

Board of Directors

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

Wild Goose Association



The International Loran  
Radionavigation Forum

Minutes of the 98th Meeting of the Board of Directors September 30,  
1991, Williamsburg, VA.

1. Call to Order

The 98th meeting of the Board of Directors was convened at 4:05 pm,  
in the Fort Magruder Inn, Williamsburg, Virginia, by President  
James Culbertson.

2. Attendance, Proxies and Statement of Quorum

The following Board members were in attendance:

Jim Culbertson, President  
Dave Scull, Vice President  
Carl Andren, Treasurer  
Walt Dean, Secretary  
Dave Amos  
Kjell Enerstadt  
Bruce Hensel  
Bob Lilley  
Henry Marx  
Ed McGann  
Mark Morgenthaler  
Mike Moroney  
Jim Van Etten

Also attending:

Dave Olsen  
Zeke Jackson  
Bob Frank  
Frank Cassidy  
Bill Mooney

The secretary reported that the number of Directors present  
constituted a quorum, and equaled the two-thirds required for  
ratification of amendments to the By-Laws.

The president stated that an agenda for the meeting had been distributed and would be followed.

3. Adoption of Minutes

Minutes of the 96th meeting of the Board of Directors were accepted. Acceptance moved by Andren, seconded by Marx.

Minutes of the 97th meeting of the Board of Directors were accepted. Acceptance moved by Andren, seconded by Van Etten.

4. Secretary's Report

The Secretary reported that the paid membership is now 459, but that mailings are also sent to 181 one year in arrears, and 92 two years in arrears.

5. Treasurer's Report

Carl Andren stated that he had prepared some viewgraphs for the general meeting, but had <sup>no</sup> on formal report. A copy of the balance sheet and ledger were made available, and taken by the Secretary. Acceptance was moved by Marx, seconded by Morgenthaler.

6. Executive Committee Report

The Executive Committee Report was presented by Jim Culbertson. A written copy was circulated to Board members prior to the meeting.

Dave Scull reported that a letter had been sent to the Coast Guard regarding the shutdown of the CENPAC loran chain.

Acceptance of the XCOM report was moved by Andren, seconded by Van Etten.

7. Standing Committee Reports

**Audit**

Andren reported that the audit was not yet done, but would be done in time for the next BOD meeting on Thursday.

**Awards**

Bob Frank reported for the last time as awards chairman, having announced his resignation from that position. He discussed the Student Paper award, which he felt should be reserved for an undergraduate (not a doctoral candidate). He questioned whether an honorarium should be considered.

The Medal of Merit this year goes to Jesse Pipkin, and the paper award to Martin Beckman. Dave Scull was selected for the President's Award, and service awards go to Jim Alexander, Bob Miller and Larry Cortland for their work on the 1990 Convention.

Jim Culbertson was given a standing ovation by the board in addition to a service award for his efforts as President for the past two years.

Bob suggested that more publicity be given to the awards, and that an awards notebook be compiled to record all the awards given over the years.

### Constitution

Copy of the Constitution Committee report was distributed to all directors prior to the meeting. The Life Membership amendment was approved, and the change in the XCOM to include the immediate past President was also approved by the membership.

### Elections

Copy of the Nominations and Elections Committee report was distributed to all directors prior to the meeting. Bob Lilley has been elected President. Directors elected are Dave Amos, Laura Charron, Walt Dean and Dave Scull. Frank Cassidy will occupy Bob Lilley's place on the board.

### Conventions

Andren reported that all finances had been cleared from the 1990 convention, and that the book is now closed on this.

Jackson reported that attendance at the 1991 convention was approximately 100, that the Navtech symposium was well attended, and that the Russian delegation had not showed up. A financial success is expected.

John Beukers was not present to report on plans for the 1992 convention. Kjell Enerstadt reported that there will be a meeting 31 October of the European loran group to determine if they will go ahead with loran without Great Britain. If the decision is negative, this could affect the desirability of holding the 1992 WGA convention in England. It was suggested that a backup plan be produced. Mark Morgenthaler accepted the chairmanship of the 1993 convention, to be held in the San Francisco Bay area, with the possibility that it might be moved up to 1992 if England turned out to be undesirable.

## Journal

No report.

## Newsletter

The report on progress of the Goose Gazette, submitted by Bob Lilley, was included in mailing to directors prior to the meeting. President-elect Lilley is looking for a new editor for the newsletter.

## Special Committee Reports

### Government Liaison

Moroney reported that, as a result of problems in certifying the Bendix-King KLN-88 for approaches, there has developed in the FAA some arguments that Loran-C is not a viable system for the national airspace. A meeting is scheduled in Washington on October 16 to further discuss this problem, and it appears urgent that supporters of Loran come prepared to defend the system.

### Users Liaison

Bruce Hensel's report on activities of the Users Liaison Committee was provided to directors prior to the meeting.

### IALA Liaison

Kjell reported that IALA had finally approved Loran-C as an acceptable radionavigation system.

### IOA Liaison

Olsen reported the IOA will hold its 1992 meeting in the Netherlands. They are looking at possibilities of integrating with another society (WGA?).

### FRP Review

The current deadline for comments for the 1992 issue is February 7, 1992. There will be a DOT Users Conference in Alexandria, VA on November 19 and 20, with an additional Aviation Users session on November 21, at the Embassy Suites Hotel. An additional West Coast Conference will be held on December 5, in Seattle, at the Sheraton Hotel and Towers. Carl Andren was appointed delegate to the Alexandria conference and Walt Dean was appointed delegate to the Seattle conference.

9. Old Business

Mid-Continent Dedication

Attendance at El Paso May 14-15 was disappointing. John Beukers' report on the event is attached.

WGA Computer Systems

Dave Scull has spend considerable time getting the system, now located at NavCom, up and running. He has hired part-time help to perform routine tasks, but still has to spend too much time on it himself. Suggestions were made that a paid position is desirable to maintain and operate the system.

Reprinting of Constitution and By-Laws

Dave Scull has had the Constitution and By-Laws reprinted, and distributed copies at the meeting. He requested that any corrections found to be necessary be sent to him as soon as possible. There was discussion as to how to implement the new life member "rule of 80". It was decided that it should be up to the individual member to determine his eligibility and apply.

10. New Business

European Loran-C Policy Group

Kjell Enerstadt reported that the British decision to go with Decca instead of Loran-C has definitely changed the loran climate in Europe. A meeting of the Policy Group is scheduled for 31 October, at which time the future direction of the loran program may be determined.

Loran Charts

Bill Mooney raised the problem that marine charts with loran information on them do not provide sufficient information. Specifically, the proper secondaries to use in a given area. He suggested that this information be included on the charts. He also criticized some of the Coast Guard's special charts for not giving the correct secondary selection information, particularly in the Florida area. He also suggested a WGA Speakers Bureau, with experts in various aspects of loran available to make presentations at gatherings of user groups.

11. Next Meeting


The date of the next meeting was set for October 3, 1991, at 7:00 am, at the same location.

12. Adjournment

The meeting was adjourned at 6:38 pm.

# WILD GOOSE ASSOCIATION

## MEMORANDUM

**Date:** August 28, 1991  
**From:** Jim Culbertson, President   
**To:** All Directors & Committee Chairmen  
**Subj:** Submission of Reports and Agenda items for 98th Board meeting

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Please submit all Officer and Committee Chairmen reports to reach the Secretary, care of Dave Scull at NavCom Systems, **not later than 16 September 1991**. Also submit any comments or new business items for the agenda at the same time.

Wild Goose Association  
c/o NavCom Systems, Inc.  
7203 Gateway Court  
Manassas, VA. 22110  
Phone: (703) 361-0884

We have a LOT of business to cover during the Board meeting that begins at **4:00 PM (1600) on Monday, 30 September 1991**. Each Committee Chairman should be heard from and we have to review certain annual information which will be brought before the General Meeting of the membership on Wednesday, 2 October 1991 (0815).

There have not been very many reports submitted for the previous Board meetings and I appeal to you all to submit something that summarizes the activities of your committees this year.

Also included with this memo is a draft agenda for the General Meeting. There is less than one hour reserved for this meeting and I believe we should have time allocated for questions and responses from the membership. We are limited, therefore, as to how much we can present. If any Director feels there is something we have missed, that should be presented, please include this with your comments.

Dave Scull will duplicate reports received and will mail a package to each Director by 20 September 1991. Any Director who misses this mailing due to travel, etc., should pick up a set from Dave Scull upon arrival in Williamsburg. Each Director should read the reports before the Board meeting as we will not be taking Board time to review them - only to approve and discuss as appropriate. Please bring your copies of the reports to the Board meeting - only limited copies will be available and they will not be mailed with the Minutes of the meeting.

Dave Scull is very busy handling most of the arrangements for the upcoming Symposium, so I request that you please submit your reports in a timely manner. Dave will not have the time to phone around asking for them.

Encl: Agenda for 98th Board of Directors meeting  
Agenda for the General Membership Meeting

# Wild Goose Association

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98th Meeting of the Board of Directors  
September 30, 1991 - Williamsburg, VA

## Agenda

Date: Monday, 30th September 1991  
Time: 4:00 PM (1600)  
Location: Fort Magruder Inn  
Williamsburg, VA  
Location to be announced.

