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7pp.



WILD GOOSE ASSOCIATION

SAUDI STATIONS

NEWSLETTER

1982-3

ITEM - 11th ANNUAL WGA TECHNICAL SYMPOSIUM

The Eleventh Annual Technical Symposium was deemed a huge success. The WGA membership greatly appreciates the contributions from Dave Carter (Convention Chairman), Dave Amos (Technical Program Chairman), John Weseman (Guest Speakers), Lloyd Higginbotham (Hospitality), Bob Schellhase (Administration), session chairmen, authors, and guest speakers for organizing one of the best WGA symposiums to date.

ITEM - 11th ANNUAL CONVENTION

The Eleventh Annual Convention Chairman and committee thank supporters of the 11th Annual WGA Convention.

- | | |
|-----------------------------|--------------------------|
| Advanced Navigation Inc. | Megapulse |
| ASEC | Micrologic |
| Beukers Laboratories Inc. | Morrow Electronics |
| Bowditch Navigation Systems | Navigation Systems Inc. |
| Digital Marine | Offshore Navigation Inc. |
| EPSCO | Raytheon Marine |
| ITT-Avionics | SI-TEX |
| Jaycor | Sperry Gyro |
| Kaman Tempo | TASC |
| | Teledyne Systems |
| | Texas Instruments |

ITEM - AWARDS 1982

The Wild Goose Association made awards at its Eleventh Annual Convention in Washington, DC, on October 14, 1982, as follows:

Medal of Merit to J. Ralph Jöhler, president of Colorado Research and Prediction Laboratory of Boulder, Colorado, for work in the field of radio propagation which improved performance of Loran.

President's Award to Edward L. McGann, Vice President of Megapulse, Inc., Bedford, Massachusetts, for his personal dedication and successful efforts in expanding Loran-C coverage and applications world-wide.

Honorary Membership to Winslow Palmer, consultant, Ft. Myers, Florida, for proposing and inventing Loran system techniques which lead to Loran-C.

Best Paper Award to John J. Anthony, USCG, and Andrew J. Sedlock, USCG, for "Operational Experience with Precision Loran Radionavigation Equipment," in Proceedings of 1981 WGA Technical Symposium.

Service Awards

Walter N. Dean, 1981 Convention Chairman
John D. Illgen, 1981 Technical Symposium Chairman
Barney Ambroseno, 1981 and 1982 President.

ITEM - AWARD NOMINATION FOR 1983

All members are invited to submit nominations for 1983 WGA awards to:
Awards Chairman:

Robert L. Frank
30795 River Crossing
Birmingham, MI 48010
(313)645-9848.

Please write or call Bob Frank with nominations as soon as possible.

ITEM - ELECTIONS

Carl Andrew has been elected President of the WGA. We all wish Carl Andrew the very best and know his term of office will be a huge success. Carl will be supported by the officers and directors listed below for the 1982-83 term.

1982-83 Officers and Board

President	Carl Andrew
Vice President	Ed McGann
Secretary	Leo Fehlner
Treasurer	Dave Carter
Directors	Jim Alexander
	Barney Ambroseno
	John Beukers
	Jim Culbertson
	Walt Dean
	Lloyd Higginbotham
	John Illgen
	Vern Johnson
	Jim VanEtten
	Vernon Weihe

ITEM - 1981 TECHNICAL PROCEEDINGS FOR THE 10th ANNUAL SYMPOSIUM

Copies of the Technical Proceedings can be obtained by submitting a check to Walt Dean in the amount of \$10.00. Send checks and mailing address to:

Mr. Walter Dean, Morrow Electronics Inc., 4740 Ridge Drive NE,
PO Box 7078, Salem OR 97303

ITEM - DAN REDDING

Does anyone know the whereabouts of Dan Redding, the WGAs first honorary member? If you do, please contact your newsletter editor.

ITEM - LORAN-C PROPOSAL

Kuwait has solicited proposals for in-country Loran-C AVL/AVM system. Kuwait requires a turnkey system that will accommodate ~250 vehicles initially.

ITEM - GOVERNMENT LIAISON

Chairman Ed McGann plans to contact the Coast Guard Congressional Liaison committee and the House of Representative Subcommittee on Coast Guard and Navigation regarding status of Loran and GPS.

ITEM - 1983 CONVENTION SITE

At the 57th Board of Directors Meeting on October 15, 1982, Lloyd Higginbotham moved that the 1983 convention is to be located in the Washington, DC, area. Ed McGann seconded. Motion carried. All WGA members should start making plans now for the 1983 convention. Start plans for preparing a paper for the 1983 convention. First call for papers to be mailed soon.

