

INPUT



EGATS QUARTERLY

SPRING '77

Input

Egats Quarterly Magazine

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Contents

Output-Editorial	2
Intercom-Letters	2
From the President	3
Carnaval - What Alaaf	3
What was that Calsign Again?	4
Area Control - Who Needs It?	5
That Meteor	7
Adsel - The Major Development in Air Traffic Control	9
The Adventures of Roger Wilco	10-14
Action (1)	11
Visit to Fokker	12
Eurocontrol Route Charges System - The Facts and the Fiction	12
B.P.C.	14
Say Again Your Type	15
On Our Behalf	16
Action (2)	16
Food for Thought?	17
The Fleet Air Arm Museum	17
Internal Affairs	19
Ifatca News	21
Guild News	22

Unless ontherwise stated, the views expressed in INPUT are not necessarily those of EGATS or of the editor.

The editor does not accept responsibility for personal opinions expressed in INPUT.

All contributions to INPUT are welcomed.

Output

Under New Management

Following several months of instability and internal upheavals within the Executive Board of EGATS, a number of Guild Members signed a petition calling for an Extraordinary General Meeting, subsequently held at Maastricht UAC on 20th December, 1976. The attendance of about forty, some carrying proxy votes, and including representatives from Brétigny, was the best since the early inaugural meetings. Such was the level of concern; many were worried about the apparent lack of activity and that the Guild was drifting without any visible objective or clear policy. Conversely, some of the Executive Board had recently resigned, feeling unsupported in their worthy individual endeavours on behalf of EGATS, which had also been without a President for several months. The mood of those present was unmistakeable. They wanted to see EGATS not only back on its feet, but fully active as the only body truly representative of control personnel within Eurocontrol.

By a substantial majority, Mr. R.S. Bartlett was elected as the new EGATS President, together with a new Executive Board (a vote of confidence for some of its former members). A clear list of priorities was then established. Almost unanimously, the Meeting voted that the Guild's first objective should be the improvement of its Member's professional environment and of the internal working conditions. Liaison with IFATCA, other Guilds and associated organisations was to continue, of course, being complementary to the main aims. The Travel Section was also to carry on its good work, and the arrangement of cultural and social activities was still to be encouraged. The Operations Committee has already set itself an arduous schedule of work aimed at bringing about internal improvements in the interests of optimum controlling efficiency within Maastricht UAC. Hopefully, they will receive one hundred percent cooperation from all concerned. Changes in the professional environment present the greatest challenge. The status of the controller within Eurocontrol leaves much to be desired. A fixed career structure is non-existent, and promotions seem to be on a purely ad-hoc basis. The conditions of service are obviously in need of drastic revision. But the future prospects for any sort of controlling career at all within the Eurocontrol Agency are now in serious jeopardy due to the attitude of some Member States who seem to consider Maastricht UAC as a competitor to their own systems. It is incredible that the nations which formed Eurocontrol as the

„European Organisation for the Safety of Air Navigation" now wish to see their own creation debased to a purely administrative or consultative body with no operational commitment whatsoever!

EGATS is faced with an extremely difficult task if it is to influence current adverse trends. The Guild must spare no effort in presenting its case in order to destroy the misconceptions that are held about Eurocontrol Operations, not only by parent administrations, but also by some of the airlines whom we serve and, sadly, by some of our colleagues.

In this issue of Input, much space is devoted to highlighting controllers' difficulties, both in and outside of Eurocontrol. Reaction to these articles is welcomed, and will be considered for publication in future magazines. The term "controller" used throughout is intended to encompass all control staff, including assistants.

M.J. Lewis

Intercom

Letters to the Editor

Sir,

I think it is true to say that there have been very few serious incidents since Maastricht opened. But what about the ones that have occurred? The results of airmiss or incident investigations have not been made available to control staff. Without wishing to place blame on those involved, surely it is important for all colleagues to realise where errors can occur, or how circumstances can lead up to something going wrong. It is common practice amongst airlines and in the military to circulate incident reports. In some cases there is voluntary, anonymous self-reporting of mistakes which others could also make.

May I suggest that, for the benefit of all concerned with safety, the facts uncovered by investigations should be made known to the ops room, to avoid repetition of the same errors.

N.E. Chance

(The Operations Committee is working on this suggestion - Ed.)

