

FOR A BETTER ATC.

EUROCONTROL



GATSM

INPUT

MAGAZINE OF EUROCONTROL GUILD OF AIR TRAFFIC SERVICES

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The magazine has to be considered as a medium for exchange and publication of informations relating to A.T.C.

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The Editor reserves the right to make any editorial changes in manuscript.

LETTER FROM THE PRESIDENT

With the imminent approach of the IFATCA conference to be held in Melbourne, guild members will wish to know the standpoint of EGATS regarding a possible third application for membership. It is appropriate therefore that the Executive Committee policy be defined.

Accepting the fact that the Eurocontrol Guild application in Tel Aviv last year failed by an extremely narrow margin, it would be fair, following analysis of the reasons for the failure, to assume that the success or otherwise of subsequent applications would depend on whether or not the balance of "for and against" the Eurocontrol Guild, as in Tel Aviv, would recur in Melbourne.

The above outline should not be seen as a predisposition towards pessimism but rather as being a realistic appraisal of a situation and time both of which are sensitive.

There seems no reason to expect a reversal from previous supporters, neither unfortunately, from opponents. EGATS has decided that, provided the significant opposition has undergone a change so as to accept what it believed to be a sound constitution as a basis for acceptance by IFATCA, together with the sincere wish of EGATS to make a meaningful contribution to the work of IFATCA, then an application will be lodged at Melbourne.

Needless to say, negotiations have already been initiated to canvass the opposition. At this time, replies are still awaited.

Failure to obtain positive indications will result in a postponement of an application to IFATCA. In any event, a special bulletin will be issued as soon as the final decision is taken.

the President

B. SMEETH



INTERNATIONAL AIR CARRIER ASSOCIATION

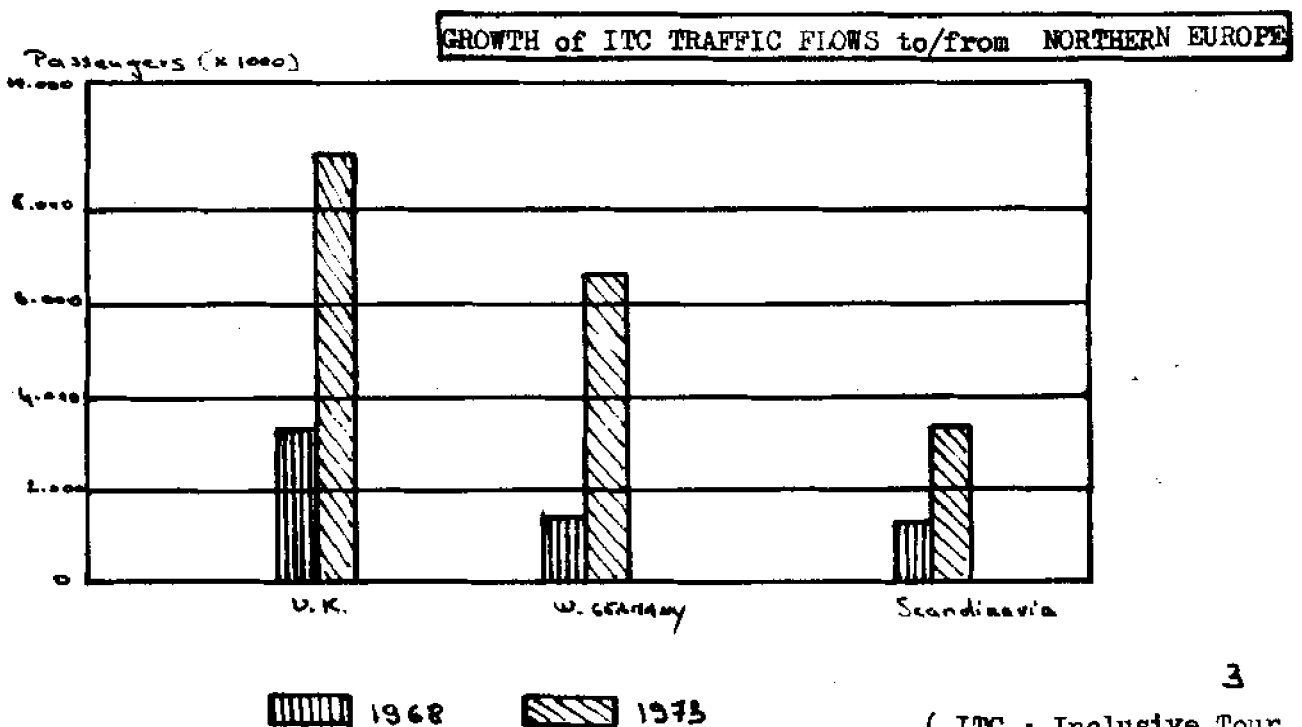
" The need arose for an organisation through which the views of charter companies and consumers could be united in furthering the development of low-cost charter air transport throughout the world. "

Charters represent one of the oldest means of air transport and they have been recognised, since the beginning, as a very efficient air transport operator, having a high percentage load factor.

