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WILD GOOSE ASSOCIATION

P.O. Box 556
 Bedford, MA 01730

NEWSLETTER

1983-2

ITEM - CALL FOR PAPERS 12th ANNUAL WILD GOOSE ASSOCIATION CONVENTION TO BE HELD IN WASHINGTON, DC, 12 through 14 October 1983.

Theme: Where are we? How did we get here? Where are we going?

This year marks a quarter century in the development of the Loran-C navigation system. The convention theme offers the opportunity to recall the enjoyment and challenge of reaching the present plateau, assess the current system, and plan the future. This year the convention committee invites papers on the history and development of the system, techniques in equipment design and system operation, and virtually any pet project (or pet peeve) that you would like to share (or air).

Please send your abstract to:

Harold T. Sherman
 ITT Avionics Division, Department 62111
 500 Washington Avenue
 Nutley, NJ 07110
 (201)284-3927

Abstracts should be sent as soon as possible.

ITEM- WGA RADIONAVIGATION JOURNAL 1982

A typographical error was found by Dennis Rochester of Aero Service, Houston, in one of the technical articles. This serious typographical error has been found on page 58 of the 1982 WGA Radionavigation Journal. Make the following pen-and-ink change to your copy of the journal:

Step 17 reads: 17. $CC = |P1 + P2|$.
 Change Step 17 to read: 17. $CC = |P1 - P2|$.

ITEM - FOUNDATION FOR THE PROMOTION OF THE ART OF NAVIGATION P.O. BOX 1126, ROCKVILLE, MD

RAdm Thomas D. Davies (USN Ret) President, has formed the subject association. I have copied a portion of Admiral Davies letter below and you may contact him at the above address for further details.

...For some time I have been concerned that the practitioner of the art of navigation (in particular celestial navigation) is becoming an endangered species. The advent of the wealth of electronic aids has tended to mask the critical importance of the basic skill of the navigator -- his expertise with the sextant and various means of sight reduction. This skill is one which is not subject to instant recall and requires continuous practice to maintain. I am convinced that the existence of a substantial community skilled in the art of navigation is important to this nation and its maritime mobility.

ITEM - NEW ADDRESS FOR WILD GOOSE ASSOCIATION

New address for the Wild Goose Association is as follows:

Wild Goose Association
P.O. Box 556
Bedford, MA 01730

ITEM - PORTABLE LORAN ASSIST DEVICE

One of the recommendations from the NTSB investigation report on the collision of the Summit Venture with the Sunshine Skyway Bridge (Tampa, Florida) is that a precision electronic navigation system be implemented and used by pilots of ships transiting Tampa Bay. The US Coast Guard was invited to describe advances in precision use of Loran-C.

The situation in Tampa Bay with respect to precision electronic navigation is unique. It appears the practicality of implementing precision Loran-C for accurate piloting assistance was proven. With the passage of Florida House Bill #722 implementation is no longer an option; it is mandated. Coast Guard future plans include a trackline survey of the Bay, validate PLAD operation, and monitor the events up to and including the state's decision to implement a Loran-C based precision piloting system. Coast Guard should be contacted for further details.

ITEM - SAUDI ARABIA GRI, CODING, AND EMISSION DELAYS

Coding and emission delay parameters cited in the WGA newsletter (1982-3) are no longer valid and are in the process of being changed. Please delete entirely by pen and ink the eleventh item listed which appears on page 3 of the aforementioned newsletter, entitled "GRI, Coding, and Emission Delays -- Saudi Arabia."

ITEM - GPS PROGRAM STATUS SUMMARY (REFERENCE NAVSTAR NEWSLETTER, GPS JAN - MARCH 1983)

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

This quarter the program officially reverted to its original name -- Navstar Global Positioning System (GPS). We expect to retain this name for the life of the program.

Both user equipment contractor's initial Phase IIB equipment has been delivered to our test range at Yuma Proving Ground. The hardware and software is currently undergoing field "debugging" in our C-141 aircraft and M-35 truck test platforms. Initial test results have been encouraging. The formal host vehicle development, test and evaluation (DT&E) program and initial operation, test and evaluation (IOT&E) begin later this year.