Sir,

Is it true that a local consultant optician has devised a type of parallax-correcting spectacles for the OEA? Would it also be possible to obtain transparent arm extensions through which strips may still be read? If not, because of the ink stains and stab wounds sustained from over-zealous trainee radar controllers updating their strips whilst the OEA is stretching for the

TID, are dry cleaning costs and elastoplasts tax-deductable?

M. Maus

Sir,

I hear, "Input" is again to be made. I have with my collaborators spoken. We like to see more general interest topics, like some unusual hobbies of Members, local places to visit and funny traditions. Comments from aviators and amusing adventures by fam flights and Guild Travel journeys are nice reading. Can we have

some more?

U. v. Leicht

(We intend to make "Input" as varied and interesting as possible. But EGATS is a comparatively small Guild, and the magazine must rely largely on Members' contributions. If not forthcoming, a high standard cannot be maintained. "Input" will award a prize for the best article or letter published in each future issue. Deadline for the next copy is June 10th-Ed.)

From the President

Colleagues,

Since my term of office began in December the Guild has been reorganised to improve its operating efficiency. The constitutional problems which in previous years had consumed so much of the Executive Board's time has been left to a small sub-committee and given a low priority on the work programme.

Top priority has been given to securing a future for Eurocontrol Maastricht U.A.C. by any professional means available.

Secondly, through the operations sub-committee we are endeavouring to bring to the attention of management any control staff requirements needed for the safe and efficient operation of the centre. The production of a prestigious magazine in order to convey our aims has also taken a great part of the work programme I hope you are pleased with the result. The work the Guild does for IFATCA will continue and we hope that the 1977 Cyprus Conference will prove once again that the IFATCA Organisation does help its member associations. This time EGATS.

The new format of INPUT together with the monthly Information notes and the Guild suggestion forms should help improve communication.

Communication is a two way thing; please in this respect use the facilities available so we can truly represent your wishes.

I would like to welcome the members of the newly formed Brétigny branch to the Guild and wish them all success.

In conclusion, I would like to thank all members of the Executive Board and sub-committees for their work and dedication to getting EGATS active again.

Let us hope we have a chance to continue after 1983.

Roger S Bartlett

Roger S. Bartlett, President.

Carnaval what alaaf



Many Eurocontrol staff, those who have lived here for some time, will have again participated, with great pleasure, in the Limburg's Carnaval

this year.

Carnaval? A great number of you may wonder about the beginnings and history of this festivity. Why so crazy? Well, in fact its origin lies in the Roman Catholic Church. The beginning of the so called "fast period", 4 days prior to Easter, used to require the giving up of many pleasures and luxury eating habits. Carnaval used to be the final fling before Lent.

In recent years this has changed, especially as far as fasting is concerned. Carnaval has nevertheless remained in the form of a three day, plus preparation and ending, celebration. Officially, this folkloric occasion begins on a crazy date and time, 11/11 at 11.11. (In the Netherlands, 11 is to crazy as 13 is to unlucky). This number is significant, and includes the

group of 11 who, with a Prince and Princess, represent towns, villages, clubs and committees who organise events.

The group of 11 is a permanent group, whilst the Prince and Princess are chosen each year, with great ceremony, from the local population.

Maastricht, for example, has one town Prince and usually one for each suburb. Special Carnival songs are written annually for each locality. This year, "Van Eijsden Tot De Mookerhei" was chosen as the 1977 Limburg's Carnival song.

At 11.11 in many places the so called "Prince Balls" and "Old Wives Balls" commence, the most famous being in Simpelveld and Valkenburg. The Old Wives evenings are intended for the women, who dress up with the intention of being unrecognisable. The men then come along for a look, and to see whether they can pick out anyone's true identity. This can result in unusual and funny situations. Finally the Carnival period arrives, beginning on Sunday morning at 11.11 and finishing on Tuesday at midnight. Its beginning signifies three days of carefree celebration and fun for all participants, who are heavily disguised with painted faces and dressed in all imaginable kinds of costume, particularly in Maastricht, where there is also a "street Carnival" composed of small groups, each with their own band, travelling from café to café.

Every village has its own parade on one of the three days. Prizes are awarded to the best group, float and individual in each procession. These parades are financed entirely by the local community, and are also prepared and organised by them. They attract many spectators. For example, approximately 150,000 came to witness this year's parade in Maastricht, in which 30,000 people actually took part. All participants in the parade improvise their own theme which may be a sketch, satire or incident involving the local people.

