



THE

GOOSE GAZETTE

volume 1
number 1

published
quarterly

THE WILD GOOSE ASSOCIATION IS LAUNCHED AT FIRST ANNUAL CONVENTION

WILD GOOSE (GEESE?) GATHER

BOSTON, MASS. -- When is more than one goose not referred to as geese? When they are men, not birds, and when they are members of a new organization labeled "The Wild Goose Association".

Now that we have established the grammatical correctness, more than 100 of the Wild Goose Association -- an organization of builders and users of Long-Range Navigation equipment -- gathered December 1 in the Boston area for the first annual meeting.

Named after the majestic birds that navigate thousands of miles with unerring accuracy, the new organization is dedicated to the development of LORAN (Long-Range Navigation) in military and commercial environments.

Chartered in Massachusetts in August, the Wild Goose Association now has more than 200 members nationwide. The recent meeting in Boston was highlighted by exhibits of current and past Loran systems, technical paper presentations, at the L.G. Hanscom Field, and a keynote address by Harry Davis, Deputy Undersecretary of the Air Force, a LORAN pioneer.

President of the Association is Lloyd D. Higginbotham, Technical Director of the Tactical LORAN System Program Office at Hanscom Field's Electronic Systems Division.

Other officers include: Claude Pasquier, Litton Systems, Inc., Vice President; Robert Frank, Sperry Gyroscope Division, Secretary; and Cdr. William Roland, United States Coast Guard Headquarters, Treasurer.

FORMATION OF WGA

The WGA was organized at a meeting held at the U.S.C.G. Officer's Club, Governors Island, New York on 16 May 1972.

This meeting was a result of a letter from Mr. Lloyd D. Higginbotham, Loran Program Office, Electronics Systems Division on 25 April 1972.

In the letter, Mr. Higginbotham expressed his desire to give the Loran community some recognition similar to that given to the people working in the electronic warfare field, where they have for some years enjoyed the camaraderie and fellowship of the "Old Crow" organization. After discussing this subject with many of his colleagues, they all agreed he should do something about it, therefore the letter.

The name Wild Goose was suggested by Mr. Vern Johnson of ITT. He indicated that "Wild Goose" would be an appropriate name because of its precise navigational capabilities.

The purpose of the first meeting or "GAGGLE" (Webster says that when geese gather on water it is called a "gaggle") was to discuss the breadth of expected interest, qualifications for membership, a proposed charter, contribution and bylaws and in general how to get the Wild Goose Association airborne.

Those attending the first meeting were:

Mr. William J. Becker - U.S.A.F.
Mr. Walter N. Dean - Magnavox
Mr. Robert H. Doherty - Institute for Telecommunication Sciences
Mr. Robert L. Frank - Sperry
Mr. William G. Fitzsimmons - ITT
Mr. Joseph A. Parini - Lear Siegler
Mr. Claude J. Pasquier - LITCOM
Commander William F. Roland - U.S.C.G.
Mr. James Van Etten - Avionics Division ITT
Mr. Lloyd D. Higginbotham - U.S.A.F.

The selection of the participants for this meeting was an attempt to get a cross section of industrial and government representation and at the same time give recognition to a few of the old timers. Although there are many other contributors to the technology of Loran, the absence of their names was not intended to slight them.

At the first meeting it was decided that the scope of the proposed organization be limited to the field of LORAN, and that "radio navigation" or even "hyperbolic navigation" would be too large a scope for a new organization.

A preliminary draft of the Constitution and bylaws was presented by Mr. L.D. Higginbotham. Several hours of discussion followed and revisions were made resulting in the present Constitution and bylaws of the association.