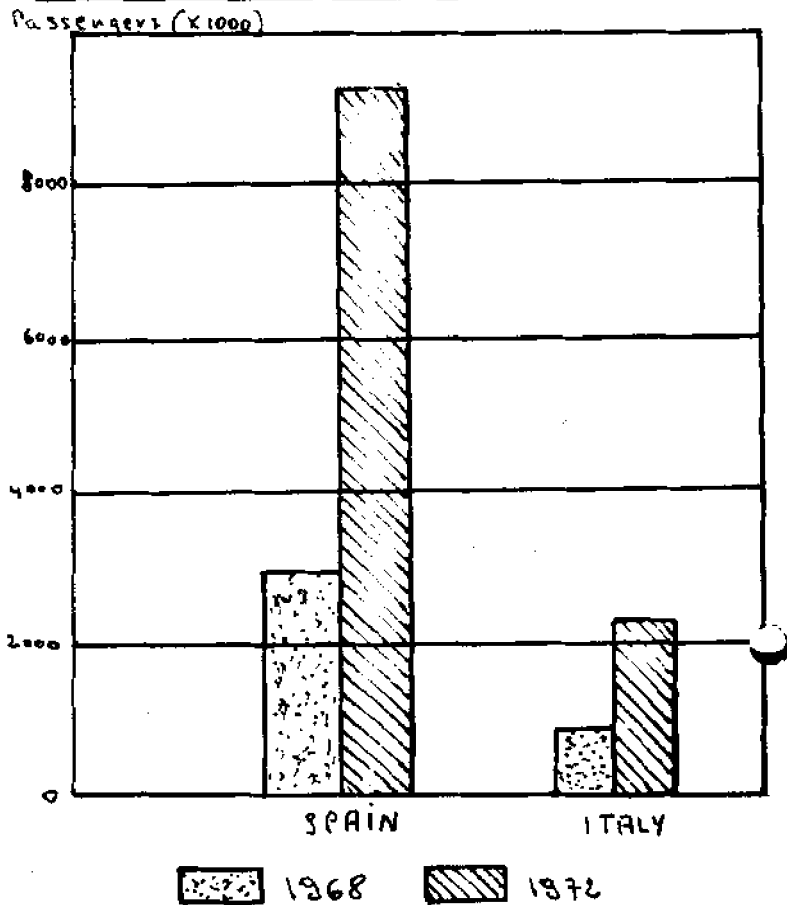
IACA represents the airlines which are specialised in charter operations and have brought air travel to within the reach of consumers all over the world.

The association represents a notable share of world air traffic:

- 56,5% of all charter traffic.
- 35 % of all non-scheduled traffic.
- 12,8 % of all air traffic.



GROWTH of ITC TRAFFIC FLOWS to/from SOUTHERN EU



IACA has been formed in Strasbourg, on June 1971. It comprises 15 members which are as follows;

- AEROPA SPA
- AIR SPAIN
- CAPITOL INTERNATIONAL AIRWAYS
- A/S CONAIR
- EURALAIR
- IDEX ADRIA AIRWAYS
- OVERSEAS NATIONAL AIRWAYS
- S.A. DE TRANSPORT AERIENS SATA
- SATURN AIRWAYS
- SPANTAX
- STERLING AIRWAYS
- TRANSAVIA HOLLAND
- TRANS INTERNATIONAL AIRLINES
- WAEDAIR CANADA
- WORLD AIRWAYS

AIMS of IACA

IACA's primary aims is to broaden the base of air travel through the encouragement of charter services. In its continuous contact with the governing bodies of air transport and tourism, IACA strives to create an awareness of the benefits of low-cost charter travel to international tourism, and seeks to ease restrictions which hamper its growth.

The resolution establishing IACA adopted the following rules:

- to develop an economically sound and balanced international air transport system that best serves the needs of the travelling public;
- to promote increased understanding and recognition of the benefits of international charter operations and by so doing broaden the base of air travel;

- to improve the quality of international air transport services (charters);
- to foster a co-operative spirit among international charter airlines in order to provide a forum for an exchange of views;
- to forge new links between such airlines and the international aviation community;
- to contribute substantially to air safety in all its form;
- to work forward the establishment of standardised and liberalised charter flight rules;
- to ensure that the charter airlines' voice is heard at international conferences and that world organisations are fully aware of their aims and objectives.

ACTIVITIES of IACA

In view of the need for uniform rules and regulations that promote international charter travel, and consistent with IACA's operating guidelines, the following actions have been taken since the formation of the association:

- Served as technical adviser to the first World Congress of Air Transport and Tourism in Madrid, in April 1972. Sponsored by the Spanish Government, this international conference brought into focus the inter-relationship of air transport and tourism;
- Has been invited to advise the Philippine Government on studies of charter tourism potential in the Philippines, and has been requested to assist in the formation of charter airlines in Latin America;
- Supported efforts of US charter airlines to gain legislative approval of Inclusive Tour Charter rules similar to those which have proved so successful in Europe;
- Established a special European Committee to focus on problems peculiar to European charter airlines;
- Participated in the formation of the North Atlantic Charter Fare Conference held in Brighton, in July 1973. This was historic, in that it was the first meeting of scheduled and charter airlines to find a solution to the problem of uneconomic rates;

- Encouraged the adoption of the Advance Booking Charter concept, as developed by Europe and Canada, in those countries which have not yet done so;
- Worked to ensure that until the more marketable ABC system is adopted, the affinity group rules be retained for North Atlantic charter operations;
- Established compliance and enforcement machinery to ensure that charter traffic, especially affinity traffic, adheres to the rules and regulations of the countries in which it originated. The machinery is based upon a self-enforcement agreement executed by all members of IACA operating on the North Atlantic and which has been approved by regulatory agencies in countries where such is required.

In addition, the following activities are now underway to strengthen and improve international charter services:

- The development of relationships with consumer organisations in order to monitor the response by IACA airlines to consumer needs;
- The inauguration of technical and commercial assistances programmes among airlines
- The undertaking of feasibility studies, on common ticketing, aircraft and equipment pooling, aircraft specification, substitute services and co-operation with airport handling.

IACA looks ahead

Dedicated to protecting the right of safe and efficiency low-cost world-wide travel IACA's operating policies and programmes reflect the views of charter airlines and their passengers. They are designed to promote the air transport and tourism industries, both of which have grown and prospered because of increased charter travel throughout the world.

As in the past, IACA will continue to initiate steps which minimise restrictions limiting the movement of people across or within national boundaries.

By introducing more and more people to air travel through low-cost charter flights, the base of air transport will be steadily broadened, thus leading to a balanced system that recognises and caters to both group and individual passengers.

Such an air transport system of scheduled and charter services will benefit all countries which seek to realise their full tourism potential.