The day after Carnival, the first day of Lent, is traditionally herring-eating day. Here, the celebration of Carnival is, in fact, prolonged, and it does not take much searching to find someone with a herring in one hand and a glass of beer in the other!

In reality, there is much more to Carnival than can ever be described in mere words. Try it yourself sometime and discover the rest.

ALAAF!

Louis Prévôt

Ouch!

From a (RAF) trainee pilot's examination answer paper:

Q: What are the objectives of Air Traffic Control?

A: To provide suitable weather for aircraft.

What was that callsign again?

It has been suggested that Input devotes some space to a 'know your airlines' feature. Therefore, we intend to publish brief information on the lesser-known operators that pass through our sectors. Long, detailed histories will not be the formula, but rather a shortened account giving more or less basic facts such as nationality, operating base, type of operations flown, aircraft fleet and any other interesting information that can be found.

Lesser Known Airlines

Alidair (QA)

This is a British independent airline based at the East Midlands airport (EGNX). Operations are concentrated on contract charter to the oil industry centred mainly round Aberdeen. Also partakes in leasing aircraft to other companies. Aircraft fleet consists of Viscounts 700 and 800 series (VC7 & VC8).

Air-Bridge Carriers Ltd. (ABC) (AK)

A British independent cargo airline also based at EGNX. Operates ad-hoc charter and scheduled flights to many parts of Europe and the Middle East with a fleet of Argosies (HS65), a Viscount and a recently acquired Vanguard (VC9).

Young Cargo

Sprl. (Belgian Airways) (CB) IC/s "Cargo Belge"

A Belgian independent cargo operator theoretically based in Charleroi but operating mainly from Brussels on worldwide ad-hoc and contract cargo charters, with a fleet of Bristol Britannias (BR31). Rumour has it that they will soon have a B707.

Express Flug

Service (Bahamas)-EFS BAHAMAS (EJ).

Don't be fooled by the Bahamas part and think that your free ride to Nassau is on the way! It is simply (one assumes) a tax-beneficial registration. This cargo operator is of German origin, based in Hamburg and operating cargo flights mainly from Germany, Holland, France and Belgium to destinations in Africa, the more common ones being Lagos and Kano (very often via Palma! - free rides ? ?.) Their fleet comprises American-registered DC-8s. As you may have noticed, this company is a regular visitor to EHBK.

D. Grew.

International football tournament for air traffic control staff

As has been organised since 1964 in different places in Europe; this year, we are organising the tournament.

Dates: 10th, 11th and 12th of May.

Participants: 24 teams from Italy to Norway, Austria to Ireland.

The tournament will take place in the "Sportpark-West" in Maastricht (direction Brussels Poort).

Party on Tuesday 11th from \pm 2100 local onwards in "The Kwien" (Vroenhoven-Belgium). Expect further news shortly from the organising committee:

Adamson/Grew/van Eck/van Ommen

P.S. There's a lot of work involved. Help! Offers of assistance will be greatly appreciated.

Volunteers, please contact the organising committee as soon as possible!

Area Control who needs it?

Ask the average member of the public what an Air Traffic Controller is and the two most likely replies will be either,

"The man with the bats, showing aircraft where to park," or

"The man sitting on a limitless supply of Very flares in a greenhouse, clearing aircraft to land and wishing departing flights good luck."

The term "Area Control" probably holds no meaning whatsoever for the layman, since most people still believe that outside the vicinity of an airfield, pilots find their own way from A to B unassisted. Outside aviation circles, the Air Traffic Controller is something of a mythological character, his public image being either non-existent, or, in the main sadly misrepresented.

Without a doubt, Air Traffic Control is an underrated profession. As such, it is prone to misunderstanding and lack of support both as a career, and in its operational requirements. The nature of their work makes controllers background figures, unnoticed so long as everything runs smoothly. It is distressing that

when ATC does receive publicity, it is generally about some negative aspect or incident, invariably inaccurately or completely misreported anyway; serious airmisses, delays due to flow control restrictions, and the recent tragedy of Zagreb are obvious examples. In all these cases, ATC is blamed on the basis of superficial evidence, but where does the fault really lie?