1. ✓ Call to Order. Culbertson
2. ✓ Attendance, proxies and statement of quorum Dean
3. ✓ Adoption of Minutes for the 96th Board meeting Board  
✓ Adoption of Minutes for the 97th Board meeting Board
- ✓4. Secretary's Report Dean
- ✓5. Treasurer's Report Andren
- ✓6. Executive Committee Report Culbertson
- ✓7. Operations manager's report Scull
8. Standing Committee Reports:
  - Audit *for Thurs AM* ?
  - Awards *Frank*
  - ✓ Consitution VanEtten
  - Conventions:
    - find* 1990 Alexander
    - 1991 Jackson
    - 1992 Beukers
    - 1993 *used Court?* ?
  - Historical Dean
  - Journal Beukers
  - ✓ Loran Technologies/Applications Amos
  - ✓ Membership Dean
  - Newsletter Lilley

## Nominations and Elections

VanEtten

### 9. Special Committee Reports:

- ✓ Government Liaison
- ✓ International Liaison
- ✓ IALA Liaison
- ✓ User Liaison
- ✓ Loran Businesses Liaison
- ✓ RTCA Liaison
- ✓ IOA Liaison — *next meet Netherlands*
- ✓ WARC Liaison
- ✓ FRP Review *needs work →*

Moroney  
McGann  
Enerstad  
Hensel  
Morgenthaler  
Dean  
Olsen  
Arnstein  
Serrell

*Comment deadline Feb 7.*

### 10. Old Business:

- a. Tax information from 1990 Convention
- b. Director's Newsletter
- c. Reprinting of Const. & By-Laws

Andren  
Beukers  
Scull

### 11. Next meeting place and time

Lilley

### 12. Adjourn

*Thurs 0900*

*Based in San  
should see it. —*

*USCG User Man Review  
Pothemus - Canadian Critique  
Proposed Loran National Standard*

# WILD GOOSE ASSOCIATION

## General Membership Meeting

0815 Wednesday, October 2, 1991

### AGENDA

CALL TO ORDER & WELCOME Culbertson

SECRETARY'S REPORT Dean

TREASURER'S REPORT Andren

MEMBERSHIP REPORT Dean

PRESIDENT-ELECT REMARKS Lilley

OPEN FORUM - Member comments & questions

ectors

..... President  
..... Vice President  
..... Secretary  
..... Treasurer  
..... Past President  
..... Exec. Administrator  
J. Alexander  
J. H. Amos  
J. O. Enerstad  
Bruce E. Hensel  
Robert W. Lilley  
Henry E. Marx  
Edward L. McGann  
Mark P. Morgenthauer  
Maurice J. Moroney  
William L. Polhemus  
James P. Van Etten

# Wild Goose Association



*The International Loran  
Radionavigation Forum*

## Executive Committee Report 30 September 1991

Executive Committee activity was limited during this period. Several letters were answered to wit:

Response to Mr. Denisov, Soviet Interradionavigation Committee with respect to location for 1993 WGA Technical Symposium. Draft was circulated for comment at last Board meeting.

Responded to the U.S. Coast Guard regarding the proposed closing down of the CENPAC Loran-C Chain (Hawaii). Dave Scull has copies for distribution to Board.

Response to Fayez Ibn Ibrahim Badr, PhD, Ports Authority, Kingdom of Saudi Arabia concerning Loran-C in Desert Storm.

Response to Allen P. Villeneuve, Ontario, Canada regarding use of Loran-C in terrestrial applications.

Response to CAPT Bill Brogdon, USCG (ret) on GPS World article that discusses Loran-C.

Response to Aviator, Doru Varian, Bucharest, Romania providing information on WGA and forthcoming Technical Symposium.

Provided guidance to Dave Scull on responding to one user's complaints about Raytheon 580 Loran. Suggested that the material be simply forwarded to appropriate office in Raytheon for their information without WGA making any comments otherwise.

A letter was sent to the U.S. Coast Guard, contracting office (Mr. Manko) taking exception to the omission of Loran-C as one of the possible radio navigation systems

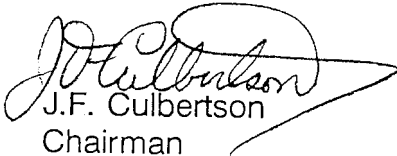
specified in the RFP for the Valdez, Alaska Vessel Traffic System. This letter was supposed to have been circulated to the Board at the last meeting but may not have made it around. It was included in package with Minutes sent following the meeting.

Pursuant to the Minutes of the last (97th) Board meeting, Mr. Andrew Serrell was contacted regarding the FRP Review Committee. He indicated he had looked over the FRP but had received no inputs from his committee members. These members were contacted by the Chairman and their reports were requested ASAP. Mr Serrell has been requested to prepare a draft report for the next Board meeting in Williamsburg. Background material and copies of WGA's previous reports were sent to Mr. Serrell.

The outgoing Chairman of this Committee encourages the Board of Directors to make full use of this committee in conducting the general business of WGA. Although our business operations are again consolidated (at NavCom systems), we cannot expect Dave Scull, or anyone else managing these operations, to function as Secretary and perform all the duties that were done by John and Marilyn Beukers working full time!

Much of work John and Marilyn were doing has to be distributed among the Directors and Committees. This includes responding to correspondence we receive and preparing WGA reports and other documentation.

One way to approach this would be for the Executive Committee to serve as the clearing house for certain activities and be authorized by the Board to direct action to be taken by specific Directors and Committees. This could prevent delays in WGA responding to important issues and save time spent at meetings trying to handle these matters on the spot.




J.F. Culbertson  
Chairman

98th  
BOD

# WILD GOOSE ASSOCIATION

## MEMORANDUM

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**From:** Jim Culbertson, President   
**To:** All Directors & Committee Chairmen  
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Encl: Agenda for 98th Board of Directors meeting  
Agenda for the General Membership Meeting



**LANDFALL  
NAVIGATION**

203/661-3176

FAX: 203/661-9613

354 West Putnam Avenue  
Greenwich, Conn. 06830

10 September 1991

To: Mr, Dave Scull

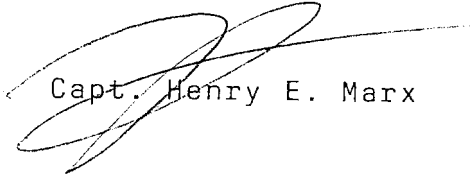
From: Capt. Henry E. Marx

Subject: Director's Report:

The enclosed "Letter to the Editor of the Goose Gazette" summarizes where the Marine User is today. All we are hearing from our customers - both commercial and recreational boaters - is: "How much has the price of GPS receiver come down"?

At the recent Newport Sailboat Show, I did not sell a single Loran C Operating Tape nor L/C Coordinates Directory. In the past both of these have been very big sellers.

I hope that the Board and the Membership will consider actively seeking the GPS Users etc. - for the future continuation of the Association.

  
Capt. Henry E. Marx



**LANDFALL  
NAVIGATION**

203/661-3176

FAX: 203/661-9613

354 West Putnam Avenue  
Greenwich, Conn. 06830

26 JULY 1991

LETTER TO THE EDITOR - The Goose Gazette:

It is becoming very apparent to me that the Marine Users of Electronic Navigation are fast losing interest in Loran C, and are turning to the "new" G.P.S. Receivers.

By their own admission, the Loran C Manufacturers are focusing their R. & D. and Marketing Efforst on the G.P.S. Market and have downgraded their emphasis on their Loran C Products.

What does this mean to our Organization - The Wild Goose Association?

I am concerned that as our Manufacturers and Technical Members are forced by the Market Place to turn to G.P.S., and that as increasing Budget Constraints reduce the role of the U. S. Coast Guard in the W.G.A., that we will decline in membership, Financial Support, and in the Quantity and Quality of the Attendance and Papers at our Annual Symposium.

What can we do about this? I feel that if the W.G.A. were to expand it's horizons and invite into Membership, the G.P.S. Manufacturers (Many of whom are already Members) and the User Community - and become the International Electronic Navigation Forum - that we could infuse new blood, new ideas, and new technology into our Group and once again grow as an Organization.

Because I do not want our Organization to diminish as the International Forum and Watch Dog for the Navigating Community, I want to see it change with the times. Hopefully this letter will provoke a review of the goals and future of the Organization and encourage the membership to GET INVOLVED with the Challenge of the future.

Capt. Henry E. Marx

## ILLGEN SIMULATION TECHNOLOGIES, INC.

Via Telefax: 011-44-(248)361429

September 11, 1991

Dr. David J. Last  
Reader, University of Wales, Bangor  
School of Electrical Engineering Science, Bangor  
Gwynedd LL57 1UT  
Wales

References: (1) European WGA Symposium, Preliminary Programme, prepared by J.D. Illgen, January 8, 1991  
(2) 1992 European WGA Programme Comments, dated January 28, 1992, prepared by Dr. David Last

Dear David:

As promised I have reworked the 1992 WGA Programme. I have made the following changes:

1. Starting each day later (0900 instead of 0800).
2. First day is all tutorial.
3. Keynote speakers will start days 2 and 3. The first speaker of day 1 could also be considered a Keynote Speaker.
4. Regarding your comments on "*Policy and Management Session*," I agree on inviting Press day 2 PM (I also agree strongly that performance and use of the system must be included in this Overview/Management session).
5. I agree on as many European speakers as possible.

I have enclosed a three-day summary chart and revised Reference 1 (Appendix A) reflecting your excellent suggestions.

Please review and fax your changes (no comments this time - just changes) back to me by marking up the enclosures or adding new sheets. I want to have copies of a Preliminary Summary Programme for use at the convention (to disseminate to all members and for use at the Board meeting).

Your must admit I am an American who indeed compromises. Additionally, since I was educated in Denmark and born under the British Empire (Sydney, Australia) you can easily convince me to involve the European community.

On a serious note, I believe it would be timely to solicit a paper from the Russians.

Sincerely,



John D. Illgen  
President/CEO, ISTT

JDI/sg  
Enclosure

cc: Jim Culbertson, WGA President (fax); John Beukers; Dave Scull (fax)

# PRELIMINARY PROGRAMME

## WILD GOOSE ASSOCIATION 1992 EUROPEAN SYMPOSIUM

### THREE-DAY SYMPOSIUM SUMMARY

Tuesday	Wednesday*	Thursday
<p style="text-align: center;"><b>0900-1630, Loran-C Tutorials</b></p> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Transmitting Equipment</li> <li>• Coverage and GDOP</li> <li>• Control Monitor Operation</li> <li>• Luncheon - Guest Speaker</li> <li>• Loran-C Pulse Definition               <ul style="list-style-type: none"> <li>- Receiver Technology</li> <li>- Processing</li> <li>- Displays</li> </ul> </li> <li>• EMC/EMI</li> <li>• Atmospheric Noise</li> <li>• Electromagnetic Propagation and Antenna Considerations</li> <li>• Simulation and Test</li> </ul> <p><i>Reception</i></p> <p>*No Luncheon</p>	<p style="text-align: center;"><b>1300-1700, Policy and Management</b></p> <ul style="list-style-type: none"> <li>• <i>Keynote:</i> Future Air Navigation Systems (FANS) and Eurocontrol</li> <li>• Land Systems</li> <li>• Coastal/Riverway Navigation</li> <li>• Russian Plans</li> <li>• Loran-C Air, Land, and Sea Experience in the USA</li> </ul> <p style="text-align: center;"><i>Reception and Banquet</i></p>	<p style="text-align: center;"><b>0900-1100, Panel Discussion</b></p> <ul style="list-style-type: none"> <li>• Keynote starts panel (~20 minutes) FANS and Eurocontrol Issues</li> </ul> <p style="text-align: center;"><i>Luncheon</i></p> <p style="text-align: center;"><b>1300-1615, Loran-C Interoperability</b></p>

