

BOARD OF DIRECTORS

W. N. DEAN President
J. F. CULBERTSON Vice President
L. F. FEHLNER Secretary
D. A. CARTER Treasurer
J. ALEXANDER
B. AMBROSENO
C. S. ANDREN
L. D. HIGGINBOTHAM
V. L. JOHNSON
A. W. MARCHAL
E. L. McGANN
W. L. POLHEMUS
W. SCHORR
J. P. Van ETTEN



WILD GOOSE ASSOCIATION

11 December 1985

MINUTES OF THE 70th MEETING OF THE BOARD OF DIRECTORS

The 70th meeting of the Board of Directors was held as scheduled Wednesday, 11 December 1985 in Conference Room 8440, Nassif Building, 400 Seventh Street, SW, Washington, DC.

The following attended:

<u>Directors</u>	<u>Members</u>	<u>Proxies</u>
W. N. Dean, President	L. Cortland	J. P. VanEtten for
L. F. Fehlner, Secretary	D. C. Scull	V. L. Johnson
D. A. Carter, Treasurer		
J. Alexander		
C. S. Andren		
E. L. McGann		
W. L. Polhemus		
W. Schorr		
J. P. VanEtten		

The number of Directors present met the requirement for a quorum. The Agenda is presented at Exhibit 1. Johnson's proxy statement is presented at Exhibit 2.

Item 1 - Call to Order

The meeting was called to order by President Walter Dean at 1311, 11 December 1985.

Item 2 - Secretary's Report

a. There being no corrections to the minutes of previous meeting, the minutes of the 69th meeting of the Board stood approved as written.

b. Membership Status - Letters requesting dues for 1986 were printed shortly after 1 December for mailing to members whose dues are paid through 1983, 1984 or 1985. Approximately 50 members have paid dues for years later than 1985, or are Life Members. Of the individual members who will receive letters, 421 reside in U. S., 23 reside in Canada and 52 overseas.

Thirteen organizations will receive dues notices. The size of the roster, therefore, is about 560. It has been noted that this has been about the size of the WGA for the last few years. Although applications for new membership are received steadily, the rate nearly balances the rate of membership loss.

c. Corporate Report - In accordance with the requirements of the Commonwealth of Massachusetts, the Annual Report was prepared for signature by the President and Directors for 1985. This report was signed during the meeting. (The report and filing fee was mailed 13 December 1985. See Exhibit 3).

Item 3 - Treasurer's Report

The Treasurer's report is presented at Exhibit 4. Alexander moved to accept the report. Andren seconded. Motion carried.

Carter raised the question of whether or not the increasing amount of money in the treasury could be interpreted as profit making, and also what could be done for the membership with the funds available. Discussion left the questions unresolved and no specific action was taken.

Item 4 - Standing Committee

a. Constitution and By Laws - In the absence of Chairman Johnson, McGann reported that some citizens of the People's Republic of China are interested in forming a Chapter and a package of informative material has been sent regarding the organization of chapters.

The status of a potential chapter in Europe was discussed. It appears that some European WGA members are representing themselves as a chapter of the WGA illegally and engaging in activities which under the constitution are reserved to the Board of Directors. The Board requested the President to write to J. H. Boettcher as an initial step in resolving the situation.

Fehlner and Dean reported that a few deficiencies had been noticed in the By-Laws, namely, 1. The fiscal year has not been defined, 2. The terms of office have not been defined and 3. Rules have not been adequately defined for the definition of the terms of office of a person who replaces a sitting officer in the event that the office is vacated. The Board requested that action on this matter be taken by the Constitution and By-Laws Committee.

b. Convention Committee

(1) 1984 - No report was received from the Chairman. Carter reported all bills have been paid.

(2) 1985 - See Illgen's report at Exhibit 5. The Board requested the President to write a letter of commendation to Illgen for his outstanding management of the Convention.

(3) 1986 - In the absence of Chairman Marchal, Dean reported that the Intercontinental Hotel in New Orleans has been reserved for the convention and Mooney has been appointed Technical Chairman.

(4) 1987 - Jimmie Toms has been appointed chairman. The convention will be in the Washington, DC area.

c. Journal Committee

Culbertson has been appointed chairman. There will not be a 1985 Journal.

d. Membership

(1) Fehlner presented a revised Fact Sheet to be considered at the next Board meeting. See Enclosure 6. A suggestion was made that a paragraph on the Annual Convention should be included.