J.C. BOSTON

(I must thank personally the President M. HELGSTRAND and the Secretary General M. PFIFFNER for their kind cooperation without which this article would have not been possible .)

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IMPRESSION OF A TRIP TO THE USA

The group consisted of Mr. von Villiez, Director Maastricht UAC, Mr. Ehrmantraut, Head of Div. 03, Mr. Benoit, the Eurocontrol Liaison officer with the FAA and myself.

I travelled via Amsterdam in a KLM B747; there was not a single seat to spare on the aircraft and most of the passengers were middle-aged American matrons returning from European tours, the noise level was incredible.

Naturally every one of us had to open our hand-baggage and submit to a personal search before boarding the ac. The flight was via RI, G1 and Cork, the weather was fine apart from a little mild turbulence, and we took exactly 7 Hrs. 12 Min.; although we were apparently half a mile off track on landfall. The run down the Eastern Seaboard was magnificent with unlimited visibility.

The returning tourists cheered when Cape Cod came into view and clapped their hands when we finally touched down at Kennedy.

We spent one day at the beginning of the mission and four days, including a weekend, at the end of the mission in Washington.

From Washington we flew in a FAA DC3 to N.A.F.E.C., the FAA experimental centre at Atlantic City.

N.A.F.E.C. controls all developments of the N.A.S. system (National Air Space System) and is responsible for the rectification of all errors. This, of course is due to the fact that some 20 centres are filled with N.A.S. and obviously they cannot permit each centre to develop in the way that it thinks best. For this reason it is normal for changes to N.A.S., from the first notification of an idea at local level to the distribution of a program tape containing the modification, to take at least a year.

After a weekend in Atlantic City, a rather run down seaside town, we flew by Twin Otter to Philadelphia (again landing over water, this time the Delaware) and from there by B707 via St. Louis to Kansas City.

The Kansas ARTCC is big but this is to be expected when one considers that there are 36 sectors.

Sectorisation is both by geographical area and by altitude. The low sectors up to FL230 incl. are in many cases also responsible for carrying out approach control. The high sectors, FL240 to FL330 incl. handle the bulk of the transiting Air Carrier Traffic. The ultra high sectors, FL350 and above are only opened when necessary.

With such a large amount of people in the OPS Room supervision becomes a problem.

The operation of the centre is under the responsibility of a Centre Chief, outside normal working hours he is represented by one of the Assistant Chiefs. The Assistant Chief is in charge of the operations room and is the senior watch keeping grade.

Working under him are team Chiefs, responsible for the administration of a team, and Area Officers, responsible whilst on watch for supervising the control of a number of sectors.

At Kansas there were two Area Officers on watch responsible respectively for the low sectors and for the high & ultra high sectors. The functions of Team Chief and Area Officer are normally combined in one man.

The three controllers on each sector work side by side, the radar controller is in charge of the sector, the manual controller marks the strips (max. 2 per ac per sector) and occasionally suggests a change of cleared flight level and the assistant controller tears off the printed strips checks and posts them.

Although our visit took place in Oct. Nov. and the traffic load appeared to be moderate, the impression gained was that the entire operation was much smoother than one would expect in a European centre. The question is therefore why should this be so and the answer is quite evident.



First: the responsibility for the control of all ac in a given block of airspace is vested on one unit, the sector concerned. There are no military AFC units and no Air Defence Units and therefore no problems of coordination manual or automatic, or restrictive procedures.

Second: The principal separation standard used is 5 nm radar separation. Because the airspace belongs to only one unit aircraft can be freely vectored, fanned out or put on to parallel tracks and in addition they can be and are passed from sector to sector and centre to centre under these conditions.

Third: aircraft climbing or descending

are never cleared into higher or lower sector's airspace. The controller in charge of an aircraft will clear it to his highest or lowest level, before the aircraft reaches this level he makes a hand-off, via the NAS system, to the high or low sector who continues the aircraft's climb or descent as necessary.

This system avoids completely the time wasting procedure of approach calling the lower sector, who then call the upper sector for a clearance that will in any case have to be justified in the light of the situation which will exist when the aircraft gets airborne.

Finally there are 20 centres equipped with NAS, there are many airfields equipped with remote input and strip printing devices and even at very small airfields it is possible at least to make a teleprinter flight plan input direct to NAS.

Automatic hand-off ~~pre~~ facilities (manual for climbing or descending traffic) exist not only between sectors but between centres and even between centres and approach units situated at airfields. Flight plans, estimates and revisions are passed automatically. NAS communicates and every communication made by NAS is one less telephone call to be made by a controller.

Conclusion

It is clear that we in Europe, in my opinion, will not even begin to compete with the efficiency of the Americans until we rationalise our procedures and our systems on a European basis, instead of relying on the national go-it-alone methods presently in vogue.

Mission Log

Duration of mission: 15 days

Total take-off/landing: 13

Total distance flown: 9500 NM

Total flying time: 23 Hrs.

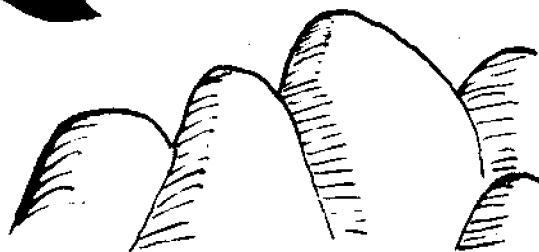
Types flown: B747, B727, B707, DC3,

Twin Otter, Sikorsky Heli.