United States/Canadian Technical Chairman: John D. Illgen, Illgen Simulation Technologies • Telephone: (805)968-8661 • Facsimile: (805)968-1311

European Technical Chairman: Dr. David Last, University of Wales • Telephone: (0248)351151 • Facsimile: (0248)361429

## APPENDIX A (Revised September 11, 1991)

## Day 1, Loran Tutorial Sessions - All Day

0900 - 0945 *Loran-C "An Overview"* What is it? (tutorial) This tutorial should be directed at program managers and executives (decision makers)

- Transmitting equipment definitions (some strong emphasis on reliability)
- Control monitor (importance of minimizing temporal variations)
- Coverage (current and future)
- Receiver (processing, displays, and error)
- Loran-C pulse definitions (and measurements)
- Fix rate
- Fix dimension
- Accuracy (normal, repeatable, and differential modes)
- Capacity
- GDOP
- EMC/EMI
- Propagation (temporal and spatial) - compensation techniques (such as differential Loran-C/grid calibration, etc.)
- Noise (atmospheric)
- Cost

Suggested time for the above is 45 minutes (speaker: one British speaker). Part of the above focus should be oriented toward removing Loran-C myths. For instance, "Oh, Loran-C only provides an accuracy within several miles" or "Oh, Loran is that World War II system that's outdated," or "Oh, satellites will resolve all accuracy considerations, be reliable, and cost a lot less than terrestrial systems that have not kept up with high technology, like Loran," or a real good one is "Space is where all the money should go." Yes, these are real quotes. These questions must be addressed at a more general level during the *Policy and Management Session*. I am not publishing the names in order to protect the guilty.

0945-1000 *Break*

1000-1045 *Transmitting Equipment*. This should provide a clear functional description of Loran-C transmitting equipment. Reliability and signal availability should be stressed here. Also, the fact that high technology is reflected in these transmitters should be emphasized. Time it requires to establish a Loran-C chain should be emphasized (i.e., implementation), portability.....Paul Johansen (Megapulse)\*

1045-1130 *Coverage and GDOP (Geometric Dilution of Precision and Accuracy Definitions [normal repeatable and differential modes])*. Describe how coverage is repre-

\* Paul is a U.S. citizen but to my knowledge his company is the only one in the world building Loran-C transmitters.

sented. Show examples that are of interest to land, air, and sea communities. Key equations and relationships should be carefully defined here. .... Van Willigen

1130-1200 *Control Monitor Operation* - Tutorial. Describe placement of monitors (that is, site selection process), receiver requirements and operational, communications, and impact or accuracy. .... Robert Frank

1200-1300 *LUNCHEON* This presentation should focus on the merits of Loran-C in Europe (European speaker preferably someone from France already using Loran-C).

1300-1345 *Loran-C Pulse Definitions/Receiver Technology/Processing/Displays* - Tutorial. Functional description level definition of Loran-C receivers (using advanced digital processing techniques/hard limiter and linear versions). This is a natural place to define Loran-C pulse definitions in depth. Emphasis again should be placed on the high technology incorporated into Loran-C receivers, Loran-C pulse control, and Loran-C receiver sampling characteristics. .... Dr. David Last

1345-1400 *Break*

1400-1430 *Loran-C Simulation* (including interoperability with GPS) .... (I volunteer)

1430-1500 *EMC/EMI* (TBD) definitions, frequency interference (inter and intra), powerline effects, etc. .... European Speaker

1500-1515 *Break*

1515-1545 *Atmospheric Noise* Definitions (median noise values, .... European Speaker impulsive noise, receiver compensation techniques), impact on SNR and accuracy

1545-1630 *Electromagnetic Propagation* (Temporal and Spatial/include ..... European Speaker skywaves and compensation techniques)

**Day 2** *Policy and Management Session* (except for one paper, these  
**PM Session** presentations should all be European speakers)

1300-1345 *Future Air Navigation Systems (FANS)* .... D. Page

1345-1430 *Land Systems* .... TBD

1430-1445 *Break*

1445-1530 *Coastal/Riverway Navigation/Position Location* .... Cdr J.M. Mackey  
(Northern Lighthouse Board, Edinburgh)

1530-1615 *Loran-C Air, Land, and Sea Experience in the USA*. These two speakers (1 USCG and 1 FAA) must carefully coordinate their presentations from the USA. I will act as catalyst for this.

1615-1700 *Russian Plans*

**Day 3**     *Panel Discussions*

0900-1100     *FANS and Eurocontrol Issues* (panel and chair to be determined from European and Russian sector). Technical, management, policy, and funding issues. Impact on air, coastal/sea, and land navigation

1130-1300     *Luncheon* (European speaker who is prepared but can capture essence of morning panel sessions).

*Loran-C and Interoperability Applications Session*

1300-1345     *Airborne Applications*

1345-1430     *Loran-C/GPS Interoperability*

1430-1445     *Break*

1445-1530     *Loran-C/GPS Interoperability Simulation*

1530-1615     *David Last Suggestion*

**ILLGEN SIMULATION TECHNOLOGIES, INC.**

250 Storke Road, Suite #10

Goleta, CA 93117

FAX: 805/968-1311

VERIFY: 805/968-8661

**TO:**

- ① Jim Culbertson - 301/392-9883  
② Dave Scull - 703/361-0535  
③ Gina Blukens - 011-44-45-130729

**FROM:**John Illgen**DATE:**9/11/91**FAX NUMBER:**301/392-9883**NUMBER OF PAGES (INCLUDING LEAD PAGE):**

Transmitting a total of 6 including cover page. If you do not receive all the pages, please contact us immediately. No classified information will be transmitted via telefax.

**MESSAGE:**


## Board of Directors

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

# Wild Goose Association



The International Loran  
Radionavigation Forum

Mr. Walter N. Dean  
 Secretary, WGA  
 8060 Sacajawea Way  
 Wilsonville, OR 97070

To: WGA Secretary, xc. D. Scull

From: R. Lilley, Chairman, Newsletter Committee

Date: September 16, 1991

Subj: Committee Report for 98th Board Meeting,  
 Williamsburg, VA, October, 1991

## 1. Spring Issue, Goose Gazette

This issue went to press somewhat early, to insure that the membership gets the mailing before the convention. A "convention centerfold" was the high point, to try to attract some more attendees.

## 2. Follow-on:

I am convinced that the newsletter, suitably expanded, can be a significant WGA "product," and that it can serve some of the functions we have traditionally ascribed to committees on membership, promotion, user education, liaison, etc. I hope the Board will consider and comment on an expanded newsletter as a group effort, with quarterly columns contributed by members, with central editorship and publishing by our administrative office.

Please consider this item for addition to the Board agenda as new business. Thank you.

Bertson..... President  
 Soull..... Vice President  
 N. Dean..... Secretary  
 Carl S. Andren..... Treasurer  
 John D. Illgen..... Past President  
 John M. Beukers ..Exco. Administrator  
 James O. Alexander  
 David H. Amos  
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 Mark P. Morgenthaler  
 Maurice J. Moroney  
 William L. Polhemus  
 Amos P. Van Etten

# Wild Goose Association



The International Loran  
Radionavigation Forum

July 15, 1991

Mr. Gus Gyllenhoff  
 Communications & Electronics Specialist  
 American Trucking Association  
 2200 Mill Road  
 Alexandria, VA 22314

Dear Gus,

It was a pleasure speaking with you recently about the Wild Goose Association and the radionavigation needs of the trucking industry. I've enclosed a pamphlet that contains information on our annual technical symposium. As I mentioned, the WGA is trying to broaden the representation of LORAN-C users within the organization. We welcome you to attend the upcoming symposium and encourage you to join the WGA as a corporate or individual member.

A second thrust of the WGA's efforts is to increase the awareness of and participation in the federal radionavigation planning process within the user communities. The Federal Radionavigation Plan, revised biennially, is the official source of such policy and planning for the federal government. I've also enclosed a preliminary announcement of conferences that are being scheduled to solicit input for the 1992 plan.

Please feel free to call if you would like additional information on the Wild Goose Association, the Federal Radionavigation Plan, or any related topic. My telephone number is (616) 285-4396. Thanks again for your time.

Sincerely,

*Bruce Hensel*

Bruce Hensel

cc: Bill Tracy, ATA

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

James F. Culbertson ..... President  
David C. Soull ..... Vice President  
Walter N. Dean ..... Secretary  
Carl S. Andren ..... Treasurer  
John D. Illgen ..... Past President  
John M. Beukers .. Exec. Administrator  
James O. Alexander  
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Edward L. McGann  
Mark P. Morgenthaler  
Maurice J. Moroney  
William L. Polhemus  
James P. Van Etten

# Wild Goose Association



*The International Loran  
Radionavigation Forum*

Date: September 16, 1991

From: Bruce Hensel

To: Walt Dean, WGA Secretary

Subj: WGA User Liaison Committee Report

This past quarter I sent letters to representatives of the American Trucking Association, National Private Truck Council, Federal Highway Administration, and IVHS America that discussed the purpose and activities of the WGA and the federal radionavigation planning process. A copy of a representative letter is attached to this report.

The proliferation of LORAN-C for land-mobile applications is uncertain. The land-mobile, LORAN-C user base was adversely affected this quarter by the demise of Geostar. Further, emerging land applications for radionavigation sensors, such as vehicle moving map displays and intelligent vehicle highway systems, favor the use of GPS.

The momentum gained by GPS this past year increases the importance of attracting LORAN-C users to the WGA. Representation of the interests of those users is an important role for the WGA to assume, especially for a mature technology such as LORAN-C. Unfortunately, I did not make any progress this past year in my stated intention to add LORAN-C users to the appropriate WGA database. Movement of the associations' computer hardware to NavCom Systems, Inc. made this difficult; however, this activity should now be pursued with the move complete.

I fully agree with observations and recommendations made in the past by Henry Marx. In order to attract more users to the WGA, the board must consider what value the organization can offer. At a minimum, I believe that more information that is pertinent to the users must be included in the Goose Gazette. Obviously, this will require work to put this together. In addition, Henry's suggestion to publicize the WGA via articles or advertisements should be pursued to reach a broad segment of the user community.

Although I don't have any specific proposals for the board to consider, I'd like to generally discuss these topics as new business at the upcoming board meeting.