After the Charter Membership Certificates were approved, as submitted by Mr. W. Fitzsimmons, Mr. L.D. Higginbotham was selected as first president by acclamation; he then accepted volunteers for the remaining positions. The final list of officers and committee chairmen is as follows:

**A PAPER IS
BORN** FOR STORY SEE PAGE 3

continued on page 3



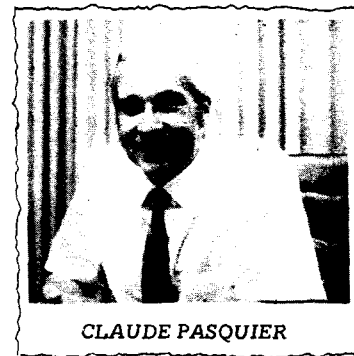
THE GOOSE GAZETTE

PUBLICATION OF THE
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ASSOCIATE EDITOR: Wm. F. Reveille
SECRETARY: Harriet Baldwin
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EDITORIAL



CLAUDE PASQUIER

This issue of the Goose Gazette is devoted to our recent convention and it is most fitting that the first issue of the WGA Newsletter should thus commemorate our most important event to date.

We enjoyed the culmination of the hard and dedicated efforts of our convention chairman, William Fitzsimmons, and of all the members who helped him in his whirlwind preparations for our first convention. We saw for the first time in the history of

Loran, a gathering of equipment which depicted graphically the progress made over the last decade. We listened to an eminent group of speakers who outlined the origins of system, the growing pains of Loran-C, the plans for its expansion and comprehensive descriptions of techniques and equipment for utilization of Loran.

The banquet which followed the technical sessions brought together so many people of like interests and enduring friendships that to many the evening was over in a flash. The high point of the occasion and one which every Wild Goose will remember with a deep sense of fulfillment was Lloyd Higginbotham's proclamation and presentation of honorary membership to Harry Davis, our keynote speaker of the evening.

Harry's message came through loud and clear; "after many years of slow, laborious starts, in competition with other navigation systems looking for research funds, Loran has now achieved global recognition for system accuracy, reliability of operation and instant availability". As Harry said: "With Loran, navigation is not wild, it's right on!"

So we are right on: right on time for the full exploitation that Loran-C now permits in all areas where accurate long range navigation is needed. The Air Force, the Army, the Coast Guard, other Government agencies and many civilian users agree that Loran-C is the way to go for applications too numerous to name. Yet, we are still awaiting the much needed awards which will infuse needed funds into this overpopulated and underfunded portion of our technology.

All of us have seen the proliferation that promises of growing Loran-C business brought on during the last decade. Starting with three major companies and a modest aggregate of dedicated engineers in the early 1960's, we have grown into a substantial segment of the electronics industry. The technical contributors to the science of Loran now number in the hundreds. During the last decade these inspired engineers have advanced the art of Loran in every conceivable way. The weight of typical equipment has been reduced from 250 pounds to less than five pounds; receiver sizes have come down from large rack and panel monsters to cigarette pack midgets, and powers have tumbled from those of scorchers consuming nearly a kilowatt to flea-power units, requiring only a few watts.

Yet despite all of these advances, the system performance has not been compromised in the least. Accuracy, reliability, ease of operation and flexibility of utilization have all been improved to the point where we now talk of Loran systems rather than Loran receivers. However, against this beautiful background of advances and pioneering we now see a gloomy picture of delayed procurements, funding cutbacks, political strife and slow acceptance by both military and commercial users. We all heard described by several of our speakers how the early days of Loran-C were besieged by the attacks of competitive systems which claimed better performance and, having proven nothing, could make preposterous demands for scant research dollars.

Today having demonstrated superb accuracy and remarkable availability, Loran-C is once again on a low burner and no strong advocate has risen to advance its implementation. Worse yet, Loran-C phase-out is being discussed not in terms of why but in terms of when.

The time has come to ask ourselves what we are doing to advance the objective of the Wild Goose Association and enhance, promote and sell the Loran technology. Far too much energy and time have been spent on pointless squabbling which we sometimes glorify as friendly competition. Much too much verbiage has been expended on the relative merits of esoteric information processing schemes. While we occupy ourselves with trivia, other systems are competing for hard sought support dollars and thus aggravate the impact of funding cutbacks on Loran expansion.