BRIAN MARTIN



1975



ATTENTION
THE MOST COMPREHENSIVE
PROGRAM FROM
BEEK

- TUNESIA
- MALLORCA
- COSTA DEL SOL
- COSTA BLANCA
- COSTA BRAVA
- COSTA DORADA

WE REPRESENT ALL TOUROPERATORS

TRAVEL-AND BOOKINGAGENCY

 **VAN HULST**

MAASTRICHT: GROTE STAAT 21 TEL 16996

HEERLEN: ORANJE NASSAUSTRAT 15

TEL 715555

THE MICRO WAVE LANDING SYSTEM

- ICAO standardisation of an integrated system will be a long process and some countries may require a new landing system which will inevitably be air-derived... ICAO plan for developing a new landing aid is the way of handling the problem. -

The Micro-wave Landing System was conceived to give a greater operation flexibility and to make possible the non-visual guidance of aircraft at airports where the normal ILS cannot be used.

The FAA will have to take a decision in the first half of this year, whether one or the other of two different techniques " Beating Beam " or " Doppler Effect " will be chosen.

The ICAO , at mid-1976 , will decide which of 4 methods is to be employed. All this leading in the early 1980's in a world wide accepted MLS operation or a big fight between companies, like the one some 10 years ago, between VOR and LECCA.

The classical ILS system, thought in the 19ths, to become standard equipment in the 1950's, shows its limits and weak points , which is leading towards a new landing system. Nevertheless, even with the most up-to-date ILS, equipments available today, there are different system difficulties limiting the number of airports where it could be implemented.

The ILS trajectory is a straight line in space defined by the intersection of two plans guiding the aircraft and additionally by distance information in two or three fixed ground positions.

The beams, being wide and affected by ground irregularities, also by different constructions, etc..., prevent the system from being used at many airports ; and with the latest ATC procedures enabling the handling of more and more traffic , it would also be useful to have variable

glide slopes (eg. to include IFR operation of helicopters, etc...)

A national MLS plan was established in the US in 1970, to determine a system in which an aircraft could determine its positions with great accuracy at any point of the approach and missed approach areas.

Two solutions were available :

- the Micro-Wave Beating Beams

already known by the military

- the Doppler Effect

sending a coded frequency signal in the airspace.

In 1971, the All Weather Operational Panels (AWOP) within ICAO, established the operations basis of a micro-wave landing system. It put them forward at the 7th ICAO Air Navigation Conference in 1972 and in 1973, the U.S., the United Kingdom, Australia, France, the Federal Republic of Germany proposed to establish systems which will be handed over to the AWOP by mid-1975 for evaluation . A final international decision defining MLS should be given by ICAO in 1977.

The requirements are those of a precision guidance system allowing a maximum rate of approach, landing and missed approach on most runways at most airports.

The same flexibility is demanded as during a VMC approach , whatever the Met conditions , without any system limitation. Guidance signals should not be limited by geographical hinderances , or buildings, etc..., and most important, the system precision, its reliability must suit to any approach and landing sequence of any aircraft (DA20, LR25, B727, B747, etc...), while conforming with actual noise level procedures.

DME



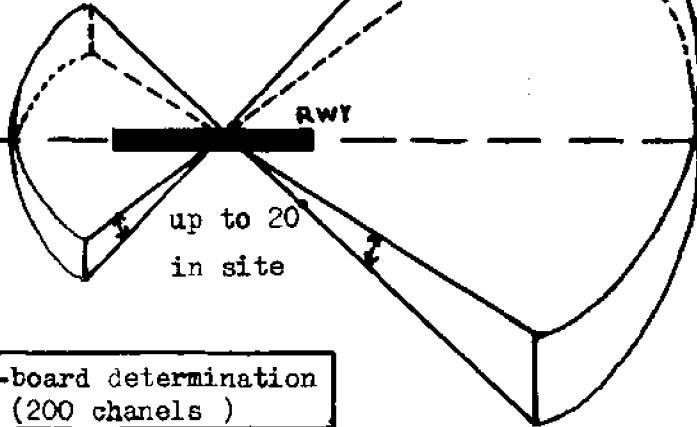
El 1 El 2

Az.



" Front " ; cover up to 60° of side of RWY.

Cover for missed approaches, up to 40° of each side of the RWY.



Range up to 36 km.

up to 20 in site

MLS cover with on-board determination (200 channels)

BEATING BEAM SYSTEMS

DOPPLER EFFECT SYSTEM

Two industrial groups are working in the U.S. on this subject, the one under supervision of Bendix, the other under Texas Instruments. Bendix is using element phased linear grids giving a high precision with category II and III operation.

Texas Instruments, with Collins and Thomson-CSF, has selected a mechanical sweeping system.

Amalgamated Wireless (Australia) offers the Interscan, based on a time reference to provide angular information :
- time between two impulses giving angular position of the aircraft in site and azimuth.

The principle of the Beating Beam System is that of a fanlike radioelectrical beam sweeping the airspace to cover, the immediate frequency value providing at a given spot the angular movement measure. With two beams, an aircraft gets site and azimuth angles, while a DME sends distance information from the runway.

Frequency modification of radioelectrical signal received during relative movement between the receiver and the emitter.

One mobile radioelectrical energy source is used perpendicular to the runway direction. On centre line, the same frequency will be received, while off centre line the frequency received will be changed in relation to the speed, and the angular movement away from centre line.

One steady emitter with signals will only be received with a frequency change in relation to the aircraft movement. The difference between these two changes will give the angular movement of the aircraft by reference to the runway centre line.

With two similar systems, in the vertical and the horizontal plane each, site and azimuth angles will be delivered at any point.

P. SINGER

5 BASIC TYPES OF MLS CONFIGURATIONS

- Basic MLS
- Expanded MLS
- Small Community MLS
- Common Tactical MLS
- Shipboard MLS

HYPNOTICS, TRANQUILLIZERS AND AIR TRAFFIC CONTROLLERS

by Dr. E. EVRARD Eurocontrol Medical Consultant.

(continued)

"Alertness is one of the essential qualities a controller must possess when performing his duties."

The dictionary definition of alertness is zealous watchfulness. In other words the controller's concentration must remain sharp and constant throughout the time he is on watch as a radar or planning controller.