Bruce



# MLCPAC LOG

"LOGISTICS IS OUR MIDDLE NAME"

Volume 2, Number 2

Maintenance and Logistics Command Pacific

Alameda, CA

May 1991

## NORTHWEST PACIFIC LORAN-C TRANSMITTERS UPGRADED

— Barbara J. Lawless (tes)

An MLCPAC (t)-led electronics team has successfully completed a difficult and challenging engineering task. Obsolete Loran-C transmitting equipment in the Pacific has been upgraded in a major administrative and logistical effort stretching halfway around the world.

Deteriorating motor-driven power supplies in transmitters on Loran Stations Marcus Island and Iwo Jima, Japan, were replaced with solid state power supplies (SSPS). SSPS will ensure continued high reliability (99.9%) Loran operations. During the upgrades, both Loran stations continued to broadcast signals without interruption.

"Replacing the old power supplies averted a likely catastrophic failure," said Project Manager CWO4 Burt Thomas of the Navigation Systems Section (tes-3). "The SSPS modification came none too soon. The old parts were crumbling in our hands as we removed them."

Thomas coordinated plans among 65 Coast Guard offices in 14 commands, plus two civilian firms. Within MLCPAC, tes, tb, fac, vpl, ESU-Alameda, ESU-Honolulu, and CEU-Honolulu participated in the SSPS Project.

Among those assisting were COMDT (G-TES), PacArea (Ptl), CGD Fourteen (oan), and FESEC. EECEN in Wildwood, N.J., supplied technical manuals. Supply Center Brooklyn contributed SSPS kits and spare parts. FESEC provided an installation crew. CEU Honolulu contracted to strengthen the transmitter building floor at Iwo Jima. Loran Stations Marcus Island and Iwo Jima crews contributed support ranging from physically moving equipment to providing meals at odd hours.

### "No Hardware Stores"

Supplies were critical. "You can't go down to the corner hardware store for parts," said Thomas. Nearly 50,000

pounds of equipment were shipped from East and West coasts to Barbers Point, Hawaii, and Tokyo, Japan. A Coast Guard C-130 ferried supplies from Hawaii to Marcus Island and Iwo Jima. Log flights from Yokota Air Force Base, Japan, delivered other needed materials.

"Precision planning was necessary to be sure that they were all set for the job," said (tes-3) Section Chief LT Dan Larson. "The transmitters had to be gutted. Oodles of wires had to be pulled, rerouted, and checked."

### Three Decades of Loran-C

Air and sea navigators rely upon Loran -- Long Range Navigation -- to determine their location. A Loran-C chain issues a series of precisely timed, low-frequency, high-power radio pulses from a master station and a series of secondary stations.

The Northwest Pacific Loran-C Chain has been in continuous operation since 1963. The U. S. Air Force funded an upgrade of the Loran transmitters at Gesashi, Okinawa, and Hokkaido, Japan, as part of its Commando Lion project in 1979. A Loran station was built at Barrigada, Guam, to replace the one at Yap in 1987.

Meanwhile, the original equipment at Iwo Jima and Marcus continued to suffer from the ravages of time and environment. Electronic technicians spent an inordinate amount of overtime keeping the 28-year-old transmitters on the air.

### Island Workaholics

Last summer Thomas and a fact-finding team visited four Northwest Pacific Loran Stations. They conducted tests and took measurements at Iwo Jima and Marcus, comparing conditions with those at the modern Hokkaido and Gesashi transmitters.

Then in November 1990, Thomas, aided by crew members from FESEC,

LORMONSTA Yokota, a civilian contractor, and station personnel, spent 15 days on Marcus Island installing the first SSPS modification. The crew worked without a day off to upgrade the two Loran-C transmitters. On Thanksgiving, they enjoyed an excellent turkey dinner before returning to work, Thomas noted.

Temperatures often reached 100 degrees inside the transmitter building. To avoid the heat, Thomas and his eight-man, two-woman crew took afternoon breaks and worked at night.

In honor of the first women to work on the transmitters at Marcus, the transmitters were temporarily named "Jacqui" and "Sherri". Said Thomas, "The SSPS crew and I would challenge anyone to try to outwork ET3s Jacqui Neault and Sherri Wray."

The original transmitters were held together with the proverbial bubble gum and bailing wire. "We found one transmitter not long for this world and the other one in only slightly better shape," Thomas said.

In February 1991, Thomas set out for the small volcanic island of Iwo Jima, scene of fierce fighting during World War II. An SSPS crew of eight men worked long hours for 15 days straight at Iwo Jima. Now another Loran Station in the Northwest Pacific sends vastly-improved signals to navigators.

### Kudos

In a hearty "Well done," CAPT James J. Shaw, Commander of Far East Section (FESEC), Yokota Air Base, Japan, commended the SSPS installation team. "There is no doubt that this project ranks among those most difficult and challenging ever attempted within the Loran community," he said.

"I particularly commend CWO Burt Thomas," added CAPT Shaw. "His vision for SSPS and his perseverance to see it come to fruition in NWPAC were cornerstone to this project."

WGA MEMBER

Goose Association  
BALANCE SHEET Sep 30, 1991

ASSETS

CURRENT ASSETS

Operating Account	30,281.98
Money Market	0.00
Convention Temp Funds	0.00
Bank C - Payroll	0.00
Cash: Total	30,281.98
Accounts Receivable	0.00
Advances Receivable	0.00
Inventory	0.00
Office Equipment	1,478.70
<b>TOTAL CURRENT ASSETS</b>	<b>31,760.68</b>

TOTAL ASSETS

31,760.68  
=====

LIABILITIES

CURRENT LIABILITIES

Accounts Payable	0.00
FIT Payable	0.00
SIT Payable	0.00
FICA Payable	0.00
FUTA Payable	0.00
SUTA Payable	0.00
SDI Payable	0.00
Local Tax Payable	0.00
Deduction A Payable	0.00
Deduction B Payable	0.00
Deduction C Payable	0.00
Sales Tax Payable	0.00
<b>TOTAL CURRENT LIABILITIES</b>	<b>0.00</b>

TOTAL LIABILITIES

0.00

EQUITY

EARNINGS

Retained Earnings	26,153.44
Current Earnings	5,607.24
<b>TOTAL EARNINGS</b>	<b>31,760.68</b>

TOTAL EQUITY

31,760.68

LIABILITIES AND EQUITY

31,760.68  
=====

REVENUE

REVENUE	
Dues Renewal	11,848.00
Dues - New Members	3,805.00
Papers	60.00
Bibliographies	32.50
Proceedings	3,314.52
Video Sales	1,105.00
Convention 1989	0.00
Convention 1990	14,227.83
Convention 1991	0.00
Business Cards	0.00
Journal Sales	90.00
Mid-continent Registration	2,080.00
Mid-continent Sponsor	1,500.00
Mid-continent Display Reg.	325.00
Newsletter Ads	212.50
Donations	0.00
Interest Earned	883.33
<b>TOTAL REVENUE</b>	<b>39,483.68</b>
<hr/>	
<b>TOTAL REVENUE</b>	<b>39,483.68</b>

EXPENSE

ADMINISTRATION	
Contract Services	1,287.50
President Expenses	753.68
V P Expenses	0.00
Secretary Expenses	7,210.64
Treasurer Expenses	0.00
Newsletter Expenses	4,264.09
Congressional Expense	0.00
Election Expense	702.68
Membership Expenses	60.00
Awards Expenses	336.88
I A L A Liaison	976.04
Convention Expense	0.00
Journal Expenses	0.00
Proceedings Expense	1,950.00
Freight Expense	549.40
Wages	0.00
FICA Expense	0.00
FUTA Expense	0.00
SUTA Expense	0.00
SDI Expense	0.00
Equipment Expenses	8,189.99
Proceedings Expenses	99.00
Mid-continent Expense	1,505.44
Convention Exp 1989	0.00
Convention Exp 1990	394.40
Convention Exp 1991	4,000.00
Misc	0.00
Postage/Delivery	382.61
Office Supplies	413.80
License/Permits	30.00
Accounting Expense	750.00
Bank Service Charges	20.29
Video Supplies	0.00
Document Expense	0.00
<b>TOTAL ADMINISTRATION</b>	<b>33,876.44</b>

TOTAL EXPENSE

33,876.44

INCOME

5,607.24

=====

REVENUE

REVENUE

Dues Renewal	275.00
Dues - New Members	480.00
Papers	20.00
Bibliographies	0.00
Proceedings	720.00
Video Sales	90.00
Convention 1989	0.00
Convention 1990	0.00
Convention 1991	0.00
Business Cards	0.00
Journal Sales	0.00
Newsletter Ads	0.00
Donations	0.00
Interest Earned	883.33
<b>TOTAL REVENUE</b>	<b>2,468.33</b>

TOTAL REVENUE

2,468.33

EXPENSE

ADMINISTRATION

Contract Services	1,287.50
President Expenses	205.41
V P Expenses	0.00
Secretary Expenses	0.00
Treasurer Expenses	0.00
Newsletter Expenses	1,221.13
Congressional Expense	0.00
Election Expense	0.00
Membership Expenses	0.00
Awards Expenses	0.00
I A L A Liaison	0.00
Convention Expense	0.00
Journal Expenses	0.00
Proceedings Expense	0.00
Freight Expense	0.00
Wages	0.00
FICA Expense	0.00
FUTA Expense	0.00
SUTA Expense	0.00
SDI Expense	0.00
Equipment Expenses	0.00
Proceedings Expenses	0.00
Convention Exp 1989	0.00
Convention Exp 1990	0.00
Convention Exp 1991	0.00
Misc	0.00
Postage/Delivery	0.00
Office Supplies	0.00
License/Permits	0.00
Accounting Expense	0.00
Bank Service Charges	6.21
Video Supplies	0.00
Document Expense	0.00
<b>TOTAL ADMINISTRATION</b>	<b>2,720.25</b>

