

Board of Directors

Robert W. Lilley..... President
David C. Scull Vice President
Walter N. Dean Secretary
Carl S. Andren Treasurer
James F. Culbertson Past President
James O. Alexander
David H. Amos
John M. Beukers
Frank S. Cassidy
Laura G. Charron
Kjell O. Enerstad
Bruce E. Hensel
John D. Illgen
Henry E. Marx
Mark P. Morgenthaler
Maurice J. Moroney
William L. Polhemus

Wild Goose Association



*The International Loran
Radionavigation Forum*

Minutes of the 101st meeting of the Board of Directors, April 28, 1992

1. Call to Order

The 101st meeting of the Board of Directors was convened at 10:47 am in Room 6436 of the Nassif Bldg., 400 7th St. NW, Washington, DC.

2. Attendance, Proxies and Statement of Quorum

The following Board members were in attendance:

Bob Lilley, President
Dave Scull, Vice President
Carl Andren, Treasurer
Mike Moroney
Frank Cassidy
Laura Charron

Also Attending

Dave Olson

Written proxies were received from Mark Morgenthaler, John Beukers, Bruce Hensel, Dave Amos and Henry Marx.

At the opening of the meeting a quorum was not present, so it was decided to proceed but not to vote on any motions until Mike Moroney arrived, which occurred at 11:07 am. A quorum was then declared.

3. Adoption of minutes of the 100th meeting of the Board of Directors

The minutes of this meeting were adopted without exception.

4 Secretary's Report

The Secretary's report was adopted later on as part of the Executive

Committee reports without exception. It was agreed that the Executive Committee would look into the Secretary's recommendation that teleconferencing be used for the January Board Meeting.

5. Treasurer's Report

Carl Andren passed out copies of the Treasurer's Report. He explained the various expenses for incurred by the Vice President for operations and for moving the operations of the WGA to Ohio. The Treasurer's report was adopted later without exception as part of the Executive Committee Report.

6. Executive Committee Report

Bob Lilley and Dave Scull referred to their respective reports in the Secretary's recent mailing. Reports of all Executive Committee members were adopted without exception at this point.

7. Standing Committee Reports

a. Nominating Committee Report

President Bob Lilley tabled this report for the time being. It was later adopted with Lilley to contact Chairman Bruce Hensel to obtain two President candidates.

b. Awards Committee

A verbal report was received from Frank Cassidy who is assisting Jim VanEtten. Vern Johnson is also expected to assist. (This was later supplemented by a written report submitted by Frank Cassidy) They are requesting input from the Board on candidates for the Medal of Merit and Special Service Awards. The Awards Committee report was approved without exception.

c. 1991 Convention

Dave Scull reported that over \$14,000 was realized from the 1991 Convention (exceeding that of any of the past three conventions) and referred the Board to the spread sheet in the Secretary's previous mailing. Carl Andren suggested that ~~the~~ memberships picked up at a convention be applied to the next dues year.

d. 1992 Convention

Bob Lilley referred the Board to John Beukers' report. The Board agreed with his recommendation of obtaining dues renewals at the convention but objected to the 10% discount. Frank Cassidy pointed out that he still needs policy and application papers. Mike Moroney passed out a copy of the meeting budget, which was reviewed by the Board. Mike also passed out souvenir pens and seals, to be used on correspondence, which will advertize

the meeting. The report was adopted without objection except for the 10% discount on registration fees.

e. 1993 Convention

The 1993 Convention Report was discussed. Dave Scull mentioned that he found Monterey to be very expensive and that the 1993 ION Technical Meeting would be held in San Francisco, and he preferred the Reno location as a new exciting place to go. The Board adopted the report without exception.

8. Special Committee Reports

Bob Lilley referred the Board to the letter from Henry Marx on GPS issues and noted that he had taken steps to form a Special Committee for studying the issues concerned with the future role of the WGA. The Board approved the Henry Marx report without objection.

Laura Charron mentioned that George Preiss, Chairman of the GPS International Information Committee was looking for a site to hold his next committee in Europe. Laura suggested that the WGA might inform him of the Birmingham, England WGA Technical Symposium (loran- GPS theme) as a possible site for his committee meeting.

Dave Olsen reported on the International Omega Association and their recent vote by the members to change their name to the International Navigation Association. Bob Lilley reported he had some telephone conversations with John Waltz on future role of both organizations but had not had a face to face meeting. Dave Olsen's report was approved without objection.

Bob Lilley and Laura Charron reported that they had found someone at the Naval Observatory who was willing to serve on the Audit Committee. Norma Meyer is willing to conduct an audit of the WGA books.

Bob Lilley stated that he saw no activity for an Constitution and Bylaws Committee at the present, but a proposal on membership/dues simplification is in the works.

There was no report from the Historical Committee.

Bob Lilley reported that he talked with John Beukers regarding the Radionavigation Journal. Bob will check with Dan Maxim on obtaining possible help from the Coast Guard Auxiliary.

Bob Lilley indicated that we may let the Membership Committee go this year, as Ellen and he will be performing these duties at the Convention.

9. Old Business

Bob Lilley reviewed his paper WGA Business- 101st Board of Directors, Washington, D.C. Some of the highlights follow:

He indicated that we may have to approve the awards nominations by fax since we do not plan to meet before the Convention.

Bob Lilley plans to find a Chairman for his Future Role of WGA Committee.

Mike Moroney had no report regarding the National Standard for Loran-C.

Bob Lilley referred to the past awards booklet which he hopes to publish after the 1992 Convention.

Dave Scull reported he had not seen a copy of the WGA comments on the FRP. Bob Lilley promised to send him a copy.

10. New Business

None

11. Next Meeting Schedule

To be held at the 1992 Convention in Birmingham.

12. Adjourn

The meeting was adjourned at 1:05 pm.

MAY 14 '92 03:30PM JET ELECTRONICS, INC

Board of Directors

Robert W. Lilley..... President
 David C. Soull..... Vice President
 Walter N. Dean..... Secretary
 Carl S. Andren..... Treasurer
 James F. Culbertson..... Past President
 James O. Alexander
 David H. Amos
 John M. Beukers
 Frank S. Cassidy
 Laura G. Charron
 Kjell O. Enerstad
 Bruce E. Hensel
 John D. Ilgen
 Henry E. Marx
 Mark P. Morgenthaler
 Maurice J. Moroney
 William L. Polhemus

Wild Goose Association

The International Loran
 Radionavigation Forum

Date: May 14, 1992 *BZH*

From: Bruce Hensel, Chairman, Nominating and Election Committee

To: Bob Lilley, WGA President

Subj: Nominating and Election Committee Report

The Nominating and Election Committee submits the following nominations for the offices of President and Board of Directors for the 1992 election.

President

James Alexander
 Robert Lilley

Board of Directors

Carl Andren
 Bill Brogdon
 Frank Cassidy
 Dale Johnson
 Bruce Hensel
 David Last
 Henry Marx
 Ben Peterson

Please obtain the approval of the Board of Directors for these nominations as required by Section 4.c. of the association bylaws.

Approved by tel FAX 19 May '92
Wen



Conv 92 MARX

Wild Goose Association

1992 Annual Convention and Technical Symposium August 24 – 27, Birmingham, England

*The International Loran
Radionavigation Forum*

1992 Convention Report for the Board of Directors' Meeting April 28, 1992

Organizers

Convention Chairman (U.K.)

John M. Beukers
East Ridge, Longborough
Moreton-in-Marsh
Glos. GL56 0QX, England
Phone: 44 (0)451-870777
Fax: 44 (0)451-870222

Convention Co-Chairman (U.S.)

Maurice J. Moroney/DTS-52
Transportation Systems Center
Kendall Square
Cambridge, MA 02142, U.S.A.
Phone: (617) 494-2026
Fax: (617) 494-2628

Technical Chairman

John D. Illgen
Illgen Simulation Tech., Inc.
250 Storke Road, Suite 10
Goleta, California 93117, U.S.A.
Phone: (805) 968-8661
Fax: (805) 968-1311

Technical Co-Chairman (U.S.)

Frank Cassidy
Datamarine International
53 Portside Drive
Pocasset, MA 02559-1900, U.S.A.
Phone: (508) 563-7151
Fax: (508) 564-4707

Technical Co-Chairman (U.K.)