Everyone knows, from experience, that concentration can be heightened by strong motivation but that it can become dulled, by natural processes, as a consequence of physical or mental fatigue or boredom. This is why a break can restore concentration, which tends to fall off imperceptibly if an absorbing task is performed continuously.

Certain substances used for therapeutic purposes have the effect of impairing concentration. This action is not necessarily sought after by a doctor, who is aiming to achieve effects on certain symptoms by means of the substances characteristic properties. Even if an undesirable side effect is only of minor importance, it must nevertheless be reckoned with.

The majority of hypnotic drugs have an action that is not limited to the simple induction of sleep. Their effect also depends on the dose used.

Even if the subject awakens after ten hours of sleep his concentration remains impaired for a period that varies according to the type of drug used and the dose given.

Alertness therefore remains diminished for part of the day following the night a subject has taken an active dose of a hypnotic in order to induce sleep. Moreover he will feel mentally sluggish and those around him will easily see that his mind is working slowly.

Tranquillizers have a much more insidious action which, as a result, constitutes a greater danger to the controller during the performance of his duties. Tranquillising drugs are very much in vogue at the present time. The hectic pace of modern life is undoubtedly a contributory reason for this. By their use the doctor seeks to relieve his patient of additional anxiety that superimposes itself on the usual vicissitudes of life. He thus endeavours to get the hyperexcited nervous system back to normal.

Many of the tranquillisers however, have an action that is not limited solely to cutting the subject off from the real events or influences that are the cause of his anxiety: they also affect mental control and the power of decision, which they diminish, and concentration, which becomes weakened and is liable to wander under the effects of these drugs.

It is thought that tranquillizers in conjunction with alcohol, are the cause of many road accidents. Thus, their secondary action can have a disastrous effect on efficient performance of any mental work that requires the maintenance of a high degree of concentration. In other words, this action may, over a period of several hours, prejudice the alertness required of a controller.

The doctor may have excellent reasons for initiating a course of treatment with tranquillizers. When faced with certain symptoms and certain complaints, it is naturally his first thought that he should relax a tense and anxious patient. It is up to the controller to make the doctor aware of the exact nature of his work:

in most cases a doctor will have only a very hazy and rudimentary idea of what is entailed.

The controller on his part should put no faith in miracle tablets offered to him by friends with the promise that they will allay his cares and make him forget all the problems of life and the tensions they induce.

There are other sedatives which do not have such euphoric psychic effects but do have a beneficial action on the nervous system albeit a less spectacular one. The doctor consulted by the controller is familiar with these preparations. He is competent to judge what is the most appropriate substance to prescribe in his patient's individual case, provided that he has been properly informed about the work he performs.

FOR THE MAASTRICHT BOOK OF RECORDS

On the 4th of Febr. 1975 at 0959 peripheral computer problems caused one sector to be without MADAP displays for 2 minutes. The next system failure, an abend, took place at 1244 on 25th of Febr. 1975.

This amounts to 506 Hours and 45 Minutes of continuous operation

without a system failure.

During the first month of MADAP Operation (October 1973) the average time between failures was 23 Hours. Our congratulations are due to all involved in this achievement.

DC10 AREA NAVIGATION SYSTEM

KOBUOTEK

AINS 70

The basis navigation mode of some DC 10 aircraft is Area Nav., which can also be called R/Nav. Area Nav. equipments employ computers to process VOR/DME data and provide very accurate navigational guidance along tracks between points which are not necessarily VOR stations.

This equipment has been developed in response to FAA specifications and has been scheduled to replace the present VOR airway structure between 1975 and 1982. Area Nav. equipment will then be required for operation in controlled airspace. There are 4 types of Area Nav. systems :
Mark 1,2,3,4 .

EQUIPMENT

The DC 10 is equipped with a dual redundant Mark 2 system with " crosstask" , which monitors system status and computered positions .

The system includes :

- 2 Navigation Computer Unit (NCU)
- 2 Flight Data Storage Unit (FDSU)
- 2 Control Display Unit (CDU)

Each NCU is a powerful 16K digital computer which can be programmed by a tape cassette in the FDSU as a comprehensive