There is no denying the advances made in aeronautical technology over the last 25 years. At the extremes, men have walked on the moon, and robot vehicles are now probing the surface of Mars. Closer to Earth, ATC daily handles wide-bodied jets, capable of 500 knots, and able to set course direct to any point with the help of INS. Yet in some countries, the control of such aircraft is left to underpaid, undertrained and undermanned ATC units, whose equipment was makeshift and inadequate when the fastest aircraft flew at 120 knots, and the volume of traffic was less than one tenth of present day levels. In some cases, no radar is available at all; in others, there are insufficient personnel trained in its use. Quite often, when radar equipment is provided, it is government surplus stock which has become obsolete for military purposes.

Many national administrations seem reluctant, or even unwilling, to spend the money required for albeit expensive new ATC systems, which should logically be as sophisticated in development as the traffic that they must handle. In most governments, ATC is only a small part of the overall responsibility of their Ministers of Transport. It may be a poor political platform to demand taxes for something as intangible as the latest SSR decoder, or a synthetic data display, especially when the Minister himself does not appreciate what these things are, and what the implications of not providing Air Traffic Services with them must be. Whilst the need for airlines, and particularly the national carriers, to be re-equipped with the latest aircraft, in order to remain competitive, is well understood, the controller is neglected time and time again. He is expected to cope, because he has somehow always managed to before. And when, finally, because the facilities provided prove to be inadequate, he fails to maintain a safe and expeditious flow of traffic, he is severely criticized. The changing whims of politics and political indifference to its requirements tend to, and often do work to the detriment of the ATC profession.

In 1972, when the French controllers went on strike, a government plan was devised for military units to continue ATC services. This was something like ordering a trained nurse to carry out major surgery, an almost impossible task for men who, in the main, could not speak English, who had little or no knowledge of ICAO procedures or civil airliner performance

characteristics, and who had never before handled anything vaguely approaching the volume of traffic that they were faced with. Although, under the circumstances, the military made a magnificent attempt to handle the incredible job that they found foisted upon them, the subsequent mid-air collision over Nantes was almost inevitable, and foreseeable to all adjacent ATC units working with France. Those who died did so because of a lack of appreciation of the demands made daily on ATC, and the vast differences between civil and military operations.

In Spain, the equipment has deteriorated to such a serious extent that severe flow control measures have become a necessity - anathema to the objective of "an expeditious flow of traffic", but essential in the interests of safety. The repercussions of this action has been felt all across Europe. Each successive Area Control Centre radiating outwards from Spain has been allocated a smaller permitted number of sunbound aircraft. In any Centre, Flow Controller must certainly be the most unpopular, if not despised position to work, since the imposition of restrictions is in direct conflict with the controller's professional instincts. Even more frustrating is the fact that several airlines do not understand why flow control is being imposed. The wrong ATC units are blamed for causing late departures (especially Maastricht, which is central to the European Airways network) despite their attempts to find alternative, more beneficial routings. Air Traffic can only be expedited when the facilities exist to make such expedition safe! The prime objective of ATC is and always will be SAFETY. The Spanish controllers should be commended for their action in taking the necessary precautions to safeguard this, the most important of all considerations. However, frustrated passengers in transit lounges throughout Europe, waiting to begin their holiday in the sun, will be told "Flight further delayed due to ATC restrictions". Few will realise that the prolonged wait is in their own interest - fewer will sympathise with the Spanish controllers who are forced to work procedurally.

So what is the answer? In Spain's case, the timely introduction of new equipment might have saved the country a great deal of the tourist revenue which is now being lost, and which would have, in no small way compensated for the initial financial outlay. Over the broader spectrum, as long as aircraft cannot be utilised to the maximum extent due to ATC deficiencies, a lot more money will be lost, be it from tourists' holiday expenditure, delayed business transactions, or even fares on taxis and public transport serving airports. The loss of airline profits may lead to eventual bankruptcy, creating further unemployment in

Aviation and its associated industries. Ideally, every country should possess the most modern ATC system available, operated by competent, highly trained and contented personnel.

The morale of the controller is probably the most universally neglected factor contributing to his personal efficiency. This may be attributed to the widespread basic lack of understanding of his human and professional needs.

As long as the controller is treated as Aviation's second class citizen, fully effective Air Traffic services can never become a reality. The possibility of achieving the absolute optimum ATC network is even more remote. Within Europe, certainly, the artificial limits of national boundaries, with the compression of airways within their confines, form a barrier to the safe and efficient conduct of flights. Even the most modern centre can become saturated when dense traffic starts converging on where the airways have been sandwiched together - the congestion over certain points is unavoidable at present. The transit time from State to State is frequently only a few minutes. This causes a lot of inter-unit coordination work for controllers, and means several frequency changes within a short time, and interrupted climbs or descents for aircrew.