Dr. David Last
University of Wales, Bangor
School of Elec. Eng. Sci., Bangor
Gwynedd LL57 1UT, Wales, U.K.
Phone 44 (0)248-351151
Fax: 44 (0)248-681031

Navtech Seminars, Inc.,

Carolyn McDonald
2775 S. Quincy Street, Suite 610
Arlington, VA 22206-2204, U.S.A.
Phone: (703) 931-0500
Fax: (703) 931-0503

Birmingham Convention & Visitors Bureau

Kim Bate
National Exhibition Center
Birmingham B40 1 NT, England, U.K.
Phone: 44 (0)217-804321
Fax: 44 (0)217-804260

Summary

Planning for the 1992 Convention and Technical Symposium is on track and no difficulties have been identified. Perhaps the most significant development is the letter from the Mayor of Birmingham's office confirming that the City will host a reception and our Banquet at no cost to the WGA. For this privilege we have been asked to modify our banquet proceedings and do without a banquet speaker and minimize the awards ceremony. The following paragraphs provide the current status of the plans and highlight the issues.

N.W. Europe Decision

Ratification by governments of the N.W. Europe's Policy Group decision to go ahead with Loran-C in Europe will impact the attendance at the convention. Word of the result of this process is therefore eagerly awaited but has slipped past the March 2nd date and an April date. The latest information is that the announcement will be made in now mid-May. There is nothing negative to be construed from this delay which appears to be created by political diversion due to elections.

Booking Sheet and Program

The convention booking sheet and program are currently in preparation and will be available for mailing in early May. The entire membership as of January 29th, 1992 received preliminary notice of the meeting together with travel instructions. This same notice was mailed to all those who attended the Royal Institute of Navigation's NAV91 conference held in London as well as those that participated in the IALA Loran-C deliberations.

Group Travel

After a great deal of time, effort and at some cost, the group travel plan fizzled. There was only one taker and that was a non-WGA member who was persuaded by the Chairman's wife to come along! It appears that the main reason for no response was that lower fares could be obtained on an individual basis. However, if this is an indication of the potential attendance from the U.S., the Board must take action. The list of people indicating an interest in the 1992 England Convention that signed up at the 1991 convention in Williamsburg is attached to this report. It is recommended that this list be divided up and each director take some names and make calls. The Chairman will call those outside of the United States.

Technical Program

The Technical Chairman and his committee report that plans for the technical program are falling into place. It is encouraging to note that there are considerably more papers from Europe than the U.S., however it may also indicate a larger drop in attendance from the U.S. than was anticipated.

Seminar

Navtech Seminars have created a Loran-C/GPS tutorial and published the synopsis in their brochure for 1992. This has a circulation of some 40,000 in the U.S. and overseas. The synopsis was sent to all members and others with the travel instructions.

Exhibition

Space has been rented for two forms of exhibition, hardware and poster/literature type. The hardware will be in a secure room while the posters and boards will line the coffee break area and corridors. There is room for 10-12 hardware exhibits and 15-20 self-standing poster boards. The fee that will be charged for hardware exhibits is \$250 and \$200 for poster/board displays. Manufacturers of Loran-C, Loran-C/GPS, GPS and GLONASS equipment and services will be invited to show their wares. Institutional exhibits will be encouraged. A plan of the exhibition area is attached to this report.

Publicity

The first publicity release was sent out the second week of March to 600+ magazines and institutions requesting that the convention be included in publication calendar listings, copy attached. A second release will go out in mid- May with details of the program. The convention was publicized at the recent European "International Space Year" conference held in Munich, Germany at the beginning of April. All WGA literature that was put out was taken. Several attendees at this conference indicated that they would be attending the WGA conference.

Hospitality Suite

A hospitality suite has been organized with the hotel and will be operated by one or more of their staff. This will cost more than we have spent in the past, however, it appears that this is the mode of operation in England. The suite, located on the ground floor, will be open at defined times that will be posted on the door.

Donations

The budget calls for a total donation of \$7500 to cover the cost of the hospitality suite and an industry-sponsored reception. Every effort must be made to collect this amount. Dale Johnson and Mark Morgenthaler have agreed to interface with industry for the exhibition and industry sponsorship. The Chairman will attend to the overseas participation.

Spouse Program

The spouse program has been defined and will be listed, with costs, in the program with sign up boxes. Coaches have been organized and there will be a minimum requirement for participation which, if not met, will cause the excursion to be cancelled.

Mediaeval Banquet

A commitment of 100 has been made for this event. This is the minimum and we will have Coombe Abbey to ourselves. The booking sheet will include a sign up box.

Bank Account

A bank account has been opened with National Westminster in Birmingham at a branch next to the Birmingham Convention and Visitor Center office adjacent to the National Convention Center (this is a ten minute drive from the center of Birmingham). The treasurer advanced \$5000 to the chairman and this money has been transferred at a favorable rate into an interest bearing account (just over 10%). No monies have been spent to date from this account. Expenditures incurred in the U.S. have been forwarded to the treasurer for payment.

A Board resolution is required to ratify the action of the Chairman in opening this account. The motion should read "The Board hereby ratifies the action of the 1992 Convention Chairman, John M. Beukers, in opening an account with the National Westminster Bank, Birmingham National Exhibit Center branch, for the purpose of depositing and dispensing funds in connection with the 1992 Annual Convention of the Association". done

Merchants Charge Account

The Birmingham Convention and Visitors Bureau were to have let us use their merchant charge account for the WGA registration. However, a recent experience with another international organization caused them to lose money and they are no longer willing to extend this service to us. We are, therefore, once again pursuing a WGA merchant account with VISA.

Membership and Renewals

It is recommended that all attendees that are not already members of the WGA become members automatically for the balance of 1992 and 1993. The differential in registration fee will cover this. Current members will be encouraged to pay their 1993 dues at the time of registration. A 10% discount might be offered.

Roll Labels

5000 promotional stick-on roll labels were ordered for sending around to the Loran-C industry and others for attaching to correspondence and faxes. These give the date and place of the convention. Directors are urged to use these and get others to use them. Please see Mike Moroney.

Items for Sale

We have purchased 500 ball point pens with the inscription "Wild Goose Association - Birmingham 1992" for general issue at the convention. We intend to obtain other purchasable items such as bone china mugs and/or plates having the WGA logo fired on. In addition we are investigating T shirts etc.

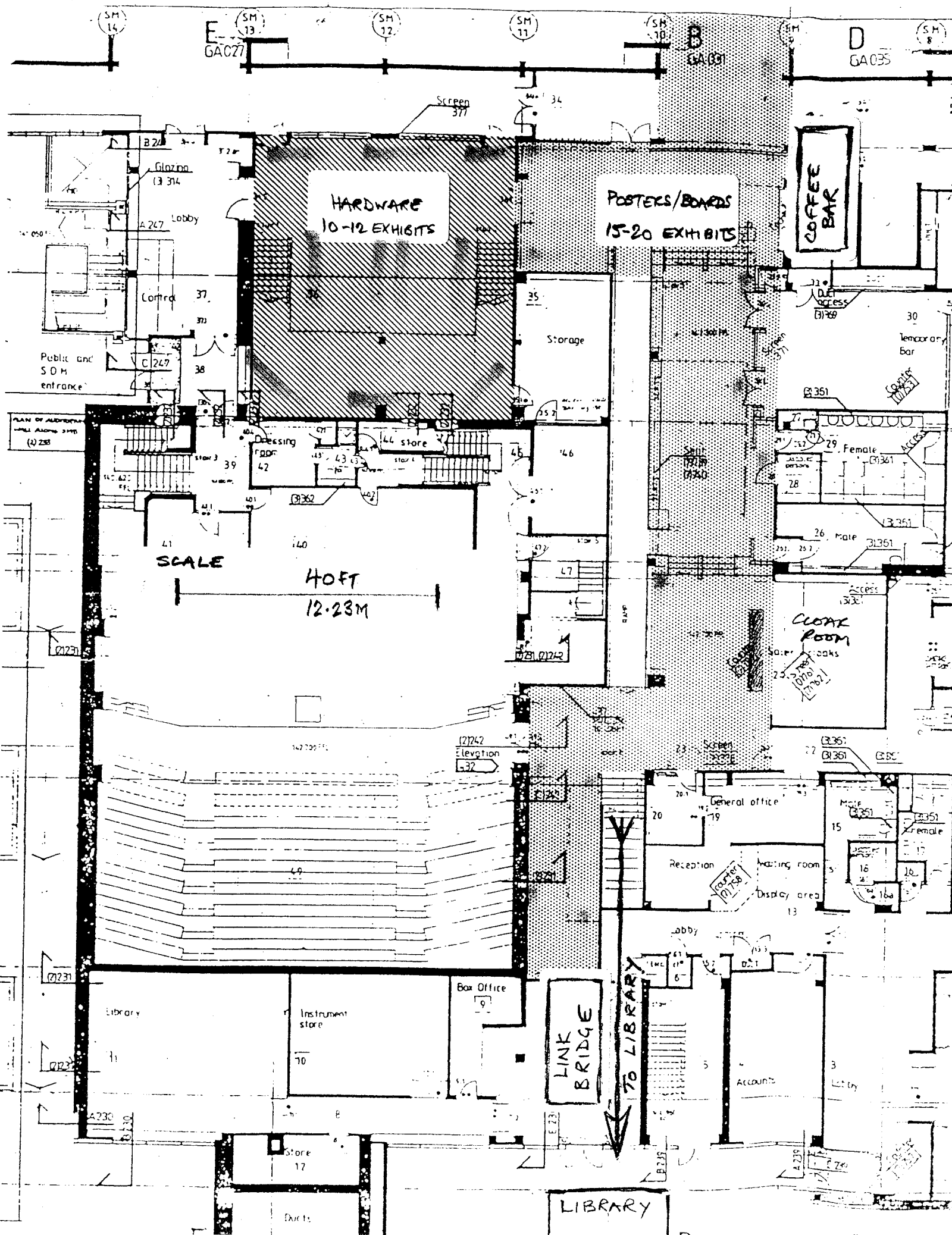
Attachments:

Exhibition Plan
1991 Convention sign up names
Convention News Release

Distribution:

Board of Directors (17)
Plus mailed by Chairman to:
Dale Johnson
John Illgen
David Last
Carolyn McDonald
Kim Bate

Respectfully Submitted
J. M. Beukers
April 14th 1992



END OF AUGUST -

1992

5+

NAME

SPOUSE

*

BUTLER - CANADIAN COAST GUARD

+ Tom & Polly NEAL

Dirk van Willigen

CARL ANDREN

NIF

~~DAVE & DARYL WHITE~~

+ FRANK CASSIDY

BILL SCHORR

ELIJAH "ZEKE" JACKSON

Jay & Scull

JIM CULPERTSON

Mary

JoAnne

BILL LAM

MURRAY

David Lass

John Benkers

Wendy

BRUCE HENSE

Bob & Ellen Lilley

YES

Walter Dean

Shirley

Monty Poppe

Who knows!

Jim Van Zetten

Grace

NIF X

David Waters

Ed Goudie

DAVE GAY

GENE

DORRI POPP

Emelyn & Jim Boham

Shirley

DALE JOHNSON

JEAN

USCG ACTEUR STAFF (??)

James M Wood, SR

LAVONA

ED FRAUGHTON

ANN

Bill & De George

Annie

Robert McKee

MARIE

Norman Matthews

MARY

D- Amos

Mark Hargreaves

(OVER)*

SEE TOP YES

Found pen at letter

28 13

Mike Moroney/DTS-52
Transportation Systems Center
Kendall Square
Cambridge, MA 02142
Phone: 617-494-2026
Fax: 617-494-2628

For Immediate Release.....

**Wild Goose Association
1992 Convention and Technical Symposium**

**"The Loran-C/GPS Mix - Sharing the Success"
Birmingham, England - August 25 - 27, 1992**

In 1994 the United States Coast Guard will transfer operation of the U.S. overseas Loran-C radionavigation transmitting stations to the current host countries. Other countries are currently installing or planning their own national Loran-C chains. Cooperative agreements are in the making between Japan, Korea, China and the Commonwealth of Independent States in the Far East, as well as between the countries of Northwest Europe and the countries bordering the Mediterranean, all of which are expected to be concluded in 1992.

To reflect this growing international involvement with Loran-C and the worldwide interest in the use of satellites for position determination and navigation, the Wild Goose Association will hold its annual convention and technical symposium outside the United States for the first time. The technical program's theme for the 21st Annual Convention is "The Loran-C/GPS Mix" and will underscore the need to retain a mix of radionavigation systems to ensure security, signal availability, and integrity when satellite systems become operational.

The convention will be preceded by a one day seminar, conducted by Navtech, Seminars Inc. covering the "Interoperability of Loran-C with Satellite Systems".

The Copthorne Hotel and City Library in Birmingham, England have been selected for the four day event which will be held on Monday, August 24 through Thursday, August 27, 1992. The seminar will be conducted at the same location on Monday, August 24, 1992.

The Wild Goose Association is a non-profit organization that serves the interests of the international Loran-C radionavigation community. Its membership is drawn from governments, academia, industry, and users, and derives its name from the Canada Goose - one of nature's best navigators.

For further information please contact Mike Moroney (U.S.A.) phone: +1-617-494-2026, fax: +1-617-494-2628 or John Beukers (U.K.) phone: +44-(0)451-870777, fax: +44-(0)451-870222.

101 BOB
file

WGA BUSINESS - 101st Board of Directors, Washington, DC

This is an updated copy of the agenda
of "things to do" presented at the
100th Board of Directors' meeting in San Diego.

- ✓ 1. Board approval of the minutes of the 100th Board meeting, and committee reports.
2. Copies of Coast Guard User Handbook for WGA use, or a master copy for WGA reprint for members. Permission for WGA logo on cover. (R. LILLEY TO CALL DAN MAXIM MONDAY 609-655-7426).

Dan is checking as of 3/4/92 on the publication schedule and on our getting reprint permission. The USCG publication schedule is unknown, but likely will be late Spring.

Also, R. Lilley to see if Maxim interested in working with WGA on Journal. He is to contact J. Beukers at 407-563-0627 if so.

Dan is talking to USCG about this.

3. An FAA request to Capt. Weseman for a companion volume on aviation would result in a CG Auxiliary offer to write it, according to Dan Maxim. (M. MORONEY TO TALK WITH GEORGE QUINN) Follow
4. Be sure Bill Brogdon gets info on Directors' activities.

✓ **Directors are reminded to fax Goose Gazette information to Bill at 919-527-9349.**

6. Northwest Europe progress - Be alert to ~~March/April~~ May - decision by the various governments.

Kjell Enerstad reports generally good news. Agreement to be signed by mid-May (without Canada/Iceland). Some hope for Iceland later. See attached documents.

9. Administrative Operations - Dave Scull - status and changes.

WGA assets have been moved from NAVCOM to Ohio. Note that one item (the storage enclosure) is still at NAVCOM, and Dave Scull was to try to sell it from there.

The WGA office is being set up in Ohio - The new telephone and fax number is 614-797-2081.

Dave Scull has executed the administrative operations contract with Ellen Lilley.

10. WGA Bylaws - preliminary suggestions to simplify dues payment and accounting for delinquent dues.

Article VII, Section 1. Change to:

- f. Annual dues and fees shall be due and payable on January 10 for the year beginning January 1.
- g. Fees and dues paid at or after the Annual Convention may be designated to cover dues for the next calendar year.

Article VII, Section 2. Delete

The changes have the effect of simplifying considerably the administrative practices of the WGA. Members can be encouraged to renew at the Convention for the following year, maintaining their dues currency for the forthcoming elections. Dues reminder notices would go out in October. Any members not paid by January will not receive Gazette mailings until dues are paid. Members not paid prior to the issue of ballots will not participate in the election that year.

At the Convention, a member would pay a \$20 lower registration fee than a non-member. Additionally, registration materials should include a slot for pre-payment of \$20 membership for the following year!

11. BOD Meeting schedule

August XX, at the Technical Symposium in Birmingham

12. ~~WGA/IBA and IBA~~ future - Dave Scull
Dave Amos
Henry Marx
M. Morgenthaler

} ← need chairman

13. WGA Directory - B. Hensel, B. Brogdon suggestion - This should proceed, once Data Base is moved. Will need a pre-publication, with members adding info later.

Publication expected during 1992:

- Database update
- Members' verification/addition to database
- Members' preference on amount of info to publish
- Advertising?

14. Loran-C National Standard
M. MORONEY CHECKING ON STATUS.

15. Awards - early this year - August Convention
J. van Etten with Frank Cassidy.
B. Frank for background - 313-645-9848

P [We need to publish a past-awards booklet. Once we get past the Birmingham meeting, we'll proceed.

16. Radionavigation Journal - John Beukers
R. Lilley talked with J. Beukers. See also talk with Dan Maxim. Still a live issue.

17. Committees (all chairs members of WGA)

Audit (non-BOD)	LAURA CHARRON CHECKING ON RICH KEATING IN WASHINGTON AREA FOR THIS.
Awards	J. van Etten, Frank Cassidy
Constitution	L. Charron
Convention	
1992	J. Beukers/M. Moroney/J. Illgen,
1993	M. Morgenthaler
Historical	W. Dean
Journal	J. Beukers
Technology/Applications	D. Amos
Membership	(?)
Newsletter	B. Brodgon
Nominations/Election	B. Hensel/J. Culbertson
	(suggested they call Bill Garmany and Ed McGann for support)

Special Liaison Committees

FANS	- John Illgen
IALA	- Kjell Enerstad
RTCA	- Walt Dean/M. Shuey
IOA	- D. Olsen
ION	- C. Andren
FRP	- ? Ed McGann?
FAA	- M. Moroney
USCG	- D. Olsen

Membership Comm: Need someone who will follow up delinquent renewals by telephone, etc.