TOTAL EXPENSE

2,720.25

INCOME

251.92-

=====

House Association  
BALANCE Sep 30, 1991

	debits	credits
	-----	-----
105 Operating Account	30,281.98	-
106 Money Market	0.00	-
108 Cenvention Temp Funds	0.00	-
110 Bank C - Payroll	0.00	-
120 Accounts Receivable	0.00	-
124 Advances Receivable	0.00	-
126 Inventory	0.00	-
130 Office Equipment	1,478.70	-
220 Accounts Payable	-	0.00
231 FIT Payable	-	0.00
232 SIT Payable	-	0.00
233 FICA Payable	-	0.00
234 FUTA Payable	-	0.00
235 SUTA Payable	-	0.00
236 SDI Payable	-	0.00
237 Local Tax Payable	-	0.00
240 Deduction A Payable	-	0.00
242 Deduction B Payable	-	0.00
244 Deduction C Payable	-	0.00
260 Sales Tax Payable	-	0.00
356 Retained Earnings	-	26,153.44
410 Dues Renewal	-	11,848.00
420 Dues - New Members	-	3,805.00
430 Papers	-	60.00
431 Bibliographies	-	32.50
432 Proceedings	-	3,314.52
433 Video Sales	-	1,105.00
440 Convention 1989	-	0.00
441 Convention 1990	-	14,227.83
442 Convention 1991	-	0.00
445 Business Cards	-	0.00
450 Journal Sales	-	90.00
455 Mid-continent Registration	-	2,080.00
456 Mid-continent Sponsor	-	1,500.00
457 Mid-continent Display Reg.	-	325.00
460 Newsletter Ads	-	212.50
480 Donations	-	0.00
490 Interest Earned	-	883.33
501 Contract Services	1,287.50	-
502 President Expenses	753.68	-
503 V P Expenses	0.00	-
504 Secretary Expenses	7,210.64	-
505 Treasuer Expenses	0.00	-
510 Newsletter Expenses	4,264.09	-
511 Congressional Expense	0.00	-
512 Election Expense	702.68	-
513 Membership Expenses	60.00	-
514 Awards Expenses	336.88	-
515 I A L A Liaison	976.04	-
516 Convention Expense	0.00	-
517 Journal Expenses	0.00	-
518 Proceedings Expense	1,950.00	-

se Association  
BALANCE Sep 30, 1991

	debits	credits
520 Freight Expense	549.40	-
530 Wages	0.00	-
531 FICA Expense	0.00	-
532 FUTA Expense	0.00	-
533 SUTA Expense	0.00	-
534 SDI Expense	0.00	-
540 Equipment Expenses	8,189.99	-
550 Proceedings Expenses	99.00	-
555 Mid-continent Expense	1,505.44	-
560 Convention Exp 1989	0.00	-
561 Convention Exp 1990	394.40	-
562 Convention Exp 1991	4,000.00	-
570 Misc	0.00	-
571 Postage/Delivery	382.61	-
572 Office Supplies	413.80	-
573 License/Permits	30.00	-
574 Accounting Expense	750.00	-
575 Bank Service Charges	20.29	-
576 Video Supplies	0.00	-
577 Document Expense	0.00	-
	65,637.12	65,637.12

AGER Oct 1,1990 TO Sep 30,1991

				debits	credits	debit balance	credit balance
				-----	-----	-----	-----
<b>105 Operating Account</b>						24,674.74	-
10-15-90	John M. Beukers	Ck 1316 J1		-	3,300.53	21,374.21	-
10-15-90	John M. Beukers	Ck 1317 J2		-	752.09	20,622.12	-
10-18-90	Postmaster, Bedford Ma 01730	Ck 1318 J3		-	14.00	20,608.12	-
10-18-90	Dues, Proceedings & Papers	Cash J4	455.00	-	-	21,063.12	-
10-18-90	Dues, Proceedings & Papers	Cash J5	610.00	-	-	21,673.12	-
10-25-90	James F. Culbertson	Ck 1319 J6		-	221.08	21,452.04	-
11-12-90	Dues,proceedings,video & Papers	Cash J7	1,084.50	-	-	22,536.54	-
11-12-90	John M. Beukers	Ck 1320 J8		-	461.80	22,074.74	-
11-12-90	The Athens Messenger	Ck 1321 J9		-	475.40	21,599.34	-
12-12-90	Robert L. Frank	Ck1322 J10		-	336.88	21,262.46	-
12-12-90	David Scull	Ck1323 J11		-	2,000.00	19,262.46	-
12-21-90	Dues, Proceedings, Videos & Papers	Cash J12	1,097.50	-	-	20,359.96	-
12-21-90	John M. Beukers	Ck 1324 J13		-	899.17	19,460.79	-
12-21-90	Omni Press	Ck 1325 J14		-	700.00	18,760.79	-
01-07-91	Omni Press	Ck 1326 J15		-	1,250.00	17,510.79	-
01-18-91	John M. Beukers	Ck 1327 J16		-	160.67	17,350.12	-
01-23-91	James F. Culbertson	Ck1328 J17		-	160.67	17,189.45	-
02-01-91	John M. Beukers	Ck 1329 J18		-	7,000.00	10,189.45	-
02-04-91	The Athens Messenger	Ck1330 J19		-	1,180.32	9,009.13	-
02-04-91	Newsletter Ad	Cash J20	212.50	-	-	9,221.63	-
02-04-91	Omni Press	Ck 1331 J21		-	99.00	9,122.63	-
02-05-91	Dues, Proceedings, Videos & Papers	Cash J22	2,928.00	-	-	12,050.63	-
02-05-91	Dues & Proceedings	Cash J23	1,740.00	-	-	13,790.63	-
02-05-91	John M. Beukers	Ck 1332 J24		-	297.11	13,493.52	-
02-06-91	Dues & Videos	Cash J25	686.00	-	-	14,179.52	-
02-11-91	Bank Charge	Bank Ad J26		-	7.08	14,172.44	-
02-12-91	Dues Proceedings & Videos	Cash J27	1,085.00	-	-	15,257.44	-
02-15-91	Robert Gould	Ck1333 J28		-	30.00	15,227.44	-
02-15-91	John M. Beukers	Ck1334 J29		-	606.78	14,620.66	-
02-15-91	Dues, Video & Proceedings	Cash J30	959.52	-	-	15,580.18	-
03-25-91	John M. Beukers	Ck 1335 J31		-	554.16	15,026.02	-
04-05-91	Dues & Proceedings	Cash J32	2,370.00	-	-	17,396.02	-
04-05-91	Dues & Proceedings	Cash J33	260.00	-	-	17,656.02	-
04-05-91	Dues, Proceedings & Video	Cash J34	595.00	-	-	18,251.02	-
04-16-91	James F. Culbertson	Ck 1336 J35		-	166.52	18,084.50	-
04-30-91	The Athens Messenger	Ck 1338 J36		-	668.61	17,415.89	-
04-30-91	Commonwealth Of Massachusetts	Ck 1338 J37		-	15.00	17,400.89	-
04-30-91	Commonwealth Of Massachusetts	Ck 1339 J38		-	15.00	17,385.89	-
04-30-91	Gene Brusin	Ck 1340 J39		-	21.45	17,364.44	-
05-06-91	Dues	Cash J40	1,155.00	-	-	18,519.44	-
05-06-91	Dues,Proceedings & Videos	Cash J41	452.50	-	-	18,971.94	-
05-06-91	IALA Dues	Ck 1341 J42		-	976.04	17,995.90	-
05-14-91	The Athens Messenger	Ck 1342 J43		-	718.63	17,277.27	-
05-14-91	John M. Beukers	Ck 1343 J44		-	270.21	17,007.06	-
05-14-91	United Van Lines	Ck 1344 J45		-	549.40	16,457.66	-
05-14-91	Bank Charge	Bank St J46		-	7.00	16,450.66	-
05-14-91	James P. Van Etten	Ck 1345 J47		-	702.68	15,747.98	-
05-17-91	David C. Scull	Ck 1346 J48		-	95.78	15,652.20	-
05-21-91	Rost Associates	Ck 1347 J49		-	535.46	15,116.74	-
05-21-91	John M. Beukers	Ck 1348 J50		-	969.98	14,146.76	-
05-21-91	Carl Andren	Ck 1349 J51		-	58.00	14,088.76	-
05-21-91	Video	Cash J52	55.00	-	-	14,143.76	-
05-21-91	Convention Acct Closeout	Wire J53	13,727.83	-	-	27,871.59	-

Oct 1,1990 TO Sep 30,1991

			debits	credits	debit balance	credit balance
05-29-91	David C. Scull	Ck 1350 J54	-	2,000.00	25,871.59	-
06-05-91	Mid-continent Dedication	Cash J55	3,905.00	-	29,776.59	-
06-05-91	Dues,proceedings & Videos	Cash J56	982.00	-	30,758.59	-
06-13-91	John M. Beukers	Ck 1351 J57	-	661.64	30,096.95	-
06-13-91	Rost Associates	Ck 1352 J58	-	170.00	29,926.95	-
06-20-91	John M. Beukers	Ck 1353 J59	-	60.00	29,866.95	-
06-21-91	John M. Beukers	Ck 1354 J60	-	1,268.05	28,598.90	-
07-11-91	Linton, Shafer & Company PA	Ck 1355 J61	-	750.00	27,848.90	-
07-11-91	Dues, Proceedings & Videos	Cash J62	2,685.00	-	30,533.90	-
08-05-91	The Athens Messenger	Ck 1356 J63	-	693.89	29,840.01	-
08-05-91	James F. Culbertson	Ck 1357 J64	-	205.41	29,634.60	-
08-05-91	Bank Charge Canadian Checks	Bank J65	-	6.21	29,628.39	-
08-08-91	McCarthy Enterprises, Inc	Ck 1358 J66	-	1,287.50	28,340.89	-
08-23-91	Dues, Proceedings & Videos	Cash J67	770.00	-	29,110.89	-
09-27-91	Dues, Proceedings & Videos	Cash J68	815.00	-	29,925.89	-
09-27-91	The Athens Messenger	Ck 1359 J69	-	527.24	29,398.65	-
09-27-91	Bank Interest FY 89	Bank J70	407.00	-	29,805.65	-
09-27-91	Bank Interest FY90	Bank J71	476.33	-	30,281.98	-
			39,513.68	33,906.44		
106	Money Market				0.00	-
108	Convention Temp Funds				0.00	-
110	Bank C - Payroll				0.00	-
120	Accounts Receivable				0.00	-
124	Advances Receivable				0.00	-
126	Inventory				0.00	-
130	Office Equipment				1,478.70	-
220	Accounts Payable				-	0.00
231	FIT Payable				-	0.00
232	SIT Payable				-	0.00
233	FICA Payable				-	0.00
234	FUTA Payable				-	0.00
235	SUTA Payable				-	0.00
236	SDI Payable				-	0.00
237	Local Tax Payable				-	0.00
240	Deduction A Payable				-	0.00
242	Deduction B Payable				-	0.00
244	Deduction C Payable				-	0.00
260	Sales Tax Payable				-	0.00
356	Retained Earnings				-	26,153.44
410	Dues Renewal				-	0.00
10-18-90	Dues, Proceedings & Papers	Cash J4	-	210.00	-	210.00
10-18-90	Dues, Proceedings & Papers	Cash J5	-	190.00	-	400.00
11-12-90	Dues,proceedings,video & Papers	Cash J7	-	60.00	-	460.00
02-05-91	Dues, Proceedings, Videos & Papers	Cash J22	-	1,808.00	-	2,268.00
02-05-91	Dues & Proceedings	Cash J23	-	1,615.00	-	3,883.00
02-06-91	Dues & Videos	Cash J25	-	555.00	-	4,438.00
02-12-91	Dues Proceedings & Videos	Cash J27	-	965.00	-	5,403.00
02-15-91	Dues, Video & Proceedings	Cash J30	-	190.00	-	5,593.00
04-05-91	Dues & Proceedings	Cash J32	-	2,190.00	-	7,783.00
04-05-91	Dues & Proceedings	Cash J33	-	160.00	-	7,943.00
04-05-91	Dues, Proceedings & Video	Cash J34	-	390.00	-	8,333.00
05-06-91	Dues	Cash J40	-	1,080.00	-	9,413.00
05-06-91	Dues,Proceedings & Videos	Cash J41	-	70.00	-	9,483.00