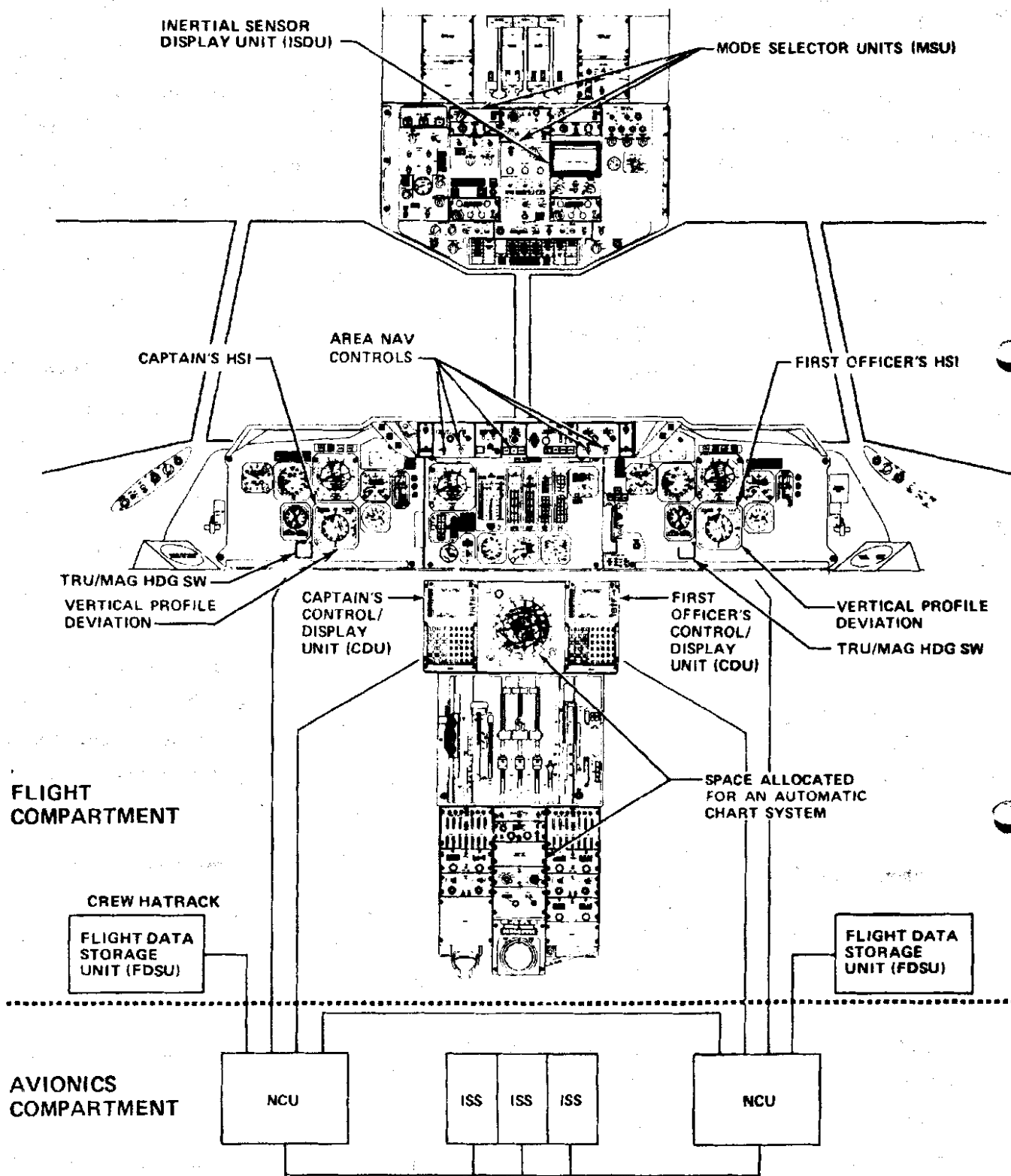
system and sensor tester or as Nav. computer. All data for the flight is transferred from the tape through the FDSU to the computer. The FDSU contains the tape cassette in which all the computer programs and all the routes , Terminal and airport data required for the entire route structure of a group of airlines are stored.

The tape is updated every 28 days. The CDU is an alpha numeric keyboard which allows the pilot to insert, read and adjust routing and other data.

SENSORS

Navigational inputs to the system are provided by dual digital VOR/DME equipment which may be automatically tuned by the Nav. Computer Units. This, combined with air data inputs, allows the system to operate in the Radio Nav. mode to $\pm 0,5$ nm.

DC 10-30 aircraft destined for overwater operations are also equipped with triple Inertial Sensor Unit (ISU). The intercontinental output of which is also used by the Nav-Comp-Unit which computes a navigation position once every 1/5 second.



MDC-J4400

W

The Nav-Comp-Unit does not revise the position of the Inertial Sensor Sub-System (ISS). The pilot cannot insert an update of position either to the Nav Comp-Unit or ISS, except during alignment.

FLIGHT PLAN

The Area Navigation Systems will accept a flight plan through the Cont. Display Unit as a "company route number" or as a " from-via-to " between airports , gateways or lat/longs. Consecutive routes may be loaded to enable a flight from A to B to land at C, then via D to E.

The system then searches out the data required for the route from the Flight Data Storage Unit. A tape data is brought into the computer which includes all waypoints and vector airways at least 150 nm each side of the route scheduled.

VOR/DME stations (250 nm each side of the route) are also transferred from tape to the computer.

Terminal area data of the departure and destination airports are also transferred. This is the same for the Standard Instrument Departures (SID) at the departure airport and the Standard Terminal Arrival Routings (STAR) at two arrival airports.

All of this data is automatically transferred after route definition. Only data stored in the tape are available.

If a route number is chosen, all the enroute waypoints are displayed consecutively on the Contr. Disp. Units. 6 waypoints may be viewed at once and up to 5 are available.

If a " from-via-to " format is used, waypoints or complete airways must be inserted individually. SID's , STAR's and altitudes may be added.

WAYPOINTS

Stored waypoints may be inserted by name or identification or as a bearing and distance from another stored waypoint. Waypoints may be inserted by Lat/Long. even if they are not stored on the tape or if they are out of the area of data stored on the tape.