~~18.~~ FRP - We submitted comments to Elisabeth Carpenter and Heywood Shirer.

~~19.~~ Businesses - Mfgs card program - once Admin ops are moved
Data base update

20. Ed McGann letters

a. Vessel traffic systems
J. CULBERTSON TO RE-WORK ✓

21. Member Concerns from Williamsburg Symposium

B. Mooney - WGA should publish a list of speakers on various subjects. Referral; data base; newsletter?

This can be done as part of our membership directory, which will be worked after the move of the operations center.

B. Mooney - LOPs should be put on charts

Dave Scull offered to work with NOAA, using Bill Mooney's WGA '91 paper.

U.S. Department
of Transportation

United States
Coast Guard



Commandant
U.S. Coast Guard

2100 Second Street S.W.
Washington, DC 20593-0001
Staff Symbol: **G-NRN**
Phone: **(202) 267-0990**

*fax W. Dean
for file -
file - 101st BOD*

1650
Ser: 92/38
FEB 13 1992

Dr. Robert Lilley
Wild Goose Association
Ohio University
College of Engineering
Athens, OH 45701

Dear Bob:

Thank you and please thank the other members of the Wild Goose Association who provided comments to Mr. Dan Maxim during his preparation of an updated Loran-C User Handbook. The combined efforts of the Wild Goose volunteers in conjunction with Mr. Maxim's extraordinary efforts in drafting the "Handbook" will result in a comprehensive publication. This publication will not only provide the basic information necessary to educate Loran-C users, but will serve as a good reference text for those who wish more in-depth knowledge on Loran-C.

Thank you for your efforts in this endeavor, and for the continuing support of Loran-C by the Wild Goose Association.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. F. Weleman".

J. F. WESEMAN
Captain, U.S. Coast Guard
Chief, Radionavigation Division
By direction



THE INSTITUTE OF NAVIGATION

Mr. Richard L. Greenspan, President
1026 16th Street, N.W., Suite 104, Washington, D.C. 20036
Telephone (202) 783-4121 Fax (202) 347-4698

March 13, 1992

Mr. John Beukers
5080-106 Harmony Circle
Vero Beach, FL 32967

Dear Mr. Beukers:

Enclosed you will find the ION's exhibitor mailing list as you had requested. This is being provided to the Wild Goose Association in a spirit of cooperation in hopes that the Wild Goose would reciprocate should the need arise.

Please note that this list is for one time use only and the reproduction or duplication of this list is strictly prohibited.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lisa L. Beaty".

Lisa L. Beaty
Director of Operations

cc: David C. Scull, ION Executive Director

*Recd - Bob Miller
Com +*

Board of Directors

Robert W. Lilley..... President
David C. Scull Vice President
Walter N. Dean..... Secretary
Carl S. Andren..... Treasurer
James F. Culbertson..... Past President
James O. Alexander
David H. Amos
John M. Beukers
Frank S. Cassidy
Laura G. Charron
Kjell O. Enerstad
Bruce E. Hensel
John D. Illgen
Henry E. Marx
Mark P. Morgenthaler
Maurice J. Moroney
William L. Polhemus

COPY

Wild Goose Association



*The International Loran
Radionavigation Forum*

March 17, 1992

Mr. Richard L. Greenspan, President
The Institute of Navigation
1026 16th Street, N.W., Suite 104
Washington, D.C. 20036

Dear Mr. Greenspan:

Our 1992 Convention chairman, John Beukers has kept me apprised of the reluctance of the ION to release an ION mailing list of exhibitors at the GPS section meetings and was happy to inform me that the problem has now been resolved.

I thought it appropriate to drop you a line to say that we appreciate this gesture and offer reciprocal cooperation as has been our past and consistent policy towards the ION. As you know, many of the WGA membership are ION members and visa versa. We do not see the ION as a competitor; to the contrary, we regard the ION as a sister organization in much the same manner we do the International Omega Association. Our members are active supporters at many of the technical meetings as I am sure you are aware.

The WGA is an advocacy group that is able to express the opinions of its membership in a manner that is not permitted by the ION charter. In this way, the WGA fills a useful and important political and technical void in the radionavigation discipline.

Let's keep in touch to ensure our continued cooperative support, especially at this time of unprecedented interest in global terrestrial and satellite radionavigation.

Sincerely,

Robert W. Lilley
President

xc: Walter Dean, WGA Secretary

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

Board of Directors

Robert W. Lilley..... President
David C. Scull Vice President
Walter N. Dean Secretary
Carl S. Andren..... Treasurer
James F. Culbertson..... Past President
James O. Alexander
David H. Amos
John M. Beukers
Frank S. Cassidy
Laura G. Charron
Kjell O. Enerstad
Bruce E. Hensel
John D. Illgen
Henry E. Marx
Mark P. Morgenthaler
Maurice J. Moroney
William L. Polhemus

COPY

Wild Goose Association



*The International Loran
Radionavigation Forum*

March 17, 1992

Mr. Phil Boyer, President
AOPA
421 Aviation Way
Frederick, MD 21701

Dear Phil:

You may already be aware that the 1992 Wild Goose Association's Convention and Technical Symposium is to be held in Birmingham England. This is the first time that the Association has ventured outside of the United States and we believe for good reason. The handing over of the Loran-C transmitting stations to host countries has created a great deal of international interest in loran and has stimulated debate, sometimes heated, over the future of global radionavigation systems. We find that there is much confusion and misinformation relating to GPS and Loran-C in Europe and for this reason we have opened up our technical sessions to include GPS and preceded the convention with a Navtech tutorial on both Loran-C and GPS.

We have found that AOPA's participation has significantly enhanced past WGA conventions and will be particularly valuable to this international event. There will be panel discussions in which we anticipate that European views on terrestrial and satellite navigation systems will be heard and debated with U.S. positions and experience.

We sincerely hope that you will put this event on your calendar for attendance or, if this date conflicts with your busy schedule, you will make sure that AOPA is represented. We value AOPA views and contributions.

Please call me if you would like to receive further information on the program and other arrangements that are being made. I look forward to personally welcoming you or your representative at our Birmingham venue.

Sincerely,

Robert W. Lilley
President

xc: Walter Dean, WGA Secretary

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



From: Rear Admiral R M Burgoyne CB
THE ROYAL INSTITUTE OF NAVIGATION

1 Kensington Gore, LONDON SW7 2AT

Tel: +44 (0)71-589 5021 Fax: +44 (0)71-823 8671

Professor Robert W. Lilley, PhD
President, Wild Goose Association
Ohio University
Stocker Center
Athens, Ohio 45701/2979
U.S.A.

6 February 1992

Dear Professor,

Mr Normal Dahl is abroad at present but I have conveyed to him the contents of your letter of 23 January.

He has asked me to say that he very much appreciates your great courtesy in informing him of the meeting of the Wild Goose Association in Birmingham in August. He shares your view on the importance of the future of radionavigation systems at this time.

The RIN would be most happy to give this Convention publicity in Navigation News and we look forward to receipt of a Press Notice which we would also distribute through our other outlets. I am sure that our members would respond to a call for papers.

I would be delighted to respond to any particular queries from the Convention Committee.

*With very best wishes from us both for
a very successful conference*

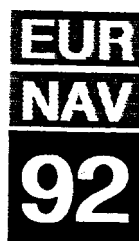
*Very Sincerely
R M Burgoyne*

Director

Enclosures.

Copy to:

Professor J.F. Kemp
Dr A. Stratton



PRESS NOTICE

EURNAV 92 - DIGITAL MAPPING AND NAVIGATION

THE ROYAL INSTITUTE OF NAVIGATION and the GERMAN INSTITUTE OF NAVIGATION are delighted to announce their co-sponsorship of EURNAV 92. This international conference devoted to DIGITAL MAPPING AND NAVIGATION will be held at CHURCH HOUSE, WESTMINSTER, LONDON on 17, 18 and 19 NOVEMBER 1992 (NB: This is a change from the previous notice). It will be the first time that these two Institutes of Navigation will have joined forces to present a conference.

In all forms of transport, there is a substantial transfer of activity from physical maps to those held on computer, and with this comes a whole new range of problems and opportunities. These include questions of digital map sources and publishers, product content and quality control, international standards and safety requirements, display ergonomics, and software design.

Although there are some distinct needs for aeronautical, maritime, and vehicle navigation, both civil and military, there are also considerable areas of overlap, and there is substantial potential to combine experience gained in each of the individual transport modes.

The conference will be of significant importance to a wide range of interests, including experts from mapping and data collection agencies, navigation system engineers, transport user organisations, regulatory and standards bodies, and hardware and software suppliers. Given the international nature of the digital mapping used to support navigation systems, world wide attendance is expected.