(2) Procedures for re-certifying the WGA logo trademark has not yet been completed.

(3) Carter Will take steps to procure new decals.

(4) Fehlner and Toms will confer to define a package to be sent to members in good standing. e.g. decals, certificate, membership card, etc.

e. Newsletter

Dean indicated quarterly newsletters are planned.

f. Congressional

McGann reported that the Joint House-Senate Committee has in the proposed Federal Budget 4.7 million dollars for the FAA to fund loran coverage of the mid-section of the U. S.

After discussion of current events involving the use of loran for aviation, land and sea uses, and their degree of recognition in the 1984 Federal Radionavigation Plan (FRP), Alexander moved to form an ad-hoc committee to develop WGA comments on the FRP. McGann seconded. Motion carried. Dean appointed VanEtten to chair the committee. Andren, McGann and Dean agreed to be committee members. Scull passed out invitations to open meetings on Government policy and future plans for radionavigation systems. See Exhibit 7. The goal of the committee is to formulate WGA comments for presentation at the Washington, DC meeting to be held 22 May 1986. To meet the schedule, the committee recommended that comments are to be in the hands of Board members by the end of February 1986 for their review and subsequent Board action.

Polhemus noted that Canada is considering plans for expansion of loran coverage of Canada. See Exhibit 8. At this point, McGann established a sub-committee of the Legislative Committee, with Polhemus as chairman, to influence whatever legislative action may be necessary to assure an appropriate and adequate level of radionavigation redundancy.

Item 5 - New Business

a. Interference

Although interference in the loran band is recognized as a serious problem, a study committee was not formed pending the response to a WGA letter to the FCC. Dean will prepare a draft for Board consideration.

b. Publicity

On the recommendation of Alexander, action regarding a Publicity Committee was tabled for consideration at next meeting.

c. Sylt Experiment

Problems related to the dual rating of Sylt were discussed. McGann indicated the problems may be resolved given enough time. No action by the WGA was recommended.

d. Business Cards

The consensus of the Board was to print business cards. Culbertson is to be the coordinator. Each Board member should convey to Culbertson his current pertinent data, e.g. address, phone, etc.

e. Other


By letter to the President and all Directors dated 11 November 1985, Fehlner proposed an agenda item for the 70th meeting to consider the following question, "Should the Board take the initiative to promote, and perhaps support, the development and implementation of an improved loran timing control system?" See Exhibit 9. After a brief discussion, it was proposed that an ad-hoc committee should be formed to consider the ramifications of such a proposal and make recommendation to the Board. Dean appointed Fehlner to be chairman of the committee. McGann suggested that Bob Goddard and Per Enge may be willing to be committee members.

Item 6 - Next Meeting

The next meeting will be held 23 January 1986 in Long Beach, CA.

Item 7 - Adjournment

The meeting was adjourned at 1658, 11 December 1985.


Leo F. Fehlner
Secretary

LFF:jp

Distribution:

All Directors
L. Cortland
D. C. Scull
J. L. Toms

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Exhibit 1



WILD GOOSE ASSOCIATION

November 25, 1985

TO: WGA Directors and Committee Chairmen
FROM: WGA President
SUBJECT: 70th Meeting of the Board of Directors

The next meeting of the Board of Directors will be held Wednesday, December 11, 1985, at 1:00 PM in Conference Room 8440, Nassif Building, 400 Seventh Street, S.W. Washington, DC.

AGENDA

1. Call to Order
2. Secretary's Report
3. Treasurer's Report
4. Standing Committee Reports
 - a. Constitution Johnson
1. European Section status
 - b. Conventions
1. 1984 Convention Report Sartin
2. 1985 Convention Report Illgen
3. 1986 Convention Report Marchal
4. 1987 Convention Report Toms
 - c. Journal Culbertson/Ambroseno
 - d. Membership Toms
 - e. Newsletter Miller
 - f. Congressional McGann
1. Status of 86 and 87 funding for Ioran expansion.

Exhibit 1 cont.