TURNING

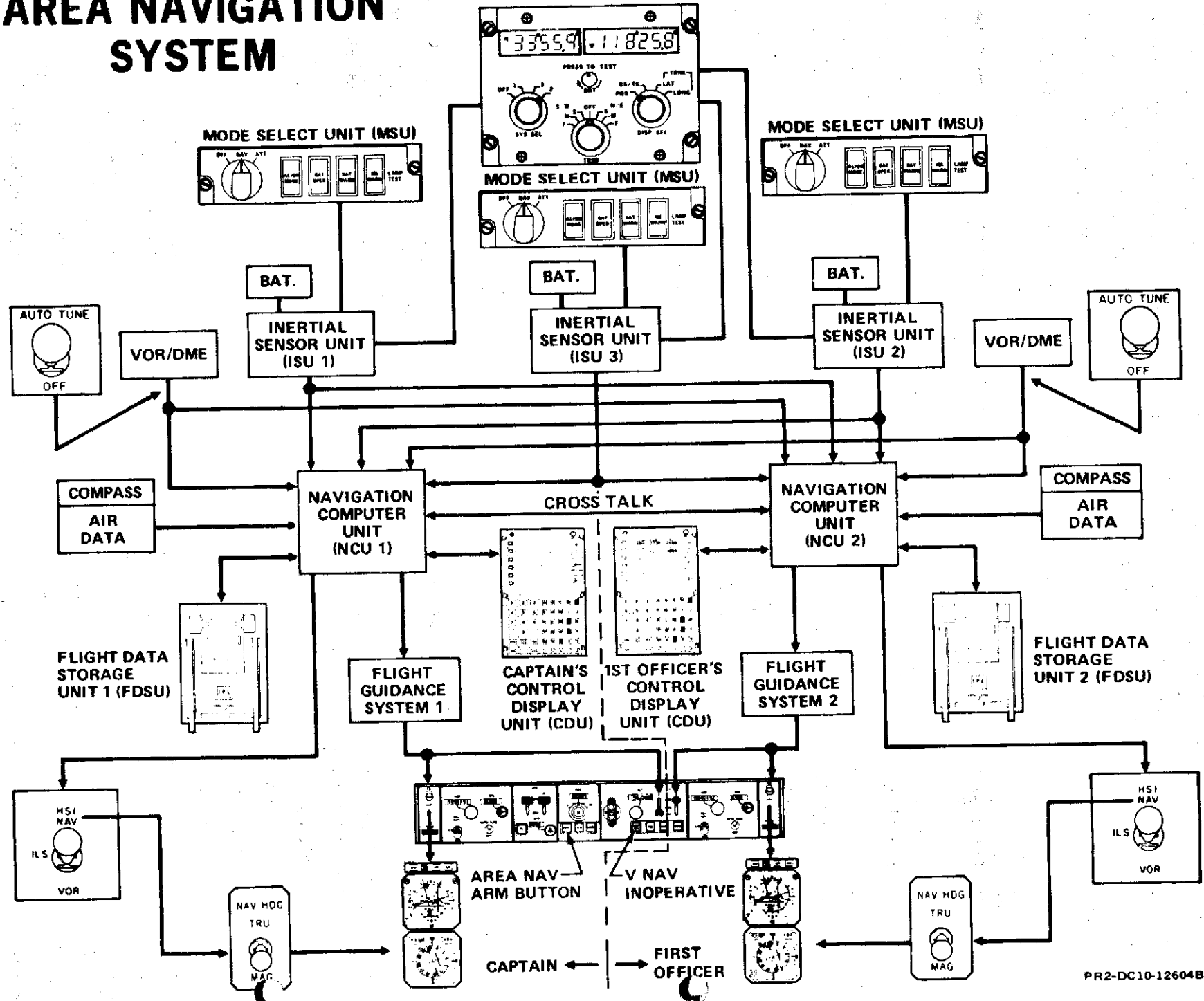
The system computes the point at which a turn from one leg to the next must be started to achieve a smooth turn from one leg to the next. The aircraft ground speed and the angle of turn are considered and turns may be started up to 10nm prior to arriving at the " to waypoint ". The pilot is given 15 seconds of such warning a turn.

BATTERY POWER

In the event of failure of the 115-vac power system, the ISS automatically transfers to its own backup battery which will power the system for 30nm.

AREA NAVIGATION SYSTEM

INERTIAL SENSOR DISPLAY UNIT (ISDU)



PR2-DC10-12604B

PROGRESS PAGE

| | | | | |
|--|-------|--------|-------|--|
| | FROM | 17 | 20027 | |
| | HNDSN | | | |
| | TO | 35 | 200 | |
| | BLANC | | | |
| | | NM | | |
| | 336°T | 35 | | |
| | NEXT | | | |
| | BSR | 40 | 200 | |
| | V1-D1 | - | V1-D2 | |
| | AVF | | PBR | |
| | OFST | GMT | MODE | |
| | ! | 1/1631 | R/I | |

1 2 3 A B C D E

4 5 6 7 8 9

IT IS SUGGESTED THAT THE PILOT FLYING THE AIRCRAFT SELECTS THE **PROG** PAGE.

1. HE CAN THEN MONITOR THE BASIC ROUTE OF FLIGHT WAYPOINTS, ATO, ETO'S AND ALTITUDES.
2. HE CAN SEE HIS VOR/DME TUNING STATUS AND OBSERVE OR INITIATE CHANGES.
3. HE CAN SEE AT ONCE THE CAUSE OF ANY FAULTS AND ALERTS LIGHTS.
4. HE CAN FLIP TO THE PERFORMANCE PAGE IF HE SO WISHES.
5. HE CAN VERY EASILY SEE THE OTHER CDU WHICH WILL NORMALLY BE ON THE FLIGHT PLAN PAGE.

AREA INERTIAL NAV. SYS. OPERATION

The AINS allows worldwide nav. based on radio and inertial data. The system is intended to navigate the aircraft on both conventional airways and area nav. routes, on great circle tracks, from take-off to the final approach.

The system operates as follows:

- After choosing a company route number or a "from-to-via" format, the NCU retrieves the necessary data from the FDSU and stores them in its own memory.
- The NCU assembles the Flight Plan, which is presented to the pilot on the CDU.

- As the flight progresses, navigation data are calculated and displayed on the CDU and the Horizontal Situation Indicator (HSI) .

- The radio stations, required for updating , are automatically tuned , identified and used to update the computed position.