For further details call:

The Director
The Royal Institute of Navigation
1 Kensington Gore
London SW7 2AT
UNITED KINGDOM
Tel: +44 71-589 5021

Managing Director
The German Institute of Navigation
Pempelforter Straße 47
D-4000 Düsseldorf 1
GERMANY
Tel: +49 211 369909

"THE LORAN-C/GPS MIX - Sharing the Success" SESSIONS

SESSION A

Policy and Management
(Focusing on Economics and Transportation)

SESSION B

Policy and Management

SESSION C

Panel Discussion
Why Loran-C In Europe?

SESSION D

Loran-C Users

SESSION E, Tutorial

Loran-C Overview and Transmitters, Antennas,
and Equipment Control Monitors

SESSION F, Tutorial

Loran-C Pulse Definition, Receiver
Technology, Processing, and Displays

SESSION G, Tutorial

Coverage, GDOP, EM Propagation,
and Antenna Considerations

SESSION H, Tutorial

Atmospheric Noise, EMC/EMI, Skywaves,
and Compensation Techniques
to Minimize Interference

SESSION I

Loran-C Receiver Technology

SESSION J

Loran-C/GPS Simulation

SESSION K

Loran-C Applications

SESSION L

Loran-C /GPS Receiver Status

ABOUT THE SYMPOSIUM

The deliberations of the Northwest Europe Loran-C Policy Group were concluded on December 3, 1991, with a decision to adopt Loran-C as the terrestrial radionavigation aid for N.W. Europe. While this agreement must be ratified by the governments involved, it is generally accepted that this will occur early spring 1992. On December 17, 1991, the Council of the European Communities on radionavigation systems for Europe adopted a resolution to support regional Loran-C chains as a component of a mix of radionavigation systems. In the Far East, under the umbrella of the International Association of Lighthouse Authorities, China, Korea, Japan, and the Commonwealth of Independent States have also agreed to cooperate to obtain contiguous coverage of Loran-C in the coastal waters of their countries.

In anticipation of this international activity to adopt Loran-C as the primary terrestrial radionavigation aid, the Wild Goose Association is conducting its first Convention and Technical Symposium outside of the United States. The venue is to be in the heart of England, close to many of the most historic and beautiful sections of the country.

Because the WGA firmly believes in and supports a mix of aids to radionavigation, and because of the immense interest in global satellite navigation, the theme for the Technical Symposium is "LORAN-C/GPS MIX - Sharing the Success". This is to reflect that the United States now enjoys full coastal and land coverage of Loran-C and that the advantages of combining terrestrial and satellite systems is now a reality. The WGA wants to share the success of

interoperation of these two systems with others who will soon have this capability.

Having the 1992 Convention in Europe will afford the opportunity to disseminate information. To this end, several tutorials covering Loran-C basics are to be held. In addition, Navtech Seminars Inc., well known for their excellent GPS tutorials, will be holding a full, one-day Loran-C/GPS seminar on the first day of the program.

The fact that in 1992 the countries of Europe will be moving closer to a cooperative union was not overlooked either. Loran-C in Western Europe will surely move eastward to couple with Chayka in the emerging Commonwealth of Independent States.

With these broad horizons you are invited to submit an abstract for a paper that falls within the subject matter of the various sessions. These are exciting and challenging times for global radionavigation; we would, therefore, like to see a high percentage of papers from the international community.

CONFERENCE COORDINATORS

General Chairman, John Beukers

Co-Chairman, Mike Moroney

Technical Program Chairman, John D. Illgen

Technical Co-Chairman, North America, Frank Cassidy

Technical Co-Chairman, Europe, Dr. David Last

Technical Session Coordinator, Carolyn McDonald

Board of Directors

Robert W. Lilley..... President
 David C. Scull Vice President
 Walter N. Dean..... Secretary
 Carl S. Andren..... Treasurer
 James F. Culbertson..... Past President
 James O. Alexander
 David H. Amos
 John M. Beukers
 Frank S. Cassidy
 Laura G. Charron
 Kjell O. Enrstad
 Bruce E. Hensel
 John D. Illgen
 Henry E. Marx
 Mark P. Morgenthaler
 Maurice J. Moroney
 William L. Polhemus

Wild Goose Association



*The International Loran
 Radionavigation Forum*

To: Dr. Robert Lilley

From: Capt. Henry E. Marx

16 April 1992

Subject: April Board meeting - W. G. A.:

Pre our telephone conversation, I hereby grant you my Proxy to be used to vote matters arising at the 28 April 1992 Board Meeting.

I strongly believe that if the WGA does not make an overt effort to attract the GPS Users and technology into the Organization, that we will be history within 10 years.

With the new economics of the 1990's, we are not going to see any significant Government (USCG) support and the interest and ability of the manufacturers to support us is going to decline rapidly. After all, the manufacturers are going to be putting their effort (Money) where their profits are - in the new technology - GPS.

Also, with increasing efforts at Government Economy, there will be increasing pressure to close the Loran Cjains - "after all we have GPS" - and user members contacting their congressmen will be far more effective than "commercial interests" in getting the message across that any prudent navigator needs redundancy - not sole means.

To increase user membership we need to do 2 things: Advertise; and provide something to our members - a Meaningful Quarterly Newsletter.

I would be happy to assist Dave Amos and Dave Scull in their Committee to look into the future of the WGA.

Please advise if I can be of any further assistance.

Regards,

[Signature]
 Capt. Henry E. Marx

Board of Directors

Robert W. Lilley..... President
David C. Scull Vice President
Walter N. Dean Secretary
Carl S. Andren Treasurer
James F. Culbertson Past President
James O. Alexander
David H. Amos
John M. Beukers
Frank S. Cassidy
Laura G. Charron
Kjell O. Enerstad
Bruce E. Hensel
John D. Illgen
Henry E. Marx
Mark P. Morgenthaler
Maurice J. Moroney
William L. Polhemus

Wild Goose Association



*The International Loran
Radionavigation Forum*

April 17, 1992

Walter N. Dean, Secretary
Wild Goose Association
8060 Sacajawea Way
Wilsonville, OR 97070

Proxy

I hereby appoint Robert W. Lilley to act on my behalf on any matters that come before the Board at the meeting of the Board of Directors of the Wild Goose Association to be held in Washington D.C. on April 28, 1992.

Signed this 17th day of April 1992,

John M. Beukers
Longborough
Moreton-in-Marsh
Glos. England, U.K.

Copy Robert W. Lilley

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

Board of Directors

Robert W. Lilley..... President
 David C. Scull Vice President
 Walter N. Dean Secretary
 Carl S. Andren Treasurer
 James P. Culbertson Past President
 James O. Alexander
 David H. Amos
 John M. Beukers
 Frank S. Cassidy
 Laura G. Charron
 Kjell O. Enerstad
 Bruce E. Hensel
 John D. Illgen
 Henry E. Marx
 Mark P. Morgenthaler
 Maurice J. Moroney
 William L. Polhemus

Wild Goose Association



*The International Loran
 Radionavigation Forum*

H. MARX REPORT

101 BOD

To: Dr. Robert Lilley

From: Capt. Henry E. Marx

16 April 1992

Subject: April Board meeting - W. G. A.:

Pre our telephone conversation, I hereby grant you my Proxy to be used to vote matters arising at the 28 April 1992 Board Meeting.

I strongly believe that if the WGA does not make an overt effort to attract the GPS Users and technology into the Organization, that we will be history within 10 years.

With the new economics of the 1990's, we are not going to see any significant Government (USCG) support and the interest and ability of the manufacturers to support us is going to decline rapidly. After all, the manufacturers are going to be putting their effort (Money) where their profits are - in the new technology - GPS.

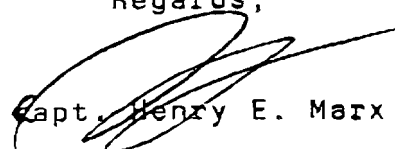
Also, with increasing efforts at Government Economy, there will be increasing pressure to close the Loran Cjains - "after all we have GPS" - and user members contacting their congressmen will be far more effective than "commercial interests" in getting the message across that any prudent navigator needs redundancy - not sole means.

To increase user membership we need to do 2 things: Advertise; and provide something to our members - a Meaningful Quarterly Newsletter.

I would be happy to assist Dave Amos and Dave Scull in their Committee to look into the future of the WGA.

Please advise if I can be of any further assistance.

Regards,

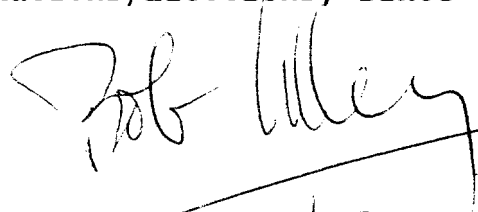

 Capt. Henry E. Marx

Walt Dean: Here are materials for the 101st Board Meeting packet.
I assume you have some additional things.