5. New Business

- a. Interference situation - is a study committee needed?
- b. Publicity - public awareness of Ioran in general and the WGA in particular is still very low. Is a Publicity Committee required?
- c. The Sylt experiment is scheduled to be ended soon. Can and should the WGA press the Coast Guard to keep it on?
- d. Do we want business cards for Directors?
- e. Other new business

6. Establish next Meeting date



Exhibit 2

Avionics Division
Defense-Space Group
ITT Corporation

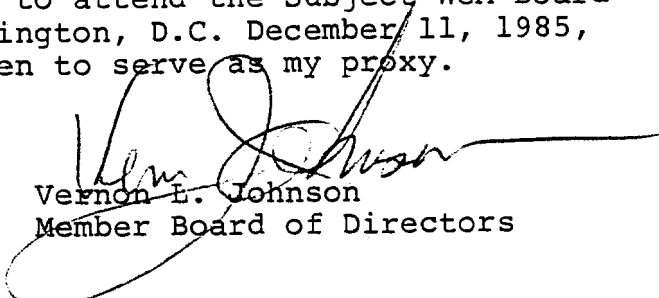
500 Washington Avenue
Nutley, New Jersey 07110
Telephone (201) 284-0123

December 9, 1985

Secretary, Wild Goose Association

Subject: WGA Board of Directors Meeting
12/11/85 Proxy Assignment

In accordance with Article II, Section 4 of the Bylaws and inasmuch as I will be unable to attend the Subject WGA Board of Directors meeting in Washington, D.C. December 11, 1985, I designate Mr. James VanEtten to serve as my proxy.


Vernon L. Johnson
Member Board of Directors

BOARD OF DIRECTORS

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A. W. MARCHAL
J. P. VAN ETTEN
V. I. WEIHE



Exhibit 3

WILD GOOSE ASSOCIATION

13 December 1985

The Commonwealth of Massachusetts
Office of the Secretary of State
One Ashburton Place
Boston MA 02108

Dear Sirs,
Enclosed please find the annual report for 1985 and our
check to cover the filing fee.

Very truly yours,
Leo F. Fehlner
Leo F. Fehlner
Secretary

LFF:1ff

WILD GOOSE ASSOCIATION		1180
PAY TO THE ORDER OF <u>Commonwealth of Massachusetts</u>		12-11-1985 15-7/540 Branch 21
<u>Ten and 00/100</u>		\$ 10 ⁰⁰
		DOLLARS
FOR <u>1985 Corp Charter Fee</u>		<i>Leo F. Fehlner</i>
The National BANK OF WASHINGTON WASHINGTON, D.C.		
⑈001180⑈ ⑆054000072⑆ 3⑈614 12 3⑈		



The Commonwealth of Massachusetts

OFFICE OF THE MASSACHUSETTS SECRETARY OF STATE

MICHAEL JOSEPH CONNOLLY, Secretary

ONE ASHBURTON PLACE, BOSTON, MASS. 02108

FEDERAL IDENTIFICATION

NO. 04-263055

ANNUAL REPORT

For calendar year ending

1985

in compliance with the requirements of Section twenty-six A (26A) of Chapter one hundred and eighty (180) of the General Laws:

1. NAME: Wild Goose Association
2. ADDRESS: P. O. Box 556
(number) (street)
CITY OR TOWN: Bedford, MA 01730
3. DATE OF LAST ANNUAL MEETING: 23 October 1985
4. The names and addresses of the officers indicated below, including all the directors of the corporation, and the date at which the term of office of each expires, are as follows: (TYPE OR PRINT)

NAME OF OFFICE	NAME	RESIDENCE ADDRESSES (City or Town) (Street and Number)	EXPIRATION OF TERM OF OFFICE
President	C.S. Andren	3160 Readsboro Ct. Fairfax VA	1985
Treasurer	D.A. Carter	15922 Paisley Lane Bowie MD	1986
Clerk (or Secretary)	L.F. Fehlner	118 Quaint Acres Dr. Silver Spring MD	1987
	J.O. Alexander	3262 Tiger Tail Drive Los Alamitos CA	1986
	B. Ambroseno	212 Madison Street Dedham MA	1985
	J.F. Culbertson	15781 Exeter St. Chatsworth CA	1986
	W.N. Dean	8060 Sacajawea Way Wilsonville OR	1987
	L.D. Higginbotham	4 Townsend Rd. Acton MA	1986
	J.D. Illgen	7819 Langle Ranch Rd. Goleta CA	1985
Directors (or officers having the powers of Directors)	V.L. Johnson	17 Maple Ave. No. Caldwell NJ	1987
	A.W. Marchal	279 Audubon Blvd. New Orleans LA	1987
	E.L. McGann	18 Wolcott Ave. Andover MA	1985
	J.P. Van Etten	230 Rutgers Place Nutley NJ	1985
	V.I. Weihe	4133 No. 33rd Road Arlington VA	1985