ITEM - GRI, CODING, AND EMISSION DELAYS - SAUDI ARABIA

The Coast Guard has determined a GRI and computed coding and emission delays for the Northern Saudi Arabian Loran-C chain. The data for the Northern Saudi Arabian Loran-C chain is as follows:

a. GRI - 8990

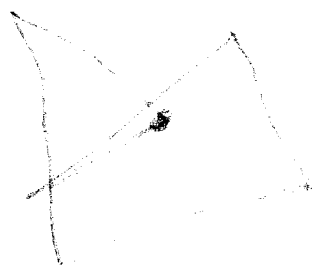
b. STATION	FUNCTION	CODE DELAY	EMISSION DELAY
Afif	Master		
Mastabah	Secondary	11,000 μ sec	12,604.82 μ sec
Ar Ruqi	Secondary	25,000	28,298.51
Salwa	Secondary	40,000	41,641.09
Al Mowassam	Secondary	56,000	56,726.94
Ras Ashaykh	Secondary	60,000	73,145.53
Homayd			

on Al Bad ?

corrected per WGA 1983 Tech Symp paper

ITEM - PTTI PANEL MEETING

The Board approved John Ilgen's attendance at a PTTI meeting to which he was invited as a WGA representative. John will serve as a panel member and discuss Loran-C timing applications.



Corrected order

ITEM - SPRING 1982 ISSUE OF THE NAVIGATION JOURNAL OF THE ION

A special issue has been prepared dedicated solely to Loran-C. This publication contains several articles of interest to the Loran-C community. Copies may be obtained from the address below for \$5.00:

The Institute of Navigation
Suite 832
815 15th Street, NW
Washington, DC 20005

ITEM - LORAN-C CHAIN OPERATIONAL INFORMATION

The current operational status of Loran-C stations is available from the Coordinator of Chain Operations (COCO) of each Loran-C chain. The COCO monitors the day-to-day operations of a Loran-C chain and provides information with a prerecorded telephone answering service or responds to queries directed to COCO personally. Pertinent telephone numbers for Eastern U.S. Chains follow:

<u>Loran-C Chain/(Rate)</u>	<u>Telephone Number</u>
Northeast U.S. Chain (9960) & Great Lakes Chain (8970)	Prerecorded Service - (607)869-5395 COCO-(607)869-5393
Southeast U.S. Chain (7980)	Prerecorded Service - (904)569-5421 COCO-(904)569-2223
Canadian East Coast Chain (5930)	Prerecorded Service - (709)454-3261 COCO-(709)454-2392

If additional information is required after contacting COCO's, contact the Loran-C Chain Manager at telephone: (212)668-7880. Pertinent telephone numbers for West Coast Loran-C chains follow:

<u>Loran-C Chain/(Rate)</u>	<u>Telephone Number</u>
U.S. West Coast Chain (9940)*	(707)987-3144
Canadian West Coast Chain (5990)*	(707)987-3144

* This service is available between 0700 and 1530 Pacific Time during weekdays.

ITEM - LORAN-C VERIFICATION SURVEYS

In order to insure that Loran-C lattices printed on nautical charts are as accurate as possible, the Coast Guard, with assistance from National Ocean Survey, has been conducting Loran-C verification surveys. The purpose of these surveys is to collect Loran-C time difference readings at precisely determined locations. The data collected is then used to update and improve the accuracy of Loran-C lattices printed on previous editions of nautical charts. A listing of survey data for a particular area may be obtained from:

Commandant (G-NRN-3)
 U.S. Coast Guard
 Washington, DC 20593
 (202)472-5857

A listing of surveys completed, including the area of the survey and the Loran-C rates surveyed is shown below.

VERIFICATION SURVEYS COMPLETED

<u>AREA</u>	<u>YEAR</u>	<u>RATE</u>	<u>AREA</u>	<u>YEAR</u>	<u>RATE</u>
Southern California			Lake Huron	1980	8970
(Pt. Arguello south)	1977	9940	Lake Superior	1980	8970
Norfolk to Long Island	1978	9960	Lake Michigan	1980	8970
New England	1978	9960	Lake St. Clair	1980	8970
Gulf of Mexico	1978	7980	Norfolk, VA-Tampa, FL	1981	7980/
	less	7980-W&Z			9960
Lake Huron	1979	9960	Strait of Juan De Fuca-		
Lakes Erie and Ontario	1979	9960	Puget Sound	1981	5990
Southeast Coast	1979	7980	Long Island to Canada	1981	9960/
Western Gulf of Mexico	1980	7980			5930
			Pt. Arguello to Strait		
			of Juan De Fuca	1982	9940

ITEM - RADIONAVIGATION BULLETIN NO. 9, JUNE 1982

A considerable amount of Loran-C data appears in the Radionavigation Bulletin No. 9 published by Commandant (G-NRN-3), U.S. Coast Guard, Washington, DC 20593 (202-472-5857). Subjects include: Carriage requirements for electronic positioning equipment, Loran-A to Loran-C conversions, Loran-C installation considerations, Antenna, receiver replacement, grounding, onboard noise, RFI, power source variations, and New York Harbor Waypoints.