Since Bill Brodgon is not on the Board, it would probably be good for him to receive a copy separately, so he can abstract things for the Gazette

Let me know if you need further info. Thanks.

On the agenda, please list each committee and its chairman. Note that Jim van Etten took Awards, and Bruce Hensel took Nominations/Elections, since the 100th BOD meeting.


3/23/92

Enclosures:

1. "WGA Business" - This is an updated copy of the agenda I used at the 100th BOD.
2. Letter from R. M. Burgoyne, in response to our courtesy note on having the Convention in England.
3. A press notice for Euronav'92, which we should circulate as a courtesy to the RION.
4. A copy of our own Call for Papers, as a reminder to Board Members, and to get it into the files.
5. A letter to Phil Boyer, AOPA, encouraging their attendance at the Birmingham Convention.
6. A letter from ION giving WGA use of its mailing list for the Convention, and a thank-you letter from WGA.
7. A thank you to WGA from Capt. Weseman for WGa's review of the Loran-C Handbook.
8. A copy of an AOPA Pilot article on Loran-C; yet another follow-up to the infamous October 16 meeting.
9. A packet of materials from Kjell Enerstad on the Northwest Europe situation, along with some comments from me after a telephone conversation with Kjell.

This material is not for release outside the Board meeting; perhaps it would be best to make it a separate packet with its own cover sheet with such a message on it?
10. A letter of thanks to Zeke Jackson for hosting the WGA administrative operation.

WGA BUSINESS - 101st Board of Directors, Washington, DC

This is an updated copy of the agenda
of "things to do" presented at the
100th Board of Directors' meeting in San Diego.

1. Board approval of the minutes of the 100th Board meeting, and committee reports.
2. Copies of Coast Guard User Handbook for WGA use, or a master copy for WGA reprint for members. Permission for WGA logo on cover. (R. LILLEY TO CALL DAN MAXIM MONDAY 609-655-7426).

Dan is checking as of 3/4/92 on the publication schedule and on our getting reprint permission. The USCG publication schedule is unknown, but likely will be late Spring.

Also, R. Lilley to see if Maxim interested in working with WGA on Journal. He is to contact J. Beukers at 407-563-0627 if so.

Dan is talking to USCG about this.

3. An FAA request to Capt. Weseman for a companion volume on aviation would result in a CG Auxiliary offer to write it, according to Dan Maxim. (M. MORONEY TO TALK WITH GEORGE QUINN)
4. Be sure Bill Brogdon gets info on Directors' activities.

Directors are reminded to fax Goose Gazette information to Bill at 919-527-9349.

6. Northwest Europe progress - Be alert to March/April 1 decision by the various governments.

Kjell Enerstad reports generally good news. Agreement to be signed by mid-May (without Canada/Iceland). Some hope for Iceland later. See attached documents.

9. Administrative Operations - Dave Scull - status and changes.

WGA assets have been moved from NAVCOM to Ohio. Note that one item (the storage enclosure) is still at NAVCOM, and Dave Scull was to try to sell it from there.

The WGA office is being set up in Ohio - The new telephone and fax number is 614-797-2081.

Dave Scull has executed the administrative operations contract with Ellen Lilley.

10. WGA Bylaws - preliminary suggestions to simplify dues payment and accounting for delinquent dues.

Article VII, Section 1. Change to:

- f. Annual dues and fees shall be due and payable on January 10 for the year beginning January 1.
- g. Fees and dues paid at or after the Annual Convention may be designated to cover dues for the next calendar year.

Article VII, Section 2. Delete

The changes have the effect of simplifying considerably the administrative practices of the WGA. Members can be encouraged to renew at the Convention for the following year, maintaining their dues currency for the forthcoming elections. Dues reminder notices would go out in October. Any members not paid by January will not receive Gazette mailings until dues are paid. Members not paid prior to the issue of ballots will not participate in the election that year.

At the Convention, a member would pay a \$20 lower registration fee than a non-member. Additionally, registration materials should include a slot for pre-payment of \$20 membership for the following year!

11. BOD Meeting schedule

August XX, at the Technical Symposium in Birmingham

- 12. WGA/IOA and the future - Dave Scull
Dave Amos
Henry Marx
M. Morgenthauer
- 13. WGA Directory - B. Hensel, B. Brogdon suggestion - This should proceed, once Data Base is moved. Will need a pre-publication, with members adding info later.

Publication expected during 1992:

- Database update
- Members' verification/addition to database
- Members' preference on amount of info to publish
- Advertising?

14. Loran-C National Standard

M. MORONEY CHECKING ON STATUS.

15. Awards - early this year - August Convention

J. van Etten with Frank Cassidy.

B. Frank for background - 313-645-9848

We need to publish a past-awards booklet. Once we get past the Birmingham meeting, we'll proceed.

16. Radionavigation Journal - John Beukers

R. Lilley talked with J. Beukers. See also talk with Dan Maxim. Still a live issue.

17. Committees (all chairs members of WGA)

Audit (non-BOD)	LAURA CHARRON CHECKING ON RICH KEATING IN WASHINGTON AREA FOR THIS.
Awards	J. van Etten, Frank Cassidy
Constitution	L. Charron
Convention	
1992	J. Beukers/M. Moroney/J. Illgen,
1993	M. Morgenthaler
Historical	W. Dean
Journal	J. Beukers
Technology/Applications	D. Amos
Membership	(?)
Newsletter	B. Brodgon
Nominations/Election	B. Hensel/J. Culbertson (suggested they call Bill Garmany and Ed McGann for support)

Special Liaison Committees

FANS	-	John Illgen
IALA	-	Kjell Enerstad
RTCA	-	Walt Dean/M. Shuey
IOA	-	D. Olsen
ION	-	C. Andren
FRP	-	? Ed McGann?
FAA	-	M. Moroney
USCG	-	D. Olsen

Membership Comm: Need someone who will follow up delinquent renewals by telephone, etc.

18. FRP - We submitted comments to Elisabeth Carpenter and Heywood Shirer.

19. Businesses - Mfgs card program - once Admin ops are moved
Data base update

20. Ed McGann letters

a. Vessel traffic systems
J. CULBERTSON TO RE-WORK

21. Member Concerns from Williamsburg Symposium

B. Mooney - WGA should publish a list of speakers on various subjects. Referral; data base; newsletter?

This can be done as part of our membership directory, which will be worked after the move of the operations center.

B. Mooney - LOPs should be put on charts

Dave Scull offered to work with NOAA, using Bill Mooney's WGA '91 paper.



From: Rear Admiral R M Burgoyne CB
THE ROYAL INSTITUTE OF NAVIGATION

1 Kensington Gore, LONDON SW7 2AT

Tel: +44 (0)71-589 5021 Fax: +44 (0)71-823 8671

Professor Robert W. Lilley, PhD
President, Wild Goose Association
Ohio University
Stocker Center
Athens, Ohio 45701/2979
U.S.A.

6 February 1992

Dear Professor,

Mr Normal Dahl is abroad at present but I have conveyed to him the contents of your letter of 23 January.

He has asked me to say that he very much appreciates your great courtesy in informing him of the meeting of the Wild Goose Association in Birmingham in August. He shares your view on the importance of the future of radionavigation systems at this time.

The RIN would be most happy to give this Convention publicity in Navigation News and we look forward to receipt of a Press Notice which we would also distribute through our other outlets. I am sure that our members would respond to a call for papers.

I would be delighted to respond to any particular queries from the Convention Committee.

*With very best wishes from us both for
a very successful conference*

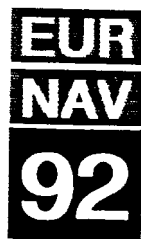
*Very Sincerely
R. M. Burgoyne*

Director

Enclosures.

Copy to:

Professor J.F. Kemp
Dr A. Stratton



PRESS NOTICE

EURNAV 92 - DIGITAL MAPPING AND NAVIGATION

THE ROYAL INSTITUTE OF NAVIGATION and the GERMAN INSTITUTE OF NAVIGATION are delighted to announce their co-sponsorship of EURNAV 92. This international conference devoted to DIGITAL MAPPING AND NAVIGATION will be held at CHURCH HOUSE, WESTMINSTER, LONDON on 17, 18 and 19 NOVEMBER 1992 (NB: This is a change from the previous notice). It will be the first time that these two Institutes of Navigation will have joined forces to present a conference.

In all forms of transport, there is a substantial transfer of activity from physical maps to those held on computer, and with this comes a whole new range of problems and opportunities. These include questions of digital map sources and publishers, product content and quality control, international standards and safety requirements, display ergonomics, and software design.