IN WITNESS WHEREOF, we have hereto signed our names under the penalties of perjury, this 11th
day of December in the year nineteen hundred and 85
(Date of signatures must be inserted)

President and Treasurer sign here: President: [Signature]
Treasurer: [Signature]

If officers are also directors, they may also sign here: *

[Signature] Treasurer
[Signature] Secretary

Majority of directors sign here:

[Signature]

If majority of directors is more than five, at least five must sign.

[Signature]
[Signature]
[Signature]
[Signature]

* If officers also sign as directors, their signatures are counted toward the majority requirement.

This report must be filed on or before Nov. 1, with filing fee of \$10.00
Make check payable to Commonwealth of Massachusetts.

BOARD OF DIRECTORS

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- E. L. McGANN *Vice President*
- L. F. FEHLNER *Secretary*
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- J. D. ILLGEN
- V. L. JOHNSON
- A. W. MARCHAL
- J. P. VAN ETTEN
- V. I. WEIHE

Exhibit 4

ORIGINAL



WILD GOOSE ASSOCIATION

TREASURER'S REPORT

December 11, 1985

Balance from October 23, 1985

\$13,788.11

TRANSACTIONS

RECEIPTS

Dues	\$350.00	
Journals/Proceedings Sales	70.00	
1987 3 Convention Return	63.65	
1984 Journal Ads	375.00	
	<u>\$858.65</u>	\$14,646.76

EXPENSES

Printed stationery	\$299.25	
Awards committee expenses	208.35	
	<u>\$507.60</u>	\$14,139.16

WGA account balance as of December 11, 1985

\$14,139.16

Submitted:

Approved: Board of Directors

Date 11 Dec 85

David A. Carter, Treasurer

Leo F. Fehlner, Secretary

*Members
Committee reports.*

SECOND REPORT OF MEMBERSHIP COMMITTEE

October 23, 1985

Since our last Committee Report of April 9, 1985, we have welcomed and sent 1984 Radionavigation Journals to:

- 65 - Regular Members
- 1 - Associate Member
- 1 - Life Member

Since our last Committee Report of April 9, we have sent out the following:

- 11 - Twelfth Proceedings (1983)
- 4 - Eleventh " (1982)
- 2 - Tenth " (1981)
- 2 - Ninth " (1980)
- 3 - Eighth " (1979)

In addition to those sent to new members, we have had requests for and mailed out twenty-one (21) 1984 Radionavigation Journals.

Also, we have yet to mail, as requested, thirty-five (35) Thirteenth Proceedings (1984). A 1985--Fourteenth Proceedings has also been paid for.

WILD GOOSE ASSOCIATION

FOURTEENTH ANNUAL CONVENTION

P.O. DRAWER QQ
SANTA BARBARA, CALIFORNIA 93102



Exhibit 5

26 November 1985

To: Walt Dean and WGA Board of Directors
From: John Illgen
Subject: 1985 Santa Barbara Convention Report for WGA December 1985
Board Meeting

Status

The technical proceedings is now being prepared. Expect to complete and mail out the proceedings in January-February 1986 time frame. Recommend copies only be mailed to attendees. Please provide me information on number of extra copies for sale during the year. I recommend the WGA newsletter editor (R. Miller) advertise availability of the technical proceedings for those who did not attend this years symposium. If the Board agrees with the above, I will coordinate with the newsletter editor and establish logistics for providing technical proceedings to those who did not attend convention.

Present financial status for the 1985 convention shows we are in the black. This will continue if the proceedings is published in accordance with the planned budget (all indications show the technical proceedings will be completed within budget).

Thank you letters have been completed and mailed to all those who worked very hard for the 1985 Convention.

A final financial report for this years convention will be provided after the technical proceedings is complete and all bills have been paid (complete breakdown of finances is expected in January-February 1986). This detailed report will be mailed to the WGA Board of Directors. The West Coast 1985 Convention Account will be closed and all excess funds mailed to Dave Carter, Treasurer.

Flags, poles, WGA signs, etc. are all being mailed to next years Convention Chairman (Bill Marchal) in January-February 1986.

