	2009	2010	2010 Change
	Enacted	Request	from 2009
Budget Authority	36	0	-35

Justification

Loran-C is a federally-provided radionavigation system for civil marine use in U.S. coastal areas. The Nation no longer needs this system because the federally-supported civilian Global Positioning System (GPS) has replaced it with superior capabilities. As a result, Loran-C, including recent limited technological enhancements, serves only the remaining small group of long-time users. It no longer serves any governmental function and it is not capable as a backup for GPS.

Several Federal agencies, including the Departments of Defense, Transportation, and Homeland Security, already have backup systems for their critical GPS applications and the termination of Loran-C does not foreclose future development of a national back-up system. It merely stops the outflow of taxpayer dollars to sustain a system that does not now and will not, in its current state, serve as a backup to GPS.

Hs. Rprt. 111-157 FY10 DHS Approps (introduced 6/16/09)

LORAN-C

Once again, the budget proposed terminating the Long Range Aids to Navigation (LORAN-C) program, as was proposed and rejected two years ago. Last year the Committee rejected another proposal to transfer LORAN-C from Coast Guard to the National Protection and Programs Directorate (NPPD), an agency that had neither the preparation nor the experience to operate the LORAN-C system.

In late 2006, the Department of Transportation convened an Independent Assessment Team to determine the future of LORAN in cooperation with DHS, whose final report was released to the public this year as the result of a Freedom of Information Act request. It concluded that eLORAN, a fully modernized and upgraded version of LORAN-C, should serve as a long-term backup for GPS for positioning, navigation and timing for twenty years. On the basis of the report's findings, DHS announced in February 2008 that eLORAN would be the backup system for GPS, and the Coast Guard testified later that year that the existing, upgradable LORAN-C infrastructure was the logical support system for eLORAN. The immediate implementation of a long-term, robust backup system is vital, given the GAO's recent finding that it is unclear whether new GPS satellites can be purchased and put in orbit in time to maintain uninterrupted GPS service to private and public sector consumers. Therefore, the Committee once again rejects termination of LORAN-C, denies the authority to sell existing LORAN-C sites as sought by the Administration, provides \$36,000,000 for continuing operation and maintenance, and directs the Coast Guard to provide a plan to the Committee within 30 days of enactment of this Act for upgrading the existing LORAN-C system to eLORAN in a cost-efficient fashion that complies with existing international agreements.

Sen. Rprt 111-31 DHS Appropriations Act (introduced 6/18/09)

LONG RANGE AIDS TO NAVIGATION-C

The Department's budget request proposes to terminate Loran-C stations on the basis that the system is no longer required by the armed forces, the transportation sector, or the Nation's security interests, and is used only by a small segment of the population.' The justification goes on to say that `the Loran-C system was not established as, nor was it intended to be, a viable systematic backup for GPS.' The Committee believes additional time is needed for the Department to fully evaluate the need for a GPS backup system and the impact that decision will have on Loran-C. A general provision is included continuing funding for Loran-C through January 4, 2010. Loran-C operations shall continue beyond that date only if the Commandant of the Coast Guard certifies that: (1) the termination of the Loran-C signal will not adversely impact the safety of maritime navigation; and (2) the Loran-C system infrastructure is not needed as a back-up to GPS or any other Federal navigation requirement. If the Commandant makes such a certification, the Loran-C signal shall be terminated effective January 4, 2010, and the Coast Guard shall commence a phased decommissioning of the Loran-C infrastructure.

Conference Report 111-298 (to be voted on)

- Maintains Senate language with two changes:
 - Amount of funds available is reduced to \$12M instead of \$36M or \$18M
 - Sec DHS certifies whether or not it is needed as a back-up

S. 1194 Coast Guard Authorization FY 10-11

SEC. 603. COAST GUARD TO MAINTAIN LORAN-C NAVIGATION SYSTEM.

- (a) IN GENERAL- The Secretary of Transportation shall maintain the LORAN-C navigation system until such time as the Secretary is authorized by statute, explicitly referencing this section, to cease operating the system but expedite modernization projects necessary for transition to eLORAN technology.
- (b) AUTHORIZATION OF APPROPRIATIONS- There are authorized to be appropriated to the Secretary of Transportation, in addition to funds authorized under section 101 of this Act for the Coast Guard for operation of the LORAN-C system and for the transition to eLORAN, for capital expenses related to the LORAN-C infrastructure and to modernize and upgrade the LORAN infrastructure to provide eLORAN services, \$37,000,000 for each of fiscal years 2010 and 2011. The Secretary of Transportation may transfer from the Federal Aviation Administration and other agencies of the Department of Transportation such funds as may be necessary to reimburse the Coast Guard for related expenses.
- (c) REPORT ON TRANSITION TO ELORAN TECHNOLOGY- No later than 6 months after the date of enactment of this Act, the Secretary of Transportation, in cooperation with the Secretary of the Department in which the Coast Guard is operating, shall provide a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Transportation and Infrastructure a detailed 5-year plan for transition to eLORAN technology that includes--
- (1) the timetable, milestones, projects, and future funding required to complete the transition from LORAN-C to eLORAN technology for provision of positioning, navigation, and timing services; and (2) the benefits of eLORAN for national transportation safety, security, and economic growth.

H.R. 3619 CG Authorization Act of 2010

SEC. 312. SUPPLEMENTAL POSITIONING SYSTEM.

- (a) FINDINGS.-The Congress finds the following:
- (1) In August 2006, the Department of Transportation and Department of Homeland Security sponsored the formation of an Independent Assessment Team to review the need for enhanced Loran (eLORAN) as a supplement to the Global Positioning System (GPS).
- (2) In December 2006, the Independent Assessment Team unanimously recommended that eLORAN be completed and retained as the national backup system for critical safety of life, national and economic security, and quality of life applications currently that are reliant on position, time, or frequency from GPS.
- (3) Based on the Independent Assessment Team report, the Department of Transportation and Department of Homeland Security jointly recommended in March 2007 that eLORAN be the national backup for GPS.
- (4) The Department of Homeland Security formally announced on February 7, 2008, its intention to implement eLORAN as a national positioning, navigation, and timing system to complement the GPS in the event of an outage or disruption in service.
- (5) A recent outage of GPS services in California due to an unintentional jamming incident resulted in the shutdown of the Coast Guard's maritime Differential Global Positions System program and the Automatic Identification System, caused disruption to vessel and aircraft operations, and severely degraded transmissions at over 150 cell phone base stations.

H.R. 3619 CG Authorization Act of 2010

- (6) In January 2009, the Independent Assessment Team reiterated its unanimous recommendation that the Federal Government commit to operating the eLORAN system as a backup to GPS for not less than a 20-year period.
- (b) REQUIRED ACTIONS.-The Secretary of the department in which the Coast Guard is operating-
- (1) shall establish eLORAN as the supplemental navigation system for the United States;
- (2) shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate-
- (A) a plan for modernizing the remaining LORAN-C stations;
- (B) a timeline for the completion of such modernization; and
- (C) a comprehensive estimate of the costs associated with modernizing LORAN–C infrastructure to meet eLORAN specifications; and
- (3) may not take action to terminate or decommission the LORAN–C program until 30 days after the Secretary certifies to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate that the eLORAN system is operational.

Summary Status of FY 10

- Senate Appropriations Completed
- House Appropriations Completed
- Approps Conference Report Filed
- House Authorization Introduced (needs vote)
- Senate Authorization Introduced (needs vote)
- Authorization Conference needs bills passed

Next Steps??