Paraphrasing the words of a great President, I say, "ask not what the Government can do for Loran, ask yourself what you can do for it".

All of us, Government and Industry alike must now mount a campaign of education: Educate all potential users on the merits of Loran, educate all possible sponsors of Loran on what it can do for them, educate all members of Congress on the threat now faced by Loran if funding cutbacks force its replacement by other systems, and above all educate the entire scientific community so that objectivity may prevail.

...IN COMING ISSUES

LETTERS TO THE EDITOR

The Goose Gazette welcomes the opinions of its readers on the issues presented in the editorial column. Address letters to the Editor, C.J. Pasquier, 1770 Walt Whitman Road, Melville, New York 11746.

COMING EVENTS

Scheduled events, symposiums, etc. of interest to WGA members will be listed as well as the dates and places of WGA meetings and the next Convention.

THE PRESIDENT'S CORNER

Post on all walls and bulletin boards where Loran people congregate.

I declare that the first international Convention (held at the Copley Plaza Hotel, Boston, Mass. on 30 November 1972) of the Wild Goose Association and the Association itself is an overwhelming success.

TECHNICAL PAPERS

The newly formed awards committee needs your assistance in selecting potential winners for the best technical paper award. Please communicate to the editor any information relative to outstanding Loran technical papers for consideration. In addition, our Convention Paper Chairman, Ed Durbin, is already issuing his call (honk?) for papers for the next Convention. Please get with it!

HYPERBOLIC LINES

These columns are open to anyone who wishes to participate in making "The Goose Gazette" an informative journal. Please let me hear from you.

Editor

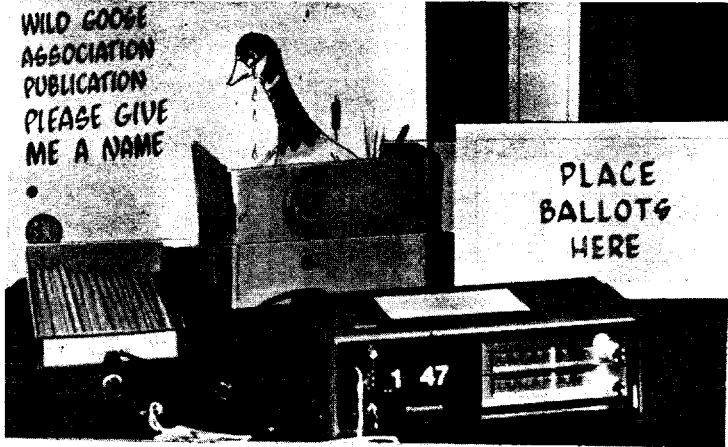
LOST SIGNALS

Where is who? (news of members, old timers, etc.)

CURRENT NEWS ITEMS

A PAPER IS BORN by BILL REVEILLE

One of the highlights of the Wild Goose Association Convention was the contest held for giving our "Goose Paper" a name. A Panasonic Digital Clock Radio was awarded to the person submitting the most appropriate name. Approximately 60 names were submitted.



However after much deliberation and many painstaking hours of trying to select a name for our paper, from so many entries, our judge(s) selected the name, "THE GOOSE GAZETTE"

which was submitted by Mr. Tom Daniels of ECOM, Fort Monmouth, New Jersey. Therefore a round of applause for Tom and a job well done for our judge(s).

PHOTOGRAPHER'S NOTE: I would like to indicate at this time that the judging was under the direction of C.J. Pasquier who is Vice President of the Association and Editor in Chief of the Goose Gazette. C.J.P. was judge, jury and executioner. However I was assured the award would be based purely on originality and his judgement would be completely unbiased, even though I was asked beforehand what type of prize I would like if I had the winning entry. (I also work for LITCOM.) It proves that there are still honest men in this world. Better luck to me next time.