Exhibit 5 cont.

Page 2

As promised I am preparing a Convention handbook. This will be completed during the Christmas/New Years holidays.

If I can answer any questions please call. Have a Merry Christmas and Happy New Year.

Best regards,



John D. Illgen
Convention Chairman
14th Annual WGA Convention

JDI/sg

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A. W. MARCHAL
J. P. VAN ETEN
V. I. WEIHE



Exhibit 6

WILD GOOSE ASSOCIATION

15 May 1985

FACT SHEET

WHAT IS THE WGA?

The Wild Goose Association (WGA) is a professional organization of individuals and organizations having an interest in loran radio-navigation. It is named after the majestic birds that navigate thousands of miles with unerring accuracy. The WGA was organized in 1972 and its membership now includes hundreds of professional engineers, program managers, scientists and operational personnel from all segments of government, industry and the user community throughout the world, working for the advancement of loran.

WHAT ARE THE AIMS & PURPOSES OF THE WGA?

The aims and purposes of the Wild Goose Association are:

- (1) To foster and preserve the art of loran;
- (2) To promote the exchange of ideas and information in the field of loran;
- (3) To recognize the advances and contributions to loran;
- (4) To document the history of loran.

OFFICIAL PUBLICATIONS OF THE WGA

Official publications of the Wild Goose Association include:

- (1) Radio Navigation Journal - The Journal is a compendium of current Association and loran information and related topics. It is intended that the Journal will be updated and published annually, after the annual elections, to provide to the membership an annual report of the significant activities, accomplishments and objectives of the Association. Further, the Journal provides a compendium of loran information and reference data deemed to be of interest to the community at large.

Exhibit 6 cont.

-2-

(2) Newsletter - The Newsletter is intended to provide to the membership of the WGA a means of frequent communications covering information pertinent to the activities of the Association, the Board of Directors, the individual members and the loran community at large. It is intended that the Newsletter will complement the Radio Navigation Journal and be published at quarterly intervals as a minimum and monthly intervals as a maximum.

(3) WGA Proceedings - The Proceedings document the papers presented at the Technical Symposium of the Wild Goose Association's Annual Convention held in October.

MEMBERSHIP

There are five classes of membership: regular, honorary, life, associate and corporate. Any individual or organization that has an interest in the field of loran is eligible for membership. Regular membership is \$15.00 for the 1st year and \$12.00 per year thereafter. Life membership is \$100.00. Associate membership is \$30.00 for the 1st year and \$25.00 per year thereafter. Corporate membership is \$220.00 or \$110.00 for large or small organizations, respectively, for the 1st year and \$200.00 or \$100.00 per year thereafter. Associate members are organizations, such as libraries, which are interested only in receiving the WGA publications. Large corporations may nominate 10 of their employees for regular membership and small corporations (less than 500 employees) may nominate 5. Additional information may be obtained by contacting:

Wild Goose Association
Box 556
Bedford, MA 01730

MARINE AND LAND RADIONAVIGATION SYSTEM USERS

-IMPORTANT ANNOUNCEMENT-

The U.S. Department of Transportation will be holding open meetings for surface marine and land users of U.S. Government provided Radionavigation Systems on Government policy and future plans for these systems. Your input is needed to help formulate these plans.

SYSTEMS COVERED

LORAN-C
OMEGA
TRANSIT
RADIOBEACONS
GPS

SCHEDULE FOR MARINE/LAND RADIONAVIGATION USERS CONFERENCES

SAN FRANCISCO	JAN. 24, 1986 AT SHERATON PALACE HOTEL
NEW ORLEANS	MAR. 26, 1986 AT CROWN PLAZA/HOLIDAY INN HOTEL
CHICAGO	APRIL ¹⁷ 1986 AT MIDLAND HOTEL
WASHINGTON	MAY ²² 1986 AT ROSSLYN WESTPARK HOTEL

MEETINGS TO BE SPONSORED BY

U.S. COAST GUARD
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

TO EXPRESS INTEREST AND TO RECEIVE MORE INFORMATION WRITE TO:

TRANSPORTATION SYSTEMS CENTER
CENTER FOR NAVIGATION DTS-52
ATTENTION: NAV. CONF.
KENDALL SQUARE
CAMBRIDGE, MA 02142

OR CALL:
J.A. LoVecchio
617-494-2131

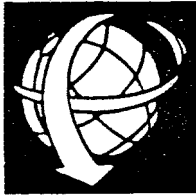


Exhibit 8

December 10, 1985

Memo: WGA, Board of Directors

Subject: LORAN-C in Canada

FOREWORD

In October 1983, the Canadian Air Transportation Administration (CATA) issued the Canadian Airspace Systems Plan (Brown Book). This document outlines the technological planning framework and identifies the "most likely" solutions to air navigation system equipment problems during the next twenty years.