				debits	credits	debit balance	credit balance
				-----	-----	-----	-----
06-05-91	Dues,proceedings & Videos	Cash	J56	-	565.00	-	10,048.00
07-11-91	Dues, Proceedings & Videos	Cash	J62	-	1,525.00	-	11,573.00
08-23-91	Dues, Proceedings & Videos	Cash	J67	-	270.00	-	11,843.00
09-27-91	Dues, Proceedings & Videos	Cash	J68	-	5.00	-	11,848.00
				-----	-----		
				0.00	11,848.00		
<b>420 Dues - New Members</b>						-	0.00
10-18-90	Dues, Proceedings & Papers	Cash	J4	-	225.00	-	225.00
10-18-90	Dues, Proceedings & Papers	Cash	J5	-	315.00	-	540.00
11-12-90	Dues,proceedings,video & Papers	Cash	J7	-	875.00	-	1,415.00
12-21-90	Dues, Proceedings, Videos & Papers	Cash	J12	-	420.00	-	1,835.00
02-05-91	Dues, Proceedings, Videos & Papers	Cash	J22	-	395.00	-	2,230.00
02-12-91	Dues Proceedings & Videos	Cash	J27	-	50.00	-	2,280.00
04-05-91	Dues, Proceedings & Video	Cash	J34	-	100.00	-	2,380.00
05-06-91	Dues	Cash	J40	-	75.00	-	2,455.00
05-06-91	Dues,Proceedings & Videos	Cash	J41	-	50.00	-	2,505.00
07-11-91	Dues, Proceedings & Videos	Cash	J62	-	820.00	-	3,325.00
08-23-91	Dues, Proceedings & Videos	Cash	J67	-	430.00	-	3,755.00
09-27-91	Dues, Proceedings & Videos	Cash	J68	-	50.00	-	3,805.00
				-----	-----		
				0.00	3,805.00		
<b>430 Papers</b>						-	0.00
10-18-90	Dues, Proceedings & Papers	Cash	J4	-	20.00	-	20.00
11-12-90	Dues,proceedings,video & Papers	Cash	J7	-	10.00	-	30.00
07-11-91	Dues, Proceedings & Videos	Cash	J62	-	10.00	-	40.00
08-23-91	Dues, Proceedings & Videos	Cash	J67	-	20.00	-	60.00
				-----	-----		
				0.00	60.00		
<b>431 Bibliographies</b>						-	0.00
10-18-90	Dues, Proceedings & Papers	Cash	J5	-	10.00	-	10.00
12-21-90	Dues, Proceedings, Videos & Papers	Cash	J12	-	22.50	-	32.50
				-----	-----		
				0.00	32.50		
<b>432 Proceedings</b>						-	0.00
10-18-90	Dues, Proceedings & Papers	Cash	J5	-	95.00	-	95.00
11-12-90	Dues,proceedings,video & Papers	Cash	J7	-	95.00	-	190.00
12-21-90	Dues, Proceedings, Videos & Papers	Cash	J12	-	435.00	-	625.00
02-05-91	Dues, Proceedings, Videos & Papers	Cash	J22	-	205.00	-	830.00
02-05-91	Dues & Proceedings	Cash	J23	-	125.00	-	955.00
02-12-91	Dues Proceedings & Videos	Cash	J27	-	65.00	-	1,020.00
02-15-91	Dues, Video & Proceedings	Cash	J30	-	724.52	-	1,744.52
04-05-91	Dues & Proceedings	Cash	J32	-	180.00	-	1,924.52
04-05-91	Dues & Proceedings	Cash	J33	-	100.00	-	2,024.52
04-05-91	Dues, Proceedings & Video	Cash	J34	-	60.00	-	2,084.52
05-06-91	Dues,Proceedings & Videos	Cash	J41	-	185.00	-	2,269.52
06-05-91	Dues,proceedings & Videos	Cash	J56	-	200.00	-	2,469.52
07-11-91	Dues, Proceedings & Videos	Cash	J62	-	125.00	-	2,594.52
08-23-91	Dues, Proceedings & Videos	Cash	J67	-	50.00	-	2,644.52
09-27-91	Dues, Proceedings & Videos	Cash	J68	-	670.00	-	3,314.52
				-----	-----		
				0.00	3,314.52		
<b>433 Video Sales</b>						-	0.00
11-12-90	Dues,proceedings,video & Papers	Cash	J7	-	44.50	-	44.50
12-21-90	Dues, Proceedings, Videos & Papers	Cash	J12	-	130.00	-	174.50

				debits	credits	debit balance	credit balance
02-05-91	Dues, Proceedings, Videos & Papers	Cash	J22	-	20.00	-	194.50
02-06-91	Dues & Videos	Cash	J25	-	131.00	-	325.50
02-12-91	Dues Proceedings & Videos	Cash	J27	-	5.00	-	330.50
02-15-91	Robert Gould	Ck1333	J28	30.00	-	-	300.50
02-15-91	Dues, Video & Proceedings	Cash	J30	-	45.00	-	345.50
04-05-91	Dues, Proceedings & Video	Cash	J34	-	45.00	-	390.50
05-06-91	Dues, Proceedings & Videos	Cash	J41	-	147.50	-	538.00
05-21-91	Video	Cash	J52	-	55.00	-	593.00
06-05-91	Dues, proceedings & Videos	Cash	J56	-	217.00	-	810.00
07-11-91	Dues, Proceedings & Videos	Cash	J62	-	205.00	-	1,015.00
09-27-91	Dues, Proceedings & Videos	Cash	J68	-	90.00	-	1,105.00
				30.00	1,135.00		
440	Convention 1989					-	0.00
441	Convention 1990					-	0.00
02-05-91	Dues, Proceedings, Videos & Papers	Cash	J22	-	500.00	-	500.00
05-21-91	Convention Acct Closeout	Wire	J53	-	13,727.83	-	14,227.83
				0.00	14,227.83		
442	Convention 1991					-	0.00
445	Business Cards					-	0.00
450	Journal Sales					-	0.00
12-21-90	Dues, Proceedings, Videos & Papers	Cash	J12	-	90.00	-	90.00
				0.00	90.00		
455	Mid-continent Registration					-	0.00
06-05-91	Mid-continent Dedication	Cash	J55	-	2,080.00	-	2,080.00
				0.00	2,080.00		
456	Mid-continent Sponsor					-	0.00
06-05-91	Mid-continent Dedication	Cash	J55	-	1,500.00	-	1,500.00
				0.00	1,500.00		
457	Mid-continent Display Reg.					-	0.00
06-05-91	Mid-continent Dedication	Cash	J55	-	325.00	-	325.00
				0.00	325.00		
460	Newsletter Ads					-	0.00
02-04-91	Newsletter Ad	Cash	J20	-	212.50	-	212.50
				0.00	212.50		
480	Donations					-	0.00
490	Interest Earned					-	0.00
09-27-91	Bank Interest FY 89	Bank	J70	-	407.00	-	407.00
09-27-91	Bank Interest FY90	Bank	J71	-	476.33	-	883.33
				0.00	883.33		
501	Contract Services					0.00	-
08-08-91	McCarthy Enterprises, Inc	Ck 1358	J66	1,287.50	-	1,287.50	-
				1,287.50	0.00		
502	President Expenses					0.00	-
10-25-90	James F. Culbertson	Ck 1319	J6	221.08	-	221.08	-
01-23-91	James F. Culbertson	Ck1328	J17	160.67	-	381.75	-