The GPS continued to routinely provide orbital positioning information within ten meters to LANDSAT 4, the first satellite with a GPS receiver on board.

Four of our on-orbit satellites have passed the four-year mean mission duration milestone. To insure the availability of five satellites to support our test program, we plan to launch two of our remaining four Block I satellites this year. (GPS-0006, 0009, and 0010 are in storage and 0011 is completing test.) The launch of Navstar 8 will mark the beginning of a new era in the GPS program. Navstar 8 will be the first satellite launched with the Nudet Detection System (NDS) payload on board. All subsequent GPS satellites will also contain the NDS payload.

GPS-0011 has completed thermal vacuum tests. Either GPS-0011 or GPS-0010 will be launched as Navstar 8. Satellites in the fabrication/test flow are given a GPS series number. When a satellite is launched, it is then given a Navstar serial number. Thus, the next satellite to be launched will become Navstar 8. It is expected to be shipped from the factory to Vandenberg AFB, CA, on 20 May 1983, and launched atop an Atlas on 28 June 1983. The upper stage is two Star 48 boosters mounted in tandem. The upper stage will contain an active nutation control to insure there is minimal coning as we attempt to get it into the correct orbit.

On 8 April 1983 Rockwell International signed our 28 satellite block buy multi-year procurement contract. Air Force approval-signature is expected by 29 April 1983. This procurement represents a major advancement in the procurement of satellites. The same procurement strategy is being applied to the upper stage -- the PAM DII made by McDonnell Douglas. This procurement of satellites and upper stages will save over \$200 million and 1.5 years in the time it takes to establish full 3-D capability.

Our Control Segment (ICS) continued to perform very well. It became fully operational on 15 January 1983. Because of delays in the projected availability of the CSOC, the ICS will continue on line longer than planned. In 1985 our Operational Control Segment (OCS) Master Control Station (MCS) software will be loaded in our ICS computer. It will continue on-line until we can relocate it and an additional computer system from the factory into the Consolidated Space Operations Center (CSOC). Our overseas site construction has begun for our monitor stations and ground antennae. The overseas network will be completed in the spring of 1986.

Our NDS terminal program continues in competitive source selection. Software pre-award surveys were completed in March 1983. Contract award is planned for this spring.

User equipment Phase III (production phase) planning is well under way. The effort is multi-faceted. It includes (among other things) developing a user equipment acquisition strategy and detail planning for host vehicle integration/installation. This effort plus the results from DT&E/IOT&E is critical for a successful DOD milestone III decision in 1984.

ITEM - RADIONAVIGATION BULLETIN PUBLISHED BY US COAST GUARD - MARCH 1983 ISSUE

The Coast Guard Radionavigation Bulletin for March 1983 defines Loran-C chain reconfiguration for Canadian East Coast, Laborador, and Iceland. Chain parameters are also provided in this issue. Additionally, the Coast Guard bulletin includes a listing of corrected Loran-C information for a number of Loran-C chains based on considerable research and coordination with the Defense Mapping Agency Hydrographic/Topographic Center. An interesting article also appeared on the Remote Operating System.

ITEM - ION LORAN-C ISSUE A SELLOUT

The Spring 1982 Loran-C issue of Navigation has resulted in a sellout of extra copies. Another printing was ordered by the ION and copies are being sent out daily.

ITEM - If you have any contributions for the WGA newsletter, please send a signed and dated note, letter, or article to:

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

or phone Sharon Garland if you have questions at (805)963-6460.

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

John Illgen
Newsletter Editor.

* * FLASH * *

ELECTION RESULTS

The WGA electorate has returned president Andren for a second term and has elected Dean, Fehlner, Johnson and Marchal directors for three years.

NOTICE NOTICE NOTICE NOTICE

LOOK AT THE DATE ON YOUR LABEL

- - IF IT ISN'T 83 - -

YOU ARE BEHIND IN YOUR DUES !

SEND A CHECK FOR YOUR DUES TODAY

OR ELSE

SEND A CHECK FOR \$12.00 TO WGA, AT THE P.O.BOX.

DO IT NOW!