Although there are some distinct needs for aeronautical, maritime, and vehicle navigation, both civil and military, there are also considerable areas of overlap, and there is substantial potential to combine experience gained in each of the individual transport modes.

The conference will be of significant importance to a wide range of interests, including experts from mapping and data collection agencies, navigation system engineers, transport user organisations, regulatory and standards bodies, and hardware and software suppliers. Given the international nature of the digital mapping used to support navigation systems, world wide attendance is expected.

For further details call:

The Director
The Royal Institute of Navigation
1 Kensington Gore
London SW7 2AT
UNITED KINGDOM
Tel: +44 71-589 5021
Fax: +44 71-823 8671

Managing Director
The German Institute of Navigation
Pempelforter Straße 47
D-4000 Düsseldorf 1
GERMANY
Tel: +49 211 369909
Fax: +49 211 351645

SUBMITTING AN ABSTRACT

Papers are invited in all areas of Loran-C technology, user equipment, operations, interoperability with GPS, and other systems and applications. Particularly desired are those that address either the Northwest Europe Loran-C Policy Group decision to adopt Loran-C as the terrestrial radionavigation aid for Europe as well as those related to expanding Loran-C in the Far East and the Mediterranean. Submissions are especially welcome from the international and user community. Send a 200- to 300-word abstract and a brief biography, along with your name, address, affiliation, phone, and fax numbers no later than March 15, 1992, to:

Europe

Technical Co-Chairman
Dr. David Last
School of Electronic Engineering Science
University of Wales, Bangor
Gwynedd LL57 1UT
United Kingdom
Telephone: 44-(0)248-351151
Facsimile: 44-(0)248-681031

All Other Geographic Locations

Technical Program Chairman
John D. Illgen
Illgen Simulation Technologies, Inc.
250 Storke Road, Suite #10
Goleta, CA 93117, USA
Telephone: (805)968-8661
Facsimile: (805)968-1311

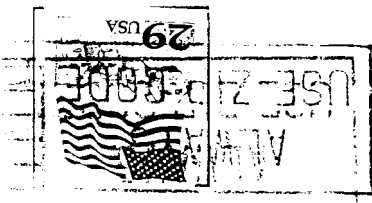
Please indicate the session(s) for which you feel your paper is most appropriate. Notification of acceptance and author package with instructions will be mailed April 1, 1992. A camera-ready copy of the paper will be due June 30, 1992. All papers will be published in a proceedings and distributed at the symposium.

|||||

Meeting Notice &
CALL FOR ABSTRACTS
for August in Birmingham, England!

Robert W. Lilley 3251991
Avionics Engineering Center
Rm 234 Stocker Cntr., Ohio Univ
Athens OH 45701-2979

The Wild Goose Association
Twenty-First Annual Convention
Illgen Simulation Technologies
250 Storke Road, Suite #10
Goleta, CA 93117
ADDRESS CORRECTION REQUESTED



MEETING NOTICE &
CALL FOR ABSTRACTS

"THE LORAN-C/GPS MIX - Sharing the Success" INTERNATIONAL SYMPOSIUM

THE 21ST ANNUAL CONVENTION & TECHNICAL SYMPOSIUM
AUGUST 24-27, 1992
BIRMINGHAM, ENGLAND

"THE LORAN-C/GPS MIX - Sharing the Success" SESSIONS

SESSION A

Policy and Management
(Focusing on Economics and Transportation)

SESSION B

Policy and Management

SESSION C

Panel Discussion
Why Loran-C In Europe?

SESSION D

Loran-C Users

SESSION E, Tutorial

Loran-C Overview and Transmitters, Antennas,
and Equipment Control Monitors

SESSION F, Tutorial

Loran-C Pulse Definition, Receiver
Technology, Processing, and Displays

SESSION G, Tutorial

Coverage, GDOP, EM Propagation,
and Antenna Considerations

SESSION H, Tutorial

Atmospheric Noise, EMC/EMI, Skywaves,
and Compensation Techniques
to Minimize Interference

SESSION I

Loran-C Receiver Technology

SESSION J

Loran-C/GPS Simulation

SESSION K

Loran-C Applications

SESSION L

Loran-C /GPS Receiver Status

ABOUT THE SYMPOSIUM

The deliberations of the Northwest Europe Loran-C Policy Group were concluded on December 3, 1991, with a decision to adopt Loran-C as the terrestrial radionavigation aid for N.W. Europe. While this agreement must be ratified by the governments involved, it is generally accepted that this will occur early spring 1992. On December 17, 1991, the Council of the European Communities on radionavigation systems for Europe adopted a resolution to support regional Loran-C chains as a component of a mix of radionavigation systems. In the Far East, under the umbrella of the International Association of Lighthouse Authorities, China, Korea, Japan, and the Commonwealth of Independent States have also agreed to cooperate to obtain contiguous coverage of Loran-C in the coastal waters of their countries.

In anticipation of this international activity to adopt Loran-C as the primary terrestrial radionavigation aid, the Wild Goose Association is conducting its first Convention and Technical Symposium outside of the United States. The venue is to be in the heart of England, close to many of the most historic and beautiful sections of the country.

Because the WGA firmly believes in and supports a mix of aids to radionavigation, and because of the immense interest in global satellite navigation, the theme for the Technical Symposium is "LORAN-C/GPS MIX - Sharing the Success". This is to reflect that the United States now enjoys full coastal and land coverage of Loran-C and that the advantages of combining terrestrial and satellite systems is now a reality. The WGA wants to share the success of

interoperation of these two systems with others who will soon have this capability.

Having the 1992 Convention in Europe will afford the opportunity to disseminate information. To this end, several tutorials covering Loran-C basics are to be held. In addition, Navtech Seminars Inc., well known for their excellent GPS tutorials, will be holding a full, one-day Loran-C/GPS seminar on the first day of the program.

The fact that in 1992 the countries of Europe will be moving closer to a cooperative union was not overlooked either. Loran-C in Western Europe will surely move eastward to couple with Chayka in the emerging Commonwealth of Independent States.

With these broad horizons you are invited to submit an abstract for a paper that falls within the subject matter of the various sessions. These are exciting and challenging times for global radionavigation; we would, therefore, like to see a high percentage of papers from the international community.

CONFERENCE COORDINATORS

General Chairman, John Beukers

Co-Chairman, Mike Moroney

Technical Program Chairman, John D. Illgen

Technical Co-Chairman, North America, Frank Cassidy

Technical Co-Chairman, Europe, Dr. David Last

Technical Session Coordinator, Carolyn McDonald

Board of Directors

Robert W. Lilley..... President
David C. Scull Vice President
Walter N. Dean Secretary
Carl S. Andren..... Treasurer
James F. Culbertson Past President
James O. Alexander
David H. Amos
John M. Beukers
Frank S. Cassidy
Laura G. Charron
Kjell O. Enerstad
Bruce E. Hensel
John D. Illgen
Henry E. Marx
Mark P. Morgenthaler
Maurice J. Moroney
William L. Polhemus

COPY

Wild Goose Association



*The International Loran
Radionavigation Forum*

March 17, 1992

Mr. Phil Boyer, President
AOPA
421 Aviation Way
Frederick, MD 21701

Dear Phil:

You may already be aware that the 1992 Wild Goose Association's Convention and Technical Symposium is to be held in Birmingham England. This is the first time that the Association has ventured outside of the United States and we believe for good reason. The handing over of the Loran-C transmitting stations to host countries has created a great deal of international interest in Loran and has stimulated debate, sometimes heated, over the future of global radionavigation systems. We find that there is much confusion and misinformation relating to GPS and Loran-C in Europe and for this reason we have opened up our technical sessions to include GPS and preceded the convention with a Navtech tutorial on both Loran-C and GPS.

We have found that AOPA's participation has significantly enhanced past WGA conventions and will be particularly valuable to this international event. There will be panel discussions in which we anticipate that European views on terrestrial and satellite navigation systems will be heard and debated with U.S. positions and experience.

We sincerely hope that you will put this event on your calendar for attendance or, if this date conflicts with your busy schedule, you will make sure that AOPA is represented. We value AOPA views and contributions.

Please call me if you would like to receive further information on the program and other arrangements that are being made. I look forward to personally welcoming you or your representative at our Birmingham venue.

Sincerely,

Robert W. Lilley
President

xc: Walter Dean, WGA Secretary

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



THE INSTITUTE OF NAVIGATION

Mr. Richard L. Greenspan, President
1026 16th Street, N.W., Suite 104, Washington, D.C. 20036
Telephone (202) 783-4121 Fax (202) 347-4698

March 13, 1992

Mr. John Beukers
5080-106 Harmony Circle
Vero Beach, FL 32967

Dear Mr. Beukers:

Enclosed you will find the ION's exhibitor mailing list as you had requested. This is being provided to the Wild Goose Association in a spirit of cooperation in hopes that the Wild Goose would reciprocate should the need arise.