INTRODUCING – Some of the members of our staff.



Left to right: Harriet Baldwin, Secretary; Bill Reveille, Associate Editor; Pat Bezotte, Design & Layout and Kathy Chopard, Type Composition.

MISS WILD GOOSE



Marianne O'Rourke is employed by TRW. Marianne works at the LORAN program office, EDS, Hanscom Field, Mass. Marianne was the overwhelming choice of all the WGA officers to be Miss Wild Goose for 1972-73. I'm sure everyone will be looking forward to seeing her at the next convention. In case some members cannot make it, Marianne's phone number is 617-861-5022.

FORMATION OF WGA

Continued from Page 1

President: L. Higginbotham
Vice President: C. Pasquier
Secretary: R. Frank
Treasurer: W. Roland
Membership Committee: W. Dean
Publicity Chairman: J. Parini
Constitution, Bylaws and Incorporation Committee:
J. Van Etten
Nomination and Election Committee: W. Becker
Convention Committee: W. Fitzsimmons
Additional Directors: E. Durbin, T. Daniels, W. Frantz,
R. Pasciuti
Awards Committee: J. Van Etten

EDITORIAL

Continued from Page 2

Let us now become Loran Salesmen and actively pursue every approach to foster the expansion of the system. Do not delude yourself into thinking that the virtues of Loran will automatically insure its survival, and stop hoping for the return of the golden age of Government subsidies. Take the active role now: publicize what has been done and project the multitude of new applications still awaiting implementation.

If the Wild Goose Association is to have a meaning, now is the time to start talking, lecturing and writing about Loran to Congress, Government agencies and leaders of user groups. Only in this way will the huge investment of long years of creative development, untiring dedication and true belief in Loran not be in vain.

ED DURBIN
TELEDYNE SYSTEMS

Mr. Durbin headed up the technical paper committee. At the symposium Mr. Durbin introduced each of the speakers. The technical papers were presented by some of the leaders in Loran Technology, and covered the spectrum of Loran from past to present to future. Summaries of each paper are presented here along with the speaker's name and company. Anyone interested in obtaining copies of the papers, is requested to write to the individual concerned.



COMMANDER WILLIAM F. ROLAND
U.S.C.G.

Commander Roland gave a presentation entitled "Loran Station Presque Isle - Prototype for the Future".

The Coast Guard is building a new Loran Transmitting Station at Presque Isle, Maine. This station will be used to test the prototype equipment for a new concept in Loran-C transmitting station operation. The design goal is to build an unmanned station capable of providing signals with an availability of no less than 99.7% including all planned and unplanned outages and with an accuracy better than any presently operational station. To do this we are building all new equipment with many new techniques for redundancy, fail-operative properties, maintenance-while-on-air, and remote sensing control, and maintenance.



WALTER DEAN
THE MAGNOVOX COMPANY

"How We Got To Where We Are"

Mr. W. Dean gave a historical view of Loran dating back to its conception during World War II.

The Loran system was developed at the Radiation Laboratory during World War II to meet the needs of the Navy in convoy operations, and to provide all-weather navigation for aircraft by day and night.

Today Loran is used world wide by both commercial and military users. The military application has advanced the state of the art to the point where Loran is used as the primary means of navigation in many areas. In addition the military use of Loran has opened the doors for Loran navigation by commercial air carriers. Commercial airlines are presently studying the feasibility of Loran navigation.



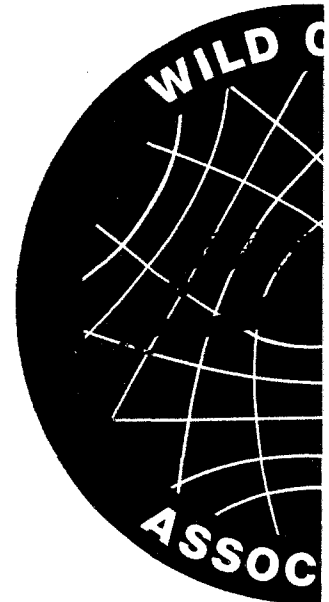
JOSEPH A. PARINI
LEAR SIEGLER, INC. - INSTRUMENT DIVISION

Mr. Parini presented a paper on "A Remote Target Locating System" designated PAVENAIL.