Not only should all ATC installation contain the latest hardware, but the equipment should be compatible with and "on line" to that of all adjacent units. Flight plan information could then be automatically transmitted in updated form from departure point to destination after only one AFTN teletype. Identification of aircraft could be maintained from start-up to shut-down using one ORCAM code per flight, and blind (automatic) radar handovers. Coordination, revisions, estimates and strip-marking would then be kept to a minimum, leaving controllers more time to concentrate on the traffic picture, with the aid of automatic conflict detection. Furthermore, the national boundaries should be completely ignored. The route structure could then be completely revised and the airspace divided into more rational, workable segments using parallel and one-way airways and thereby giving a reduction in the number of conflict points.

This is, of course, an unattainable Utopia, especially with present trends. The creation of Eurocontrol should have brought about a much better integrated European control system. Yet some signatories to the Convention are only utilising the benefits of a centralised administration whilst maintaining a completely nationalistic attitude towards the operational aspects. The Eurocontrol ATC licences and Instilux training are not even recognised by

some of the Organisation's member States! Britain and France have continued to develop their own systems independently; Holland is in the process of re-equipping to its own standards, whilst the Federal Republic of Germany has decided to nationalise the Eurocontrol-developed Karlsruhe Centre. In Ireland, the events surrounding the building of the „Eurocontrol“ Shannon Centre could make it a nationally operated living legend. The Brussels/Luxembourg and Hannover Civil/Military areas controlled together in the Maastricht UAC are under increasing threat of decentralisation.

The European Reality is rapidly moving in the opposite direction to the Ideal. Air Transport can only suffer from the current retrograde thinking. And in the end, how many outside of the ATC environment will understand why, or even care? The family that has been waiting for an extra three hours to board its holiday flight will still only be told „Further delay due to ATC restrictions.“

M.J. Lewis

Even the best...

(Flight International 25 DEC. 76)

"Eurocontrol 5-year plan approved"

"The EUROCONTROL policy and financial programme recently presented to the Permanent Commission in Brussels has been adopted, and will form the basis for development of Eurocontrol air navigation services over the next five years.

The organisation's budgets were presented, on a trial basis, in European Accounting Units (one EAU equals about \$1.2), investment credits amounted to 21.58 million EAU, and operational costs for the seven member states are estimated at 29.85 million EAU. Operating costs of the Benelux and West German region is estimated at 48.01 million EAU.

The fourth report of the Permanent Commission study group adopted as a basis for continued group working, but with the reservation that this decision may be reversed when the full report becomes available. The development of a new air traffic control centre, the 11e de-France centre at Rheims, was approved. This will assume control of all current Paris centre airspace, except the Paris terminal control region.

A proposal that operational positions at the Karlsruhe centre should be manned by controllers belonging to the "competent national authority" was approved as a long-term objective. Karlsruhe should become operational, with Eurocontrol controllers, in

February 1977. New tariffs and route fees, due to come into force on April 1, 1977, were also approved."

Many of the trainees recruited for Karlsruhe have already been forced into non-controlling jobs due to its renationalisation. They joined Eurocontrol to represent their own countries within a forward-thinking multinational cooperative as Air Traffic Controllers. Those facing redundancy will find little solace in knowing that even "Flight" can make mistakes - from the beginning, only BFS controllers will be safeguarding the Karlsruhe airspace.

That meteor...

Sitting forlornly out on one of the old readiness pads at Beek airfield is a Gloster Meteor, an aircraft whose shape was once familiar in European skies in the colours of the Belgian Air Force, the Dutch Air Force and the R.A.F. among others. Of the thousands built between 1943 and the late fifties there is now only a handful still flying, these being with the R.A.F. at Brawdy, the French Air Force at Cazaux and Brétigny, and a couple with private owners in the U.S.

The one at Beek was originally built for the R.A.F. as a T. Mark 7 two-seat trainer serial VW417. In November 1955 it was transferred to the KLu with its present serial I-320 and used by the JACHTVLIEGSCHOOL (Fighter Flying School). There it remained only three years until struck off charge in December 1958. Since then it has sat at Beek. The original intention was probably to use it as a "gate-guardian" but it ended up being used as an attraction. One could visit it with the kids and for a "kwartje" or so sit in the cockpit. Needless to say these young visitors took their toll of the aircraft and it eventually became very delapidated. About three years ago it got a complete respray but around then the apron was being extended to provide more aircraft parking space, so the decision was taken to move the Meteor to the Eurocontrol side of the airfield. And there it sits to this day, an ignoble end to a fine aircraft.