The Canadian Airspace Review (Blue Book) will confirm, modify, or deny the assumptions upon which the proposals in the Brown Book are based. The Review will outline the operational planning framework and may generate changes to the technical planning process. This approach should ensure that the user needs, identified during the Canadian Airspace Review process, are adequately addressed by the solutions proposed in the technical planning framework detailed in the Canadian Airspace Systems Plan. As well, the Review will address many areas (e.g., procedures, separation standards, airspace structure) not covered in the systems plan. Furthermore, the review will ensure, to the highest degree possible, the operational compatibility of Canadian systems with those of the United States and of other states



Page 2

with which Canada has an international interface.

After almost 2 months of continuous session, during which Task Group 6.1.1 received briefings, papers and informal inputs from a broad range of professional groups and individuals, including the Provinces, airlines, FBOs, the Canadian Owners and Pilots Association, etc; the Group (Task Group 6.1.1 of the Canadian Airspace Review Committee of the Canadian Air Transportation Administration (CATA)) has concluded that LORAN-C should be included in the Airspace Systems Plan and has recommended to the Executive Committee (of Transport Canada) the following:

1 - That Transport Canada, in support of GA, Local Service Air Carriers, and helicopter operational requirements, initiate a high priority program which will explore the expanded use of LORAN-C as an Enroute/Terminal area navigation and non-precision approach aid in Canadian airspace.

2 - That Transport Canada proceed immediately to develop a process of approval to enable LORAN-C equipped aircraft to conduct Enroute - IFR operations and non-precision approaches in areas of LORAN-C coverage.



Exhibit 8 cont.

Page 3

3 - That, in conjunction with the User community* a Cost/Benefit analysis be undertaken to determine the viability of expanded LORAN-C coverage for use in Canadian airspace south of 60° North latitude.

(* in this context I believe "user Community" will be taken to include a broad range of Users.....Emergency Medical Services (air and ground), Law Enforcement Agencies, National Resources (Forests) and Environmental Protection, Agriculture, Hazardous Cargo transfer, perhaps rail, AVM and AVL, as well as all modes of Air Transport).

The above message was relayed to W.L.Polhemus, yesterday, 10 December; by Wm Law, Senior Aviation Planner of MTC, Ontario.

Exhibit 9

118 Quaint Acres Drive
Silver Spring, MD 20904
November 11, 1985

Memo

TO: WGA Board of Directors

FROM: L. F. Fehlner

SUBJECT: Loran Timing Control Initiative

This is a proposal for an agenda item for discussion and action at the December 85 Board meeting. The questions on the table will be: Should the Board take the initiative to promote, and perhaps support, the development and implementation of an improved loran timing control system?; and if so, what is the nature of such a system?

To respond affirmatively to the first question, the consensus of the Board must be that the following statements are true:

1. The sequence of loran emissions should be controlled by the most stable and precise timing system available from current technology.
2. The timing control system should not attempt to compensate for variations in times of arrival at a user's antenna caused by natural or man-made effects in the service area.

If the consensus is that the above is true, we can consider the second question: What should it be? To answer this question, I would put on the table the following strawman for discussion:

1. The transmitter timing should be rate controlled as shown in Exhibit 1.
2. Emission times should be fixed in UTC at all stations.
3. The loran epoch should be checked periodically at all stations by a means that is independent of loran.

Such a system relieves the transmitter operations of any responsibility for the vagrancies of mother nature and excuses them from the impossible task of satisfying all users in all places at all and the same times. On the other hand, given stable and precisely timed emissions, such a control system allows the user to achieve as much precision or accuracy as may be necessary to meet his needs in his area(s) of interest.



Leo F. Fehlner

cc:

WGA President
All Directors

PROPOSED TRANSMITTER TIMING CONTROL SYSTEM
Zero-Level Block Diagram