PAVENAIL is the name of a program relative to a remote Targeting/Designating System in an OV-ID aircraft. A modified ARN-92 Loran Navigation System, Laser Ranger/Designator System, Night Observation System and an Attitude Heading Reference System make up the totally integrated system. This system has been used successfully in a tactical environment.



THE
FIRST NATIONAL
WILD GOOSE
TECHNICAL SYMPOSIUM



NOVEMBER 30, 1973

DESCRIPTION

The following non-monetary awards aim and purposes of the Wild Goose Association:

Medal of Merit:

To be awarded to a person or persons of outstanding value to the development of the Loran system. The award shall normally only be given when the contribution is clearly recognized.

Paper Award:

To be awarded to a member of the Wild Goose Association for the best paper published on the general subject of Loran navigation.

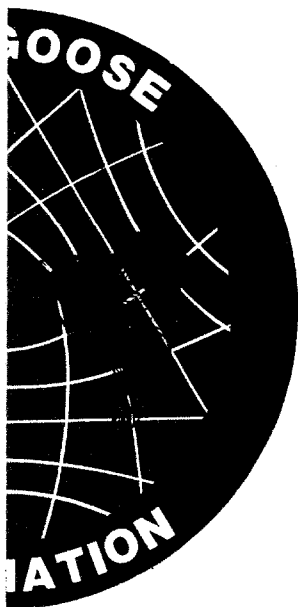
Service Award:

This award will be given to members of the Wild Goose Association for outstanding service to the Association.

MEMBERSHIP

As of the last meeting of the Wild Goose Association on January 31, 1973 the total membership was 100. Please use the enclosed application form on to a worthy candidate.

WILD GOOSE SYMPOSIUM



2 - BOSTON, MASS.

OF AWARDS

wards are proposed to further the
ose Association.

ersons for a particular contribution
pment or fostering of Loran. This
after the exceptional nature of the

the Wild Goose Association for the
subject of LORAN.

abers who distinguish themselves by
n.

IP REPORT

GA Board of Directors at Hanscom
l membership was 221 including our
lding, Gif Hefley and Harry Davis.
blank to join the WGA now or pass

CLAUDE J. PASQUIER
LITCOM DIVISION OF LITTON SYSTEMS

Mr. Pasquier presented a technical description of the AN/PSN-6 Loran personnel navigator.

His presentation highlighted the specification requirements which make the Manpack receiver unique with regard to performance, size and weight.

In addition to detailed technical descriptions, block diagrams, and operational descriptions, the model of the PSN-6 and PRC-25 combination was demonstrated to the audience.



ROBERT L. FRANK
SPERRY GYROSCOPE DIV. - SPERRY RAND CORP.

Mr. R.L. Frank presented a paper which traced the evolution and development of some of the key techniques which have resulted in present day Loran systems.

Some of the early Loran systems used complex means of reading time differences. The first major development was direct dial reading of time differences. Cycle matching was developed for the Cyclan System. This system provided completely automatic pulse envelope tracking and cycle phase tracking.

Over the years, a number of Loran systems was developed until what we know today as Loran C-D systems. Today's systems provide not only navigation but tactical systems which include transportable Loran stations.



JOHN HOPKINS
TELEDYNE SYSTEMS COMPANY

Mr. J. Hopkins presented a paper covering the evolution of Loran-C through the developments of first generation receivers to the present day systems or second generation systems.

From first generation systems it was learned that the most serious limitations were size and cost, as well as performance improvement. The second generation systems will satisfy these requirements.