On the R/T

During a slack period, one temporarily unoccupied controller was giving some virtuoso bird impressions. These were unfortunately picked up by an open microphone.

BA XXX: "Er, Maastricht, are you training cuckoos down there?"

WEC: "Negative Sir, we're all fully qualified."

CIVIL AVIATION AUTHORITY

Commercial Pilots Licence (Irish) Written Examination

Time Allowed 3 Hours

Pass 75%

Candidates Full Name.....(5 marks)

1. On the front of the VHF radio set is a switch marked "ON" and "OFF". In which of these two positions can you expect to receive the best reception? (10 marks)

2. What is the main airport in Eire situated on the bank of the river Shannon?

a. Shannon
b. Balmoral
c. Ulan Bator (5 marks)

3. a. When an aeroplane takes off does it GO UP/DOWN/SIDEWAYS/NORTH?

b. When you take off do you go UP/DOWN/SIDEWAYS/NORTH/DON'T KNOW? (10 marks)

4. Name the odd man out

VC10/DC8/QE2 (5 marks)

5. If an aeroplane has a lot of DRAG does it mean:

a. Pilots are dressed up as hostesses
b. Resistance to airflow
c. Being towed behind a tractor (5 marks)

6. If two red balls are displayed on the Signals Mast by the Control Tower, does it mean:

a. The controller is a Red Indian
b. There is a "balls up" in ATC
c. There is a glider flying (10 marks)

7. How would you know that you were flying along airway RED ONE if you were colour blind or at night?

8. Which undercarriage position do you normally select for landing? Give reasons. (5 marks)

9. If the visibility at an airport was reported as 100 Metres, what kind of weather would you expect to find?

a. Fog
b. Thunderstorms
c. Windy

If ONE METRE equals 39 inches, how far is 100 METRES. Give the answer in metres. (10 marks)

10. Is an ISOBAR an:

a. Icecream parlour
b. Czar of Russia
c. Line of equal ATMOSPHERIC pressure (5 marks)

11. What is the opposite to a COLD FRONT?

a. Hot behind
b. Warm front

(5 marks)

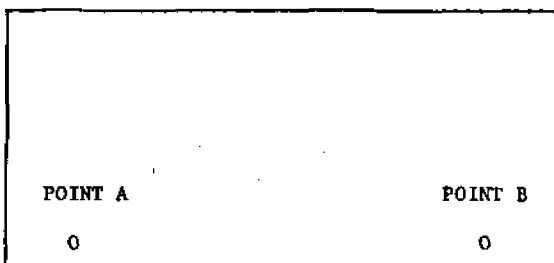
12. Who was the first person to fly the English Channel?

a. Dr Crippen
b. Eamon Andrews
c. Victor Mike Charlie
d. M. Bleriot
e. Attila the Hun

(5 marks)

13. Plotting

You are flying from Point A to Point B on the chart below. With the aid of a rule draw the track of the path you would hope to follow. Extra paper available. (20 marks)



Adsel - the major development in air traffic control

Secondary Surveillance Radar (SSR) has been widely recognized as a most important source of data for Air Traffic Control, providing range and bearing information together with the identity and height of all aircraft equipped with SSR Transponders. SSR has allowed the introduction of automated Air Traffic Control systems that provide A.T.C. controllers with readily available data on which to base their decisions, ensuring an efficient and safe service to users of crowded airspace. It is vitally important that the quality of the SSR information is maintained and improvements are made where required.

Although SSR has been continuously developed since its introduction by Cossor Electronics Limited, two areas of the present system cause concern for the future and a new approach is required to overcome these problems.

All SSR ground stations transmit interrogations on the same radio frequency (1030 megahertz) and all aircraft transponders reply on their common frequency (1090 megahertz).

Therefore a Transponder reply message to a ground-station Interrogator will not only be received by that Interrogator but by other interrogators within radio range. These replies will be received out of synchronism and are termed 'fruit'. The main effect of fruit is to cause a decrease in the accuracy of SSR positional information.