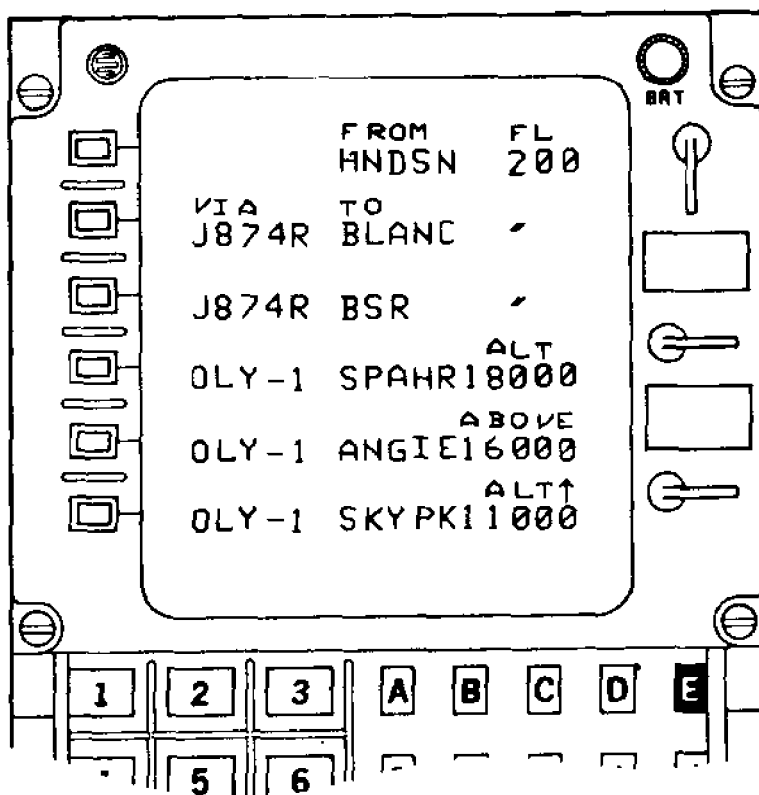
- During flight, it is possible to alter manually the flight plan by inserting or deleting waypoints and airways, and select radio stations for autotuning.

- Navigation informations are continuously displayed on the HSI and a steering command is provided for the autopilot.

J. VERMEER

(We must thank M. FRANSEN, sub-director of MARTINAIR, for his full co-operation).

FLIGHT PLAN PAGE



IT IS SUGGESTED THAT THE PILOT NOT FLYING THE AIRCRAFT, AND WHO IS NEGOTIATING WITH ATC, BE SELECTED TO THE **FLT PLN** PAGE.

1. HE CAN THEN INSERT FLIGHT PLAN CHANGES WHICH HE RECEIVES. (THIS IS THE ONLY PAGE FOR FLIGHT PLAN REVISIONS.)
2. HE CAN SEE THE OTHER CDU VERY EASILY TO NOTE THE CAUSE OF FAULT OR ALERT LIGHTS.
3. HE CAN SELECT THE **PROG** PAGE AND ACKNOWLEDGE/CHANGE VOR/DME'S, SELECT OFFSETS OR CANCEL THE FAULT OR ALERT LIGHTS AND THEN RETURN TO **FLT PLN**

ΣΥΝΔΕΣΜΟΣ ΕΛΕΓΚΤΩΝ ΕΝΑΕΡΙΟΥ ΚΥΚΛΟΦΟΡΙΑΣ ΚΥΠΡΟΥ

CYPRUS AIR TRAFFIC CONTROLLERS' ASSOCIATION

(MEMBER OF I.E.A.T.C.A.)

NICOSIA INTERNATIONAL AIRPORT

P. O. BOX 4521

NICOSIA - CYPRUS

Mr. B. Smeeth A.T.Ae.S.,

President of

Eurocontrol Guild of Air Traffic

Controllers Maastricht Lodge,

Holland.

Your Ref: 220175 Ø Secr.
22.1.75.

Dear Sir,

We are deeply moved for the generous gesture of all members of the Eurocontrol Guild for the donation of \$ 955 to the members of our Association.

We wish to assure you that, despite the tragic events which took-place as a result of the Turkish invasion and the continued discomfort and suffering of more than 200.000 refugees in our own country, our members are persuing by all lawful means to re-establish normal conditions in Air Traffic Control.

We shall be grateful if you kindly convey to all colleagues of your association our most sincere thanks for their concern of our well being which to us is a moral impetus for our strive to survival.

Reference to the transfer of the money we shall be grateful if you kindly forward it to the Bank account No.177 in the name of the Civil Aviation Employees Co-operative Savings Bank Nicosia, c/o Co-operative Central Bank, Nicosia, Cyprus.

Last but not least our most sincere thanks to you for your contribution and for all your efforts.

Yours sincerely,


A. Papathomas

Chairman CYATCA.

NEWS

Australia

- 14th Annual Conference of IFATCA (1975): held in Melbourne (14-18 April).
Host Association: Civil Air Operations Officers' Association of Australia
Box 789 F - GPO Melbourne - 3001 (Australia)
 - Programme : - 14 Ap. (Official Opening-First Plenary Session) - 15 Ap. (Committee Sessions- 16 Ap. (Com. Sessions) - 17 Ap. (Com. Ses.)
- 18 Ap. (Final Plenary Session - Closing Ceremony).
-

CYPRUS

- "Difficulties, stress and hardship continue to be the unhappy lot of CYATCA. The scene however has been brightened through the goodwill shown by the Eurocontrol Guild who have organised a collection among their members and sent the proceeds (995£) to their friends and colleagues of the Cyprus Association. Mr. A. Papaiohomas, the CYATCA President, acknowledged the gift in his letter of 4 February 1975 to Mr. B. Smeeth, the President of the Eurocontrol Guild. " The Federation is proud to record this factual evidence of the bond which exists between controllers ". - (IFATCA Circular)
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FRANCE

- The next IFATCA Conference 76 will be held in LYON (26/30 April). APCA will organise a course to be held at ADIF Institute in Lyon for those members of IFATCA who would like to improve their French and even for beginners. (1-30 April 1976) -
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IFALPA

- Concerning the Projected Symposium on Air Traffic Control Maastricht 1975.
" The Controllers of the first and most successful International Control Centre, namely the Eurocontrol facility at Maastricht which services the Upper Airspace over Belgium, Luxembourg and the northern part of West Germany (Hannover FIR) are planning a " meet-the-pilot " symposium and currently assessing the likely attendance. If it matured, no doubt much of the discussion will relate to the specific problems of the area, which contains one of the densest traffic flows in the world coupled with much military activities. ... " .

(extract from IFALPA Bulletin) .