Through design innovations and higher density microelectronics, Loran-C receiver costs were slashed, many critical and expensive parts were eliminated, the overall parts count was reduced and performance was improved.

The spurt of new developments and burgeoning applications, signal the beginning of the rapid growth in Loran-C popularity.



ROBERT A. REILLY
ITT AVIONICS DIVISION

Mr. Reilly presented a report on Loran Processing Advances. Covered in his report were "Chronic Loran Problems" such as, Noise versus Dynamics and Cycle Ambiguity.

New techniques for combating these problems were discussed. Advanced processing techniques in the area of Signal Censoring - Peak Tracking - Adaptive Envelope were presented in detail.

Future efforts in Loran navigation, should be centered around better noise models, skywave statistics, propagation studies.

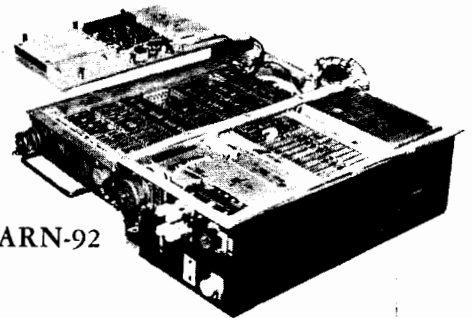


FIRST WGA MEETING

On November 30 and December 1, 1972, members of the newly formed Wild Goose Association met in Boston for their first convention. The Wild Goose Association was formed to provide an organization for individuals active in Loran and to promote the exchange of ideas and information in the field of Loran.

Loran technical developments and some very significant Loran technical papers were reviewed at ESD Hanscom Field, Massachusetts. The ESD review, conducted in the DC Hanger featured an interesting display entitled "The Evolutionary Equipment Development of Loran Hardware". The technical papers were presented by some of the leaders in Loran technology. The presentation of the papers was given at the L.G. Hanscom Field Officer's Open Mess luncheon.

Keynote speaker at the Banquet was Mr. Harry Davis, Deputy Undersecretary of the Air Force, who was introduced by Claude Pasquier, Vice President of the WGA.



AN/ARN-92



AN/UPN-35



AN/ARN-94

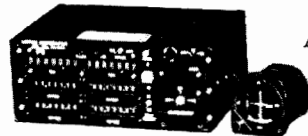


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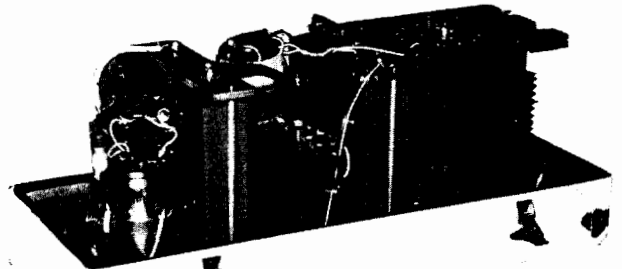