			debits	credits	debit balance	credit balance
			-----	-----	-----	-----
04-16-91	James F. Culbertson	Ck 1336 J35	166.52	-	548.27	-
08-05-91	James F. Culbertson	Ck 1357 J64	205.41	-	753.68	-
			-----	-----		
			753.68	0.00		
<b>503 V P Expenses</b>					0.00	-
<b>504 Secretary Expenses</b>					0.00	-
10-15-90	John M. Beukers	Ck 1316 J1	3,300.53	-	3,300.53	-
10-15-90	John M. Beukers	Ck 1317 J2	357.69	-	3,658.22	-
11-12-90	John M. Beukers	Ck 1320 J8	461.80	-	4,120.02	-
12-21-90	John M. Beukers	Ck 1324 J13	899.17	-	5,019.19	-
01-18-91	John M. Beukers	Ck 1327 J16	160.67	-	5,179.86	-
02-05-91	John M. Beukers	Ck 1332 J24	297.11	-	5,476.97	-
02-15-91	John M. Beukers	Ck1334 J29	606.78	-	6,083.75	-
03-25-91	John M. Beukers	Ck 1335 J31	554.16	-	6,637.91	-
06-13-91	John M. Beukers	Ck 1351 J57	572.73	-	7,210.64	-
			-----	-----		
			7,210.64	0.00		
<b>505 Treasurer Expenses</b>					0.00	-
<b>510 Newsletter Expenses</b>					0.00	-
11-12-90	The Athens Messenger	Ck 1321 J9	475.40	-	475.40	-
02-04-91	The Athens Messenger	Ck1330 J19	1,180.32	-	1,655.72	-
04-30-91	The Athens Messenger	Ck 1338 J36	668.61	-	2,324.33	-
05-14-91	The Athens Messenger	Ck 1342 J43	718.63	-	3,042.96	-
08-05-91	The Athens Messenger	Ck 1356 J63	693.89	-	3,736.85	-
09-27-91	The Athens Messenger	Ck 1359 J69	527.24	-	4,264.09	-
			-----	-----		
			4,264.09	0.00		
<b>511 Congressional Expense</b>					0.00	-
<b>512 Election Expense</b>					0.00	-
05-14-91	James P. Van Etten	Ck 1345 J47	702.68	-	702.68	-
			-----	-----		
			702.68	0.00		
<b>513 Membership Expenses</b>					0.00	-
06-20-91	John M. Beukers	Ck 1353 J59	60.00	-	60.00	-
			-----	-----		
			60.00	0.00		
<b>514 Awards Expenses</b>					0.00	-
12-12-90	Robert L. Frank	Ck1322 J10	336.88	-	336.88	-
			-----	-----		
			336.88	0.00		
<b>515 I A L A Liaison</b>					0.00	-
05-06-91	IALA Dues	Ck 1341 J42	976.04	-	976.04	-
			-----	-----		
			976.04	0.00		
<b>516 Convention Expense</b>					0.00	-
<b>517 Journal Expenses</b>					0.00	-
<b>518 Proceedings Expense</b>					0.00	-
12-21-90	Omni Press	Ck 1325 J14	700.00	-	700.00	-
01-07-91	Omni Press	Ck 1326 J15	1,250.00	-	1,950.00	-
			-----	-----		
			1,950.00	0.00		
<b>520 Freight Expense</b>					0.00	-
05-14-91	United Van Lines	Ck 1344 J45	549.40	-	549.40	-
			-----	-----		
			549.40	0.00		

			debits	credits	debit balance	credit balance
			-----	-----	-----	-----
530	Wages				0.00	-
531	FICA Expense				0.00	-
532	FUTA Expense				0.00	-
533	SUTA Expense				0.00	-
534	SDI Expense				0.00	-
540	Equipment Expenses				0.00	-
	02-01-91 John M. Beukers	Ck 1329 J18	7,000.00	-	7,000.00	-
	06-21-91 John M. Beukers	Ck 1354 J60	1,189.99	-	8,189.99	-
			-----	-----		
			8,189.99	0.00		
550	Proceedings Expenses				0.00	-
	02-04-91 Omni Press	Ck 1331 J21	99.00	-	99.00	-
			-----	-----		
			99.00	0.00		
555	Mid-continent Expense				0.00	-
	05-21-91 Rost Associates	Ck 1347 J49	535.46	-	535.46	-
	05-21-91 John M. Beukers	Ck 1348 J50	969.98	-	1,505.44	-
			-----	-----		
			1,505.44	0.00		
560	Convention Exp 1989				0.00	-
561	Convention Exp 1990				0.00	-
	10-15-90 John M. Beukers	Ck 1317 J2	394.40	-	394.40	-
			-----	-----		
			394.40	0.00		
562	Convention Exp 1991				0.00	-
	12-12-90 David Scull	Ck1323 J11	2,000.00	-	2,000.00	-
	05-29-91 David C. Scull	Ck 1350 J54	2,000.00	-	4,000.00	-
			-----	-----		
			4,000.00	0.00		
570	Misc				0.00	-
571	Postage/Delivery				0.00	-
	10-18-90 Postmaster, Bedford Ma 01730	Ck 1318 J3	14.00	-	14.00	-
	04-30-91 Gene Brusin	Ck 1340 J39	21.45	-	35.45	-
	05-14-91 John M. Beukers	Ck 1343 J44	200.25	-	235.70	-
	05-21-91 Carl Andren	Ck 1349 J51	58.00	-	293.70	-
	06-13-91 John M. Beukers	Ck 1351 J57	88.91	-	382.61	-
			-----	-----		
			382.61	0.00		
572	Office Supplies				0.00	-
	05-14-91 John M. Beukers	Ck 1343 J44	69.96	-	69.96	-
	05-17-91 David C. Scull	Ck 1346 J48	95.78	-	165.74	-
	06-13-91 Rost Associates	Ck 1352 J58	170.00	-	335.74	-
	06-21-91 John M. Beukers	Ck 1354 J60	78.06	-	413.80	-
			-----	-----		
			413.80	0.00		
573	License/Permits				0.00	-
	04-30-91 Commonwealth Of Massachusetts	Ck 1338 J37	15.00	-	15.00	-
	04-30-91 Commonwealth Of Massachusetts	Ck 1339 J38	15.00	-	30.00	-
			-----	-----		
			30.00	0.00		
574	Accounting Expense				0.00	-
	07-11-91 Linton, Shafer & Company PA	Ck 1355 J61	750.00	-	750.00	-
			-----	-----		
			750.00	0.00		

## Goose Association

LEDGER Oct 1,1990 TO Sep 30,1991

		debits	credits	debit balance	credit balance
575 Bank Service Charges				0.00	-
02-11-91 Bank Charge	Bank Ad J26	7.08	-	7.08	-
05-14-91 Bank Charge	Bank St J46	7.00	-	14.08	-
08-05-91 Bank Charge Canadian Checks	Bank J65	6.21	-	20.29	-
		20.29	0.00		
576 Video Supplies				0.00	-
577 Document Expense				0.00	-
*** End ***					

					debits	credits
					-----	-----
10-15-90 J1	John M. Beukers	Ck 1316	504	Secretary Expenses	3,300.53	-
			105	Operating Account	-	3,300.53
10-15-90 J2	John M. Beukers	Ck 1317	504	Secretary Expenses	357.69	-
			561	Convention Exp 1990	394.40	-
			105	Operating Account	-	752.09
10-18-90 J3	Postmaster, Bedford Ma 01730	Ck 1318	571	Postage/Delivery	14.00	-
			105	Operating Account	-	14.00
10-18-90 J4	Dues, Proceedings & Papers	Cash	410	Dues Renewal	-	210.00
			420	Dues - New Members	-	225.00
			430	Papers	-	20.00
			105	Operating Account	455.00	-
10-18-90 J5	Dues, Proceedings & Papers	Cash	431	Bibliographies	-	10.00
			432	Proceedings	-	95.00
			410	Dues Renewal	-	190.00
			420	Dues - New Members	-	315.00
			105	Operating Account	610.00	-
10-25-90 J6	James F. Culbertson	Ck 1319	502	President Expenses	221.08	-
			105	Operating Account	-	221.08
11-12-90 J7	Dues,proceedings,video & Papers	Cash	410	Dues Renewal	-	60.00
			420	Dues - New Members	-	875.00
			432	Proceedings	-	95.00
			433	Video Sales	-	44.50
			430	Papers	-	10.00
			105	Operating Account	1,084.50	-
11-12-90 J8	John M. Beukers	Ck 1320	504	Secretary Expenses	461.80	-
			105	Operating Account	-	461.80
11-12-90 J9	The Athens Messenger	Ck 1321	510	Newsletter Expenses	475.40	-
			105	Operating Account	-	475.40
12-12-90 J10	Robert L. Frank	Ck1322	514	Awards Expenses	336.88	-
			105	Operating Account	-	336.88
12-12-90 J11	David Scull	Ck1323	562	Convention Exp 1991	2,000.00	-
			105	Operating Account	-	2,000.00
12-21-90 J12	Dues, Proceedings, Videos & Papers	Cash	420	Dues - New Members	-	420.00
			431	Bibliographies	-	22.50
			432	Proceedings	-	435.00
			450	Journal Sales	-	90.00
			433	Video Sales	-	130.00
			105	Operating Account	1,097.50	-
12-21-90 J13	John M. Beukers	Ck 1324	504	Secretary Expenses	899.17	-
			105	Operating Account	-	899.17

					debits	credits
					-----	-----
12-21-90 J14	Omni Press	Ck 1325	518	Proceedings Expense	700.00	-
			105	Operating Account	-	700.00
01-07-91 J15	Omni Press	Ck 1326	518	Proceedings Expense	1,250.00	-
			105	Operating Account	-	1,250.00
01-18-91 J16	John M. Beukers	Ck 1327	504	Secretary Expenses	160.67	-
			105	Operating Account	-	160.67
01-23-91 J17	James F. Culbertson	Ck1328	502	President Expenses	160.67	-
			105	Operating Account	-	160.67
02-01-91 J18	John M. Beukers	Ck 1329	540	Equipment Expenses	7,000.00	-
			105	Operating Account	-	7,000.00
02-04-91 J19	The Athens Messenger	Ck1330	510	Newsletter Expenses	1,180.32	-
			105	Operating Account	-	1,180.32
02-04-91 J20	Newsletter Ad	Cash	460	Newsletter Ads	-	212.50
			105	Operating Account	212.50	-
02-04-91 J21	Omni Press	Ck 1331	550	Proceedings Expenses	99.00	-
			105	Operating Account	-	99.00
02-05-91 J22	Dues, Proceedings, Videos & Papers	Cash	410	Dues Renewal	-	1,808.00
			420	Dues - New Members	-	395.00
			432	Proceedings	-	205.00
			433	Video Sales	-	20.00
			441	Convention 1990	-	500.00
			105	Operating Account	2,928.00	-
02-05-91 J23	Dues & Proceedings	Cash	410	Dues Renewal	-	1,615.00
			432	Proceedings	-	125.00
			105	Operating Account	1,740.00	-
02-05-91 J24	John M. Beukers	Ck 1332	504	Secretary Expenses	297.11	-
			105	Operating Account	-	297.11
02-06-91 J25	Dues & Videos	Cash	410	Dues Renewal	-	555.00
			433	Video Sales	-	131.00
			105	Operating Account	686.00	-
02-11-91 J26	Bank Charge	Bank Ad	575	Bank Service Charges	7.08	-
			105	Operating Account	-	7.08
02-12-91 J27	Dues Proceedings & Videos	Cash	410	Dues Renewal	-	965.00
			420	Dues - New Members	-	50.00
			432	Proceedings	-	65.00
			433	Video Sales	-	5.00
			105	Operating Account	1,085.00	-
02-15-91 J28	Robert Gould	Ck1333	433	Video Sales	30.00	-
			105	Operating Account	-	30.00

