

STATUS REPORT ON RADIONAVIGATION SYSTEMS AND THE INSTITUTE OF NAVIGATION

Laura G. Charron
U.S. Naval Observatory
Washington, DC 20392, USA

Abstract

Due to emerging technology, primarily the Global Positioning System (GPS), the systems used for navigation, as well as for the transfer of PTTI, are undergoing rapid change. The latest status for the continued deployment of systems such as TRANSIT (NNSS), LORAN-C, and OMEGA are reported. A synopsis of the Institute of Navigation GPS Conference, particularly as it relates to timing applications, is presented.

FEDERAL RADIONAVIGATION PLAN

Purpose

Statement to set forth policy and plans for Federally provided radionavigation systems

Individual System Plans

GPS: Operated by DoD and managed by the Interagency GPS Executive Board

Standard Positioning Service (SPS) will be available to all users on a continuous, worldwide basis, for the foreseeable future free of any direct user charge

Precise Positioning Service (PPS), the most accurate service directly available from GPS without augmentations, is available to US and allied military and US Federal Government users

Augmentations to GPS: The US Government will not constrain the peaceful use of SPS-based differential GPS services as long as applicable US statutes and international agreements are adhered to.

Loran-C: The US plans to terminate Loran-C operations on December 31, 2000. DOT will prepare a report on Loran-C requirements in consultation with users and the Secretary of Commerce as required by USCG Authorization Act 1996

Omega: The US plans to terminate Omega operations on 30 September 1997

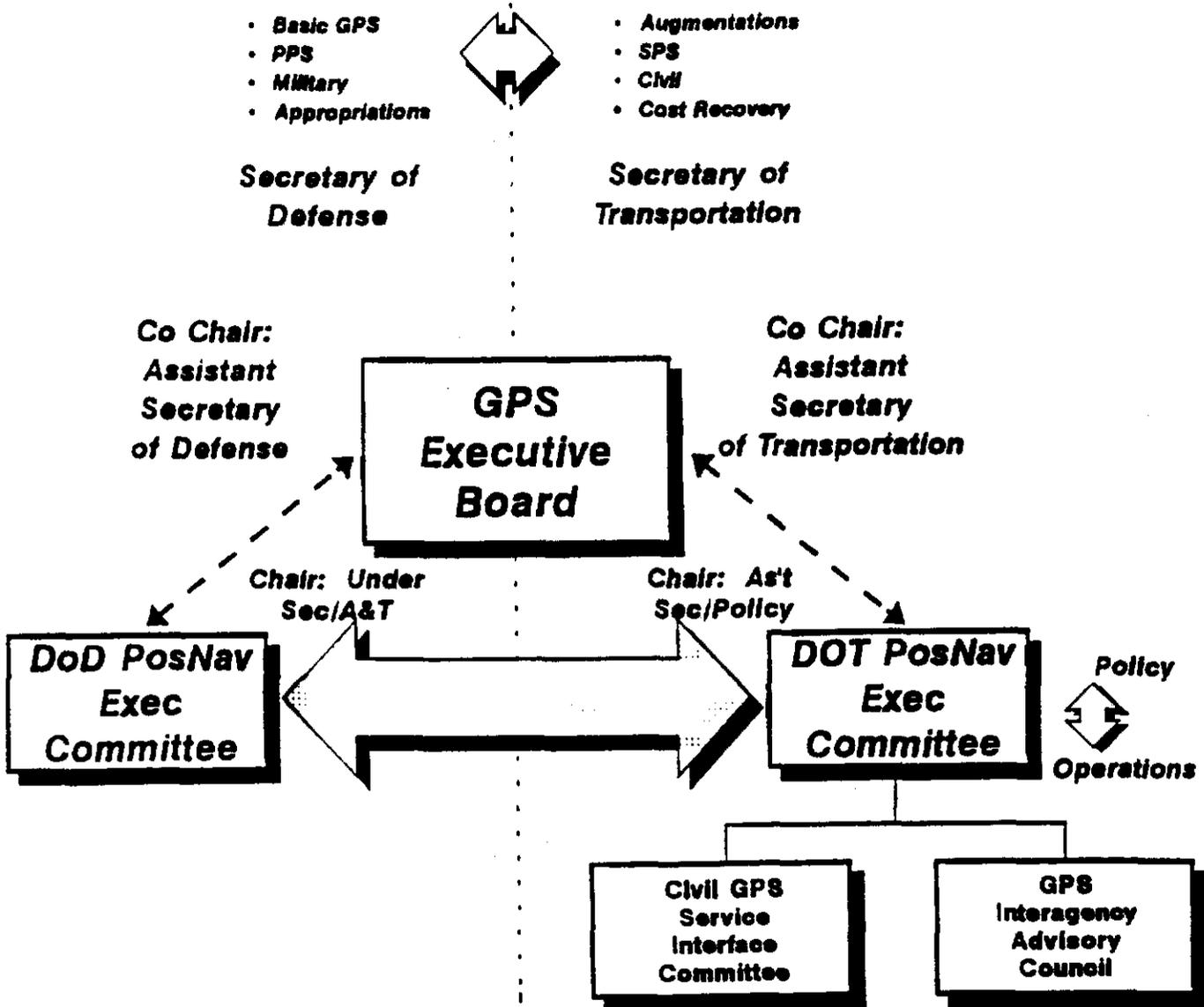
Transit: Ceases operation as a positioning and timing system on 31 December 1996