Another difficult problem arises when aircraft are flying in close proximity and their Transponder replies overlap. This condition, known as 'garble', can lead to the incorrect display of the identities and heights of aircraft. It is predicted that, with the forecast growth of air traffic, SSR systems will become saturated with fruit and garble situations will occur more frequently than at present.

Fruit can be reduced to some extent by applying to SSR Interrogators 'noise abatement procedures', such as limiting the number of installations together with their output power and rate of interrogation. However these limitations in themselves compromise the performance of the SSR system.

As a solution to these problems, a SSR system that interrogates selectively is being developed by Cossor Electronics for the U.K. Civil Aviation Authority. This system, designated ADSEL, was conceived by the Royal Radar Establishment (R.R.E.) Malvern, Worcs. and

now known as the Royal Signals and Radar Establishment (R.S.R.E.). ADSEL is entirely compatible with SSR and operates on the same frequencies as those used for SSR systems. The ADSEL ground station is similar to SSR systems currently in use but is more versatile in that it can interrogate aircraft, as and when required, and is capable of accurately measuring the position of an aircraft with the reception of a single Transponder reply. Therefore the number of interrogations can be significantly reduced, ensuring a corresponding reduction in fruit. The Interrogator will be controlled by a computer which can reduce the transmission power on selected interrogations to a minimum to achieve the desired range, again reducing the amount of interference received by other ground stations. ADSEL Transponders will be of an improved design enabling a better range accuracy to be achieved.

The capacity of ADSEL message formats is greater than that of SSR, with over 16 000 000 aircraft identity codes as compared with 4096 for SSR. So ADSEL will allow the allocation of a discrete identity code to every aircraft fitted with an ADSEL Transponder. Thus the ground station can interrogate an individual aircraft and receive a reply from that aircraft only, and aircraft flying in close proximity can be interrogated separately, ensuring freedom from overlapping replies.

The increased ADSEL message capacity can be utilized to provide far more information than the current SSR system, not only from the air to the ground but also from the ground to the air. At present there is no firm operational requirement for the use of this data link capability which could be used to transmit routine air traffic messages to aircraft or to send additional aircraft information, such as rate of turn, to the ground. However, an initial proposition is that a ground station can relay received height information back to the aircraft in order that aircrew can cross-check the transmitted data against the actual height of their aircraft, ensuring that separation standards are not compromised by false height data.

Since ADSEL is fully compatible with SSR, an ADSEL ground station can operate as a SSR Interrogator in addition to performing its ADSEL function, and an ADSEL Transponder also will be capable of replying to a SSR Interrogator.

In operation, the ADSEL ground station will transmit normal SSR interrogations with an additional pulse. SSR Transponders will ignore the additional pulse and will reply in the normal manner, but ADSEL Transponders receiving the additional pulse will reply with an ADSEL message, giving the discrete address code allocated to the aircraft. This address code

together with the position of the aircraft will be stored by the computer controlling the Interrogator. Then the computer can instruct the Interrogator to address the aircraft with that discrete code only. This ADSEL interrogation will begin with two pulses which, when received by SSR Transponder, will be interpreted as a Sidelobe Suppression (SLS) signal, as currently used in SSR, and therefore the SSR Transponder will not reply. ADSEL Transponders will await the address code which succeeds the two pulses, and only the ADSEL-equipped Transponder with that address code will reply. Once an ADSEL-equipped aircraft is under surveillance by an ADSEL ground station, the Transponder can be caused to ignore normal SSR interrogations, again reducing the amount of unwanted interference.

In a short while, the first ADSEL experimental ground station produced by Cossor Electronics will be commencing trials, conducted by the Civil Aviation Authority and R.S.R.E., with ADSEL Transponders carried by aircraft operated by C.C.A., R.S.R.E., and British Midland Airways. These trials will evaluate the ADSEL system fully to ensure that high standards of accuracy can be maintained in conditions that would severely limit normal SSR performance.

A similar system to ADSEL is being developed in the United States of America and is known as the Discrete Address Beacon System (DABS). Although DABS initially differs from ADSEL in various parameters, agreement between the F.A.A. and the C.A.A. early in 1975 has ensured that the two systems will be compatible, allowing co-operation in future development and leading to international

recognition and approval of selective address SSR.

The introduction of ADSEL will be a major development in Air Traffic Control and will ensure that, with the increased growth of air transport, A.T.C. controllers will have a system that gives better positional accuracy than the SSR system and at the same time eliminates garble. A.T.C. controllers will also have access to a data link for the transmission of a great deal of additional information when required.