				debits	credits
				-----	-----
02-15-91 J29	John M. Beukers	Ck1334 504	Secretary Expenses	606.78	-
		105	Operating Account	-	606.78
02-15-91 J30	Dues, Video & Proceedings	Cash 410	Dues Renewal	-	190.00
		433	Video Sales	-	45.00
		432	Proceedings	-	724.52
		105	Operating Account	959.52	-
03-25-91 J31	John M. Beukers	Ck 1335 504	Secretary Expenses	554.16	-
		105	Operating Account	-	554.16
04-05-91 J32	Dues & Proceedings	Cash 410	Dues Renewal	-	2,190.00
		432	Proceedings	-	180.00
		105	Operating Account	2,370.00	-
04-05-91 J33	Dues & Proceedings	Cash 410	Dues Renewal	-	160.00
		432	Proceedings	-	100.00
		105	Operating Account	260.00	-
04-05-91 J34	Dues, Proceedings & Video	Cash 410	Dues Renewal	-	390.00
		420	Dues - New Members	-	100.00
		432	Proceedings	-	60.00
		433	Video Sales	-	45.00
		105	Operating Account	595.00	-
04-16-91 J35	James F. Culbertson	Ck 1336 502	President Expenses	166.52	-
		105	Operating Account	-	166.52
04-30-91 J36	The Athens Messenger	Ck 1338 510	Newsletter Expenses	668.61	-
		105	Operating Account	-	668.61
04-30-91 J37	Commonwealth Of Massachusetts	Ck 1338 573	License/Permits	15.00	-
		105	Operating Account	-	15.00
04-30-91 J38	Commonwealth Of Massachusetts	Ck 1339 573	License/Permits	15.00	-
		105	Operating Account	-	15.00
04-30-91 J39	Gene Brusin	Ck 1340 571	Postage/Delivery	21.45	-
		105	Operating Account	-	21.45
05-06-91 J40	Dues	Cash 410	Dues Renewal	-	1,080.00
		420	Dues - New Members	-	75.00
		105	Operating Account	1,155.00	-
05-06-91 J41	Dues, Proceedings & Videos	Cash 410	Dues Renewal	-	70.00
		420	Dues - New Members	-	50.00
		432	Proceedings	-	185.00
		433	Video Sales	-	147.50
		105	Operating Account	452.50	-
05-06-91 J42	IALA Dues	Ck 1341 515	I A L A Liaison	976.04	-
		105	Operating Account	-	976.04
05-14-91 J43	The Athens Messenger	Ck 1342 510	Newsletter Expenses	718.63	-

				debits	credits
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		105	Operating Account	-	718.63
05-14-91	J44	John M. Beukers	Ck 1343 571 Postage/Delivery	200.25	-
			572 Office Supplies	69.96	-
			105 Operating Account	-	270.21
05-14-91	J45	United Van Lines	Ck 1344 520 Freight Expense	549.40	-
			105 Operating Account	-	549.40
05-14-91	J46	Bank Charge	Bank St 575 Bank Service Charges	7.00	-
			105 Operating Account	-	7.00
05-14-91	J47	James P. Van Etten	Ck 1345 512 Election Expense	702.68	-
			105 Operating Account	-	702.68
05-17-91	J48	David C. Scull	Ck 1346 572 Office Supplies	95.78	-
			105 Operating Account	-	95.78
05-21-91	J49	Rost Associates	Ck 1347 555 Mid-continent Expense	535.46	-
			105 Operating Account	-	535.46
05-21-91	J50	John M. Beukers	Ck 1348 555 Mid-continent Expense	969.98	-
			105 Operating Account	-	969.98
05-21-91	J51	Carl Andren	Ck 1349 571 Postage/Delivery	58.00	-
			105 Operating Account	-	58.00
05-21-91	J52	Video	Cash 433 Video Sales	-	55.00
			105 Operating Account	55.00	-
05-21-91	J53	Convention Acct Closeout	Wire 441 Convention 1990	-	13,727.83
			105 Operating Account	13,727.83	-
05-29-91	J54	David C. Scull	Ck 1350 562 Convention Exp 1991	2,000.00	-
			105 Operating Account	-	2,000.00
06-05-91	J55	Mid-continent Dedication	Cash 455 Mid-continent Registration	-	2,080.00
			456 Mid-continent Sponsor	-	1,500.00
			457 Mid-continent Display Reg.	-	325.00
			105 Operating Account	3,905.00	-
06-05-91	J56	Dues,proceedings & Videos	Cash 410 Dues Renewal	-	565.00
			432 Proceedings	-	200.00
			433 Video Sales	-	217.00
			105 Operating Account	982.00	-
06-13-91	J57	John M. Beukers	Ck 1351 571 Postage/Delivery	88.91	-
			504 Secretary Expenses	572.73	-
			105 Operating Account	-	661.64
06-13-91	J58	Rost Associates	Ck 1352 572 Office Supplies	170.00	-
			105 Operating Account	-	170.00
06-20-91	J59	John M. Beukers	Ck 1353 513 Membership Expenses	60.00	-

					debits	credits
					-----	-----
		105	Operating Account		-	60.00
06-21-91 J60	John M. Beukers	Ck 1354 540	Equipment Expenses		1,189.99	-
		572	Office Supplies		78.06	-
		105	Operating Account		-	1,268.05
07-11-91 J61	Linton, Shafer & Company PA	Ck 1355 574	Accounting Expense		750.00	-
		105	Operating Account		-	750.00
07-11-91 J62	Dues, Proceedings & Videos	Cash 410	Dues Renewal		-	1,525.00
		420	Dues - New Members		-	820.00
		105	Operating Account		2,685.00	-
		433	Video Sales		-	205.00
		432	Proceedings		-	125.00
		430	Papers		-	10.00
08-05-91 J63	The Athens Messenger	Ck 1356 510	Newsletter Expenses		693.89	-
		105	Operating Account		-	693.89
08-05-91 J64	James F. Culbertson	Ck 1357 502	President Expenses		205.41	-
		105	Operating Account		-	205.41
08-05-91 J65	Bank Charge Canadian Checks	Bank 575	Bank Service Charges		6.21	-
		105	Operating Account		-	6.21
08-08-91 J66	McCarthy Enterprises, Inc	Ck 1358 501	Contract Services		1,287.50	-
		105	Operating Account		-	1,287.50
08-23-91 J67	Dues, Proceedings & Videos	Cash 410	Dues Renewal		-	270.00
		420	Dues - New Members		-	430.00
		432	Proceedings		-	50.00
		430	Papers		-	20.00
		105	Operating Account		770.00	-
09-27-91 J68	Dues, Proceedings & Videos	Cash 410	Dues Renewal		-	5.00
		420	Dues - New Members		-	50.00
		432	Proceedings		-	670.00
		433	Video Sales		-	90.00
		105	Operating Account		815.00	-
09-27-91 J69	The Athens Messenger	Ck 1359 510	Newsletter Expenses		527.24	-
		105	Operating Account		-	527.24
09-27-91 J70	Bank Interest FY 89	Bank 490	Interest Earned		-	407.00
		105	Operating Account		407.00	-
09-27-91 J71	Bank Interest FY90	Bank 490	Interest Earned		-	476.33
		105	Operating Account		476.33	-
					-----	-----
					73,420.12	73,420.12

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COPY

## Wild Goose Association



*The International Loran  
Radionavigation Forum*

2 October 1991

Commandant  
U.S. Coast Guard  
2100 2nd Street S.W.  
Washington, D.C. 20593-0001

Dear Admiral Kime:

As one of my final acts as President of the Wild Goose Association, I wish to report to you the results of our recent Technical Symposium held in Williamsburg, Virginia and express my appreciation for the participation and contributions made by the U.S. Coast Guard.

As our first day's luncheon speaker, Rear Admiral Ecker delivered an excellent presentation on the Office of Navigation's role in national and international radionavigation. Additionally he presented a very informative picture of the Coast Guard's current operations and the outlook for the future. A number of conference attendees remarked on their better understanding and appreciation for the vastness of Coast Guard programs. In my opinion, RADM Ecker delivered one of the best talks I have ever heard by a Coast Guard Flag Officer - and he has been in his present job for less than a month!

Our conference was attended by engineers, scientists, educators, students, and professionals from every segment of the radionavigation community. We had several overseas attendees including Mr. Mathews of the International Association of Lighthouse Authorities (IALA). Unfortunately, the large Soviet delegation expected at the Symposium ran into some difficulties obtaining visas and could not repeat their attendance to deliver two papers or engage in the forum.

Technical papers covered the entire spectrum of radionavigation issues from the applications of Loran-C in marine, aviation and land, through the interoperability of Loran with the Global Positioning System (GPS). The current status of the Northwest European Loran-C expansion was a major topic of discussion as was the impact of a recent turn-around decision by the U.K. Ministry of Transport regarding the UK's intentions to retain the decca system.

I particularly want to commend the Coast Guard for the excellent and invaluable interaction and participation by its Symposium attendees. By having the Loran-C Regional Manager's Conference just before the technical sessions began, Coast Guard personnel directly responsible for the operation and management of Loran-C benefited directly from the technical material presented in WGA Symposium papers and the subsequent discussions they had with the leading Loran scientists and engineers of the world. Having, not too long ago, been in the position of having to keep Coast Guard field personnel abreast of the Loran technology affecting Loran-C operations and maintenance,

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

2 October 1991  
Commandant  
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I believe the attendance of your key personnel at our Symposium has cost effectively served to achieve this purpose.

I need to comment on the impressions that our overseas delegates bring with them regarding the U.S. Coast Guard. Loran-C as you know is undergoing continuing expansion worldwide. Several nations have adopted Loran-C as their national radionavigation system including the Soviets. Overseas attendees to our Symposium have traditionally arrived looking to the Coast Guard for technical guidance and other assistance in planning their own systems.

I do not believe this impression by the foreign loran community will soon fade. As the U.S. and the rest of the world moves toward interoperability between loran and space radionavigation systems, the international community will continue to look to the U.S. Coast Guard for guidance. This year's attendance by the Coast Guard to our Symposium reaffirmed this support. Considerable invaluable information was exchanged and guidance was provided to the international radionavigation community at a time critical to those in Europe and elsewhere striving to realize cost effective and reliable radio navigation.

Please be assured that the participation of the Coast Guard personnel at this year's WGA Technical Symposium had a most positive effect and I personally was proud of their performance and conduct.

I wish you well as you start your second year as Commandant and assure you that the Wild Goose Association will continue to provide the high level of support we have provided in the past.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jim".

J.F. Culbertson  
President

JFC:skc  
USCG1091