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE DEC 1996		2. REPORT TYPE		3. DATES COVERED 00-00-1996 to 00-00-1996	
4. TITLE AND SUBTITLE Status Report on Radionavigation Systems and the Institute of Navigation				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Naval Observatory, 3450 Massachusetts Ave NW, Washington, DC, 20392				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES See also ADA419480. 28th Annual Precise Time and Time Interval (PTTI) Applications and Planning Meeting, Reston, VA, 3-5 Dec 1996					
14. ABSTRACT see report					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 4	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Joint DOD/DOT POS/NAV Management Structure

FEDERAL RADIONAVIGATION PLAN 1996 (available after 1 January 1997)

Sources

Volpe National Transportation Systems Center
Kendall Square, Cambridge, MA 02142-1093, USA

ATTN: Elizabeth Carpenter FAX 617-494-2628

USCG Navigation Information Service World Wide Website

<http://www.navcen.uscg.mil/>

National Technical Information Service
Springfield, VA 22161, USA

Phone (703) 487-4650 or (703) 487-4660

INSTITUTE OF NAVIGATION

Purpose

The Institute of Navigation is a non-profit professional society dedicated to the advancement of the art and science of navigation. It serves a diverse community including those interested in air, space, marine, and land navigation, and position determination. Although basically a national organization, its membership is worldwide, and it is affiliated with the International Association of the Institutes of Navigation.

Information

The Institute of Navigation
1800 Diagonal Road, Suite 480
Alexandria, VA 22314, USA

Phone (703) 683-7101; fax (703) 683-7177

Website: <http://www.ion.org>

UPCOMING MEETINGS—1997

January 14-16:

“Navigation and Positioning in the Information Age,”
Loews Santa Monica Beach Hotel, Santa Monica, California, USA

June 30 - July 2:

The 53rd Annual Meeting
Grand Hyatt, Albuquerque, New Mexico, USA

September 16-19:

ION GPS-97
Kansas City Convention Center, Kansas City, Missouri, USA

ION GPS-96

September 1996, Kansas City, Missouri, USA

Sessions:

- | | |
|--|--|
| A1: Precision Approach | B1: Aircraft Applications |
| A2: New Product Descriptions | B2: Land Applications |
| A3: GPS & GLONASS Performance | B3: Atmospheric Effects |
| A4: Marine Application | B4: Multipath |
| C1: Wide Area Augmentation Systems (WAAS) | D1: GNSS & WAAS Architectures |
| C2: Kinematic Positioning & Ambiguity Resoultion | D2: Surveying & Geodesy |
| C3: Integrated Systems | D3: Space Applications |
| C4: Attitude Ddetermination | D4: Student Session |
| E1: GPS & GLONASS Application | F1: Precise Positioning Using Reference Networks |
| E2: Military Applications | F2: Specialized Military Equipment Technology |
| E3: Integrity | |

Working Group: GLONASS/GPS Interoperability