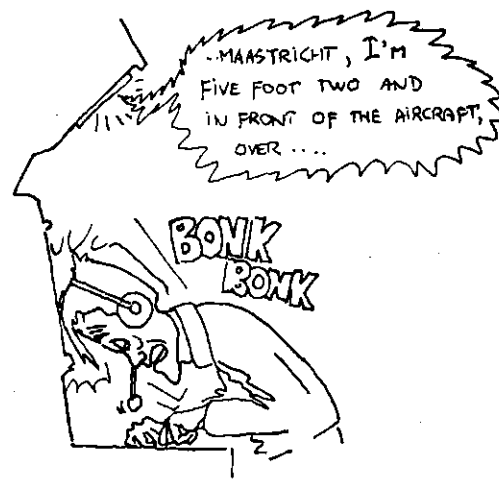
Nigel P. Ross

(Cossor Electronics Limited, Harlow, Essex, England)

An appeal on behalf of Amro

Some time ago, the Guild's bank account number was changed. A few standing orders are still made out to the old number. To save the AMRO Bank an overload of incorrect paperwork, and to prevent the Treasurer's premature balding, Members are kindly requested to check their subscription standing orders. The correct version should read: Eurocontrol Guild of Air Traffic Services, Maastricht
Account Number 46.86.12.254.

**ROGER
WILCO**



Action

Because of the increasing threat to the very existence of Maastricht UAC, copies of the following letter from EGATS have been sent to more than 150 airlines which would be affected by the demise of the Centre.

"Dear Sir,

The adverse developments within EUROCONTROL compel us to bring to your attention the following facts:

1. The further extension of services by EUROCONTROL, Maastricht UAC, has come to a standstill.
2. We are of the opinion, that for you, as a user of these services, EUROCONTROL and in particular Maastricht UAC, should continue after 1983. The present international European Convention expires in 1983.
3. The growing nationalism amongst the seven member-states of EUROCONTROL is one of the main contributory factors.
4. The knowledge and experience gained with our very advanced ATC-system may be lost in the near future and this might be detrimental to the safe and expeditious handling of international Air Traffic.
5. We hope that you will show your confidence in a European Air Traffic Control Service and support its continuation and expansion. We invite you to make known your support in any way that you consider appropriate.

Yours sincerely,
(EGATS Board)"

A further letter, explaining the situation in further detail, has also been sent, the contents of which will be published in our next issue.

And reaction

Encouraging response to this first letter has already started arriving. Aviaco have expressed their support; the reply from the Kuwait Airways Corporation reproduced below speaks for itself.

"Dear Sirs,
We are very sorry to know that further extension of Eurocontrol, Maastricht UAC, has come to a standstill.

We strongly favour continuation as we feel Eurocontrol is doing a great service to the aviation community. With the present air traffic situation in Europe, and it seems to be worsening if anything, we feel Eurocontrol can act as a hub in vital coordination in ATC matters, which is of paramount importance to flight safety. Also the revision published by Eurocontrol in levy of route charges, AIS etc. cannot be easily fragmented. We should have thought that Eurocontrol will gradually expand, covering at least all western European countries instead of reverting to the earlier days of national fragmentation.

We wish to place on record our unqualified support for continuation and expansion of Eurocontrol.

Yours faithfully
D.R. Cousik
Navigation Officer"

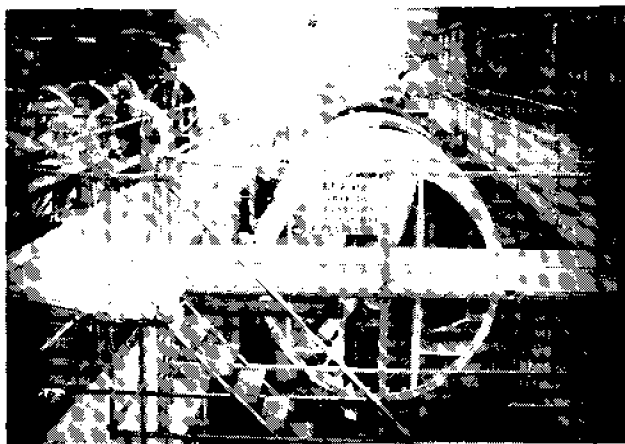
Annual General