Please note that this list is for one time use only and the reproduction or duplication of this list is strictly prohibited.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lisa L. Beaty".

Lisa L. Beaty
Director of Operations

cc: David C. Scull, ION Executive Director

*Keep
Com + Bob Miller*

Board of Directors

Robert W. Lilley..... President
David C. Scull Vice President
Walter N. Dean Secretary
Carl S. Andren Treasurer
James F. Culbertson Past President
James O. Alexander
David H. Amos
John M. Beukers
Frank S. Cassidy
Laura G. Charron
Kjell O. Enerstad
Bruce E. Hensel
John D. Illgen
Henry E. Marx
Mark P. Morgenthaler
Maurice J. Moroney
William L. Polhemus

COPY

Wild Goose Association



*The International Loran
Radionavigation Forum*

March 17, 1992

Mr. Richard L. Greenspan, President
The Institute of Navigation
1026 16th Street, N.W., Suite 104
Washington, D.C. 20036

Dear Mr. Greenspan:

Our 1992 Convention chairman, John Beukers has kept me apprised of the reluctance of the ION to release an ION mailing list of exhibitors at the GPS section meetings and was happy to inform me that the problem has now been resolved.

I thought it appropriate to drop you a line to say that we appreciate this gesture and offer reciprocal cooperation as has been our past and consistent policy towards the ION. As you know, many of the WGA membership are ION members and visa versa. We do not see the ION as a competitor; to the contrary, we regard the ION as a sister organization in much the same manner we do the International Omega Association. Our members are active supporters at many of the technical meetings as I am sure you are aware.

The WGA is an advocacy group that is able to express the opinions of its membership in a manner that is not permitted by the ION charter. In this way, the WGA fills a useful and important political and technical void in the radionavigation discipline.

Let's keep in touch to ensure our continued cooperative support, especially at this time of unprecedented interest in global terrestrial and satellite radionavigation.

Sincerely,

Robert W. Lilley
President

cc: Walter Dean, WGA Secretary

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

U.S. Department
of Transportation

**United States
Coast Guard**



Commandant
U.S. Coast Guard

*for W. Dean
for file
file 1011300*

2100 Second Street S.W.
Washington, DC 20593-0001
Staff Symbol: **G-NRN**
Phone: **(202) 267-0990**

1650
Ser: 92/38
FEB 13 1992

Dr. Robert Lilley
Wild Goose Association
Ohio University
College of Engineering
Athens, OH 45701

Dear Bob:

Thank you and please thank the other members of the Wild Goose Association who provided comments to Mr. Dan Maxim during his preparation of an updated Loran-C User Handbook. The combined efforts of the Wild Goose volunteers in conjunction with Mr. Maxim's extraordinary efforts in drafting the "Handbook" will result in a comprehensive publication. This publication will not only provide the basic information necessary to educate Loran-C users, but will serve as a good reference text for those who wish more in-depth knowledge on Loran-C.

Thank you for your efforts in this endeavor, and for the continuing support of Loran-C by the Wild Goose Association.

Sincerely,

J. F. WESEMAN
Captain, U.S. Coast Guard
Chief, Radionavigation Division
By direction

EDITORIAL

LORAN ON APPROACH

Will the effort to implement loran-based nonprecision instrument approaches follow the same tortuous, politically charged track that has characterized the microwave landing system? Let's hope not. Whereas MLS is of dubious value to general aviation—the cost of dumping ILS equipment and replacing it with MLS can't be justified on the basis of increased capability—loran approaches offer clear benefits. Chief among them is the prospect of issuing published approaches to hundreds of airports that now are VFR-only or have difficult or marginally useful nonprecision approaches because of the location of approach navoids.

The advocates of loran IFR approaches—state aeronautical agencies working through the National Association of State Aviation Officials, pilots as represented by AOPA and other user groups and associations, loran receiver manufacturers, and, most importantly, the FAA—have a six-year investment in meetings, technical papers, and research and development aimed at seeing loran approaches implemented. But recently, the effort appears to have hit a snag. Bendix/King, which makes the sophisticated and popular KLN 88 panel-mount loran, has waved a red flag.

Bendix/King has aggressively pursued certification of the KLN 88 for IFR approach use (the unit already is approved for enroute and terminal IFR operations). But after extensive flight tests and analysis, the company has reigned in its support of the certification program because of perceived shortcomings in the loran system. Bendix/King believes that loran signal availability is not reliable for approach use, that loran approach charts are inadequate, and that pilot work load during a loran approach is too high.

The company says it recognizes that the FAA is addressing the issues of charting and pilot work load and that those problems can be fixed. The show-stopper, in Bendix/King's view, is the loran signal itself: It may not be there when you need it most. Transmitter station outages and interfer-

ence from thunderstorms, precipitation static, and other sources of high ambient electrical noise can cause a loran receiver to flag. In that case, a pilot would have to dead reckon on the approach while waiting for the loran to reacquire the signal, and a loran typically takes one to two minutes to reacquire.

That scenario indicates that loran simply does not ensure an acceptable



BY MARK R. TWOMBLY

level of safety for approach use, Bendix/King argues. The company says it is pursuing technical solutions to signal problems, but it has made it clear that it will maintain a curmudgeonly attitude toward the loran approach certification effort until the issues it has raised are resolved.

Bendix/King is something of a lone dissenter among the parties involved in the certification effort. The company aired its concerns at a loran certification conference last October. Other avionics manufacturers working on loran approach certification who attended the session—Northstar, II Morrow, and Arnav—acknowledge that problems exist, but each believes technological advances will provide the solutions. Significantly, FAA staffers involved in the loran approach effort are bullish about the prospects

for overcoming technical challenges.

At that meeting, the FAA mapped out a four-pronged plan for researching certification problems. First, the FAA will fund an effort to determine how often momentary lapses in loran signal transmissions occur. A tougher challenge will be tracking—and reducing—signal outages due to precipitation static and electrical discharges from lightning.

Second, the FAA will work with the U.S. Coast Guard, which operates and maintains loran transmitting stations in this country, to determine how to reduce signal outages and what that might cost. The Coast Guard calculates that 7,000 outages of any type can be expected in one year. But that seemingly poor record includes very brief lapses in the signal that would not affect IFR approach guidance. The transmitter performance record should improve by 1995 when the last of six tube-type loran station transmitters will be replaced by solid-state equipment.

Third, the specifications governing IFR loran receivers will be examined for possible upgrade. One potential solution to loss of signal and flagging of the loran indicator is to allow a multichain or cross-chain receiver to also track stations outside the primary triad being used for the approach and provide for switching to enroute mode for guidance through a missed approach. Finally, the FAA will develop and provide loran training programs to pilots and FAA personnel.

No one thought the road to implementing loran IFR nonprecision approaches was going to be short, straight, and smooth. The FAA was a reluctant partner initially but now is showing more enthusiasm. Bendix/King has raised valid issues—certainly pilots should expect that a loran approach will be as safe and reliable as any other type of instrument approach. But too much work has been done and too much progress made toward extending the usefulness of general aviation airports and aircraft for the whole effort to now shift to idle or even die. □

Board of Directors

Robert W. Lilley..... President
David C. Scull Vice President
Walter N. Dean Secretary
Carl S. Andren Treasurer
James F. Culbertson Past President
James O. Alexander
David H. Amos
John M. Beukers
Frank S. Cassidy
Laura G. Charron
Kjell O. Enerstad
Bruce E. Hensel
John D. Illgen
Henry E. Marx
Mark P. Morgenthaler
Maurice J. Moroney
William L. Polhemus

FILE

Wild Goose Association



*The International Loran
Radionavigation Forum*

February 14, 1992

Mr. Elijah (Zeke) Jackson, President
NAVCOM, Inc.
7203 Gateway Court
Bldg. 7251
Manassas, VA 22110

Dear Zeke:

By now, you know that the Wild Goose Association has decided to relocate its administrative operations center. On behalf of the Association, I take this opportunity to thank you and NAVCOM for hosting this activity.

We appreciate your willingness to provide operational and storage space for the Association and to permit Dave Scull to spend some time keeping the WGA running. These contributions were most welcome at a time when we were trying to adjust to John and Marilyn Beukers' withdrawal from WGA's everyday business.

I hope to have the relocation completed prior to March 1, 1992. Please let me know if any questions or problems arise. Thanks again for your help.

Sincerely,

Robert W. Lilley
President
(614) 593-1514

RWL:skc
ZJ0210

xc. WGA Secretary

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