AN/PSN-6

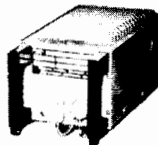
AN/PSN-2



TDL-301



MEGATRON



MK-1



AN/ARN-110

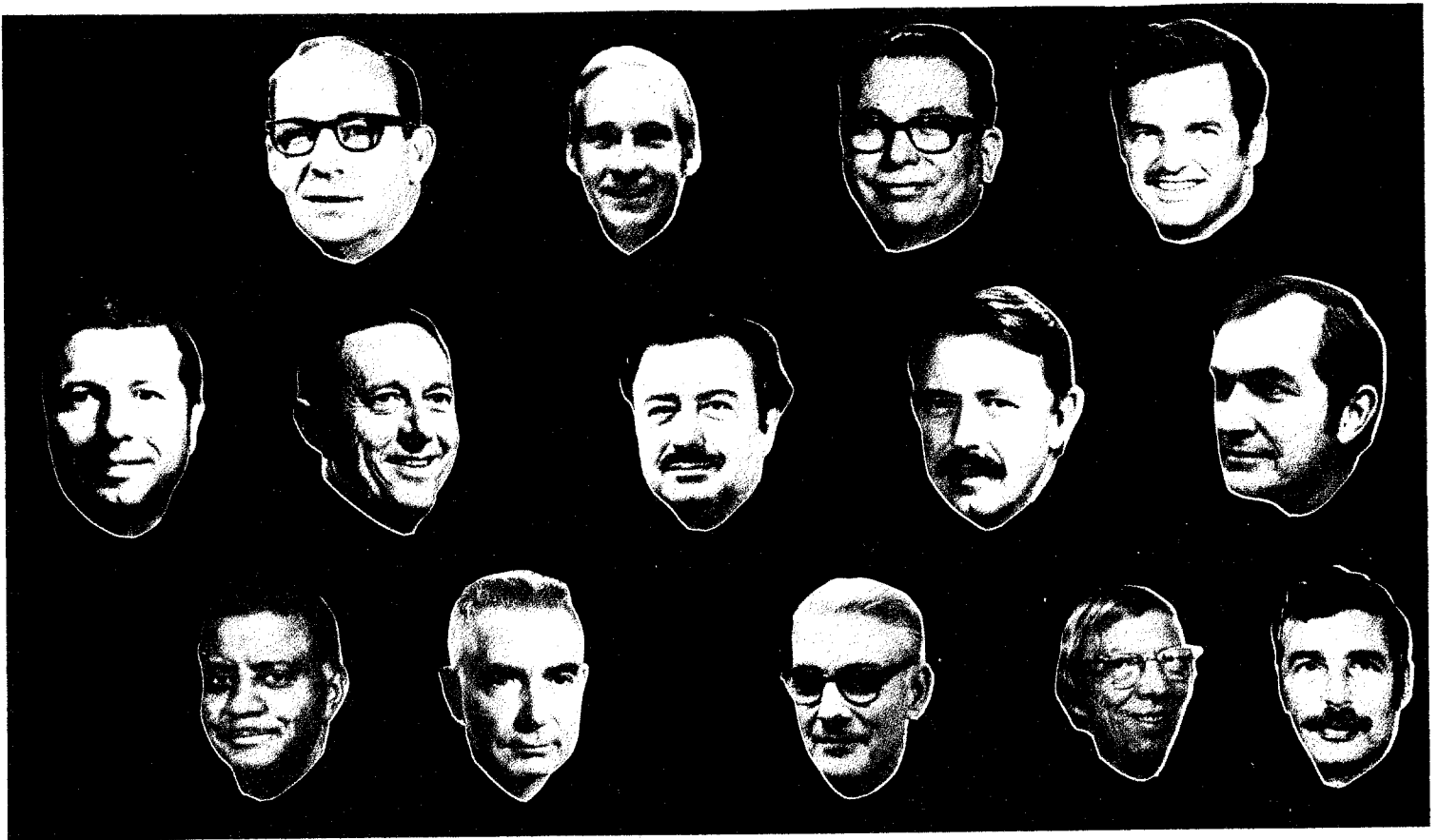
FIRST ANNUAL WILD GOOSE ASSOCIATION BANQUET

FIRST TOAST GIVEN BY
MR. W. FITZSIMMONS

"May it always fly high
and straight,
And may each of us bene-
fit
From the association with
it."

Left to Right: W. Fitzsimmons; Miss Wild Goose, Marianne O'Rourke and Claude Pasquier.





GLORIA the GOOSE

by RICKY PASQUIER



THE GOOSE GAZETTE

1770 WALT WHITMAN ROAD
MELVILLE, N. Y. 11746

ATTENTION

NOMINATIONS FOR BOARD OF DIRECTORS

Our next annual convention will take place in the fall. At that time all members will vote on the election of our president and four directors. Please submit nominations for the post of President and 4 directors to our nomination chairman, W. Becker.