ITEM - LORAN-C POSITION REPORTING SYSTEM, MAY 1980 BY D.W. MAHAR

Copies of this report may be obtained from: U.S. Department of Commerce, NOAA, Oceanic and Atmospheric Services, NSTL Station, MS 39529.

ITEM - FOR SALE! NSIA TWO-VOLUME STUDY OF THE "CIVIL USE OF THE NAVSTAR GLOBAL POSITIONING SYSTEM"

NSIA's Command, Control, and Communications Committee completed in June 1982 a two-year study of the "Civil Use of the NAVSTAR Global Positioning System". Copies of the unclassified, two-volume final report now are available for purchase.

The two volumes record a detailed investigation of the potential civil applications of the global positioning system (GPS) and the issues involved. These include interest in the civil use of GPS and Congressional interest for a comprehensive plan for recouping GPS costs.

Volume I, 60 unclassified pages, presents a narrative, technical document covering the principal issues, conclusions, and findings.

Volume II, 137 unclassified pages, is an extensive and detailed document in a briefing chart format.

The highly professional and knowledgeable study group assembled to perform this study was drawn from those elements of industry concerned with the development and future operations of the GPS and its user equipment, and those elements of industry concerned with overall radionavigation and transportation systems analysis, economics, and operations.

If you desire to purchase one or more copies of this two-volume study, "Civil Use of the NAVSTAR GLOBAL POSITIONING SYSTEM," please get in touch with: National Security Industrial Association, Suite 901, 1015 15th Street, NW, Washington, DC 20005, telephone (202)303-3620.

ITEM - GPS PROGRAM STATUS SUMMARY (REFERENCE NAVSTAR NEWSLETTER, GPS JULY - SEPTEMBER 1982)

This article is quoted directly from the GPS newsletter published by the Joint Program Office, Air Force Space Division.

"Chapter 1. PROGRAM STATUS SUMMARY

1.1 During the quarter ending 30 September 1982, the Navstar Joint Program Office (JPO) signed a long lead contract that starts the 28 satellite block buy. This is one of the most significant accomplishments in the program's history. It means that we are now underway in establishing a constellation of satellites that will revolutionize navigation, positioning, and NUDET detection. We are working with Rockwell International while they work to complete the full proposal for the block buy. Their formal proposal is expected shortly.

1.2 On 30 September 1982, the Initial Operational Capability (IOC) was declared for our Interim Control Segment (ICS) at Vandenberg AFB, CA. Full Operational Capability (FOC) is scheduled for December 1982. At Vandenberg, we have changed from our old Xerox 550 computer system to our new IBM 3033 computer system. The hardware and software are working very well and the system is now controlling our constellation of Block I satellites. In addition, test results at our Yuma Proving Ground range have demonstrated that the new ICS is working well.

1.3 The Determination and Findings (D&F) for the IONDS terminals referred to as the Ground/Airborne IONDS Terminals (G/AIT) was signed by the Air Force Assistant Secretary for Acquisition and Logistics on 22 October 1982. The Request for Proposal (RFP) is expected to be released the week of 25 October 1982. The RFP is for a 54 RDT&E program that includes a test phase in the EC-135. The production portion of the Program will begin in FY84. The current production program calls for 40 terminals (4 in E-4Bs, 28 in EC-135s, and 8 in ground command posts).

1.4 The Fiscal Year 1983 Authorization Bill approved the full request for the GPS program for all services. The Appropriations Bill has not yet been approved and, like all other DOD activities, we are operating under Continuing Resolution Authority through at least 17 December 1982.

ITEM - MR. DAVID T. HAISLIP APPOINTED DIRECTOR, TIDELAND SIGNAL CORP - WASHINGTON, DC OFFICE

The entire WGA membership congratulates Commander David T. Haislip (R) on his new assignment as Director, Tideland Signal Corp - Washington, DC Operations. Dave's address and phone number are as follows: Suite 216, North Tower, 7315 Wisconsin Avenue, Bethesda, MD 20814 (301-656-6694).

ITEM - If you have any contributions for the WGA newsletter please send a one- or two-liner or article to:

John Illgen
Kaman Tempo
PO Drawer QQ
Santa Barbara, CA 93102

or phone Sharon Garland at (805)963-6460.

Your newsletter editor greatly appreciates all of the fine contributions provided by the membership for the 1982 newsletters.

Wishing you all a very prosperous New Year.

John Illgen
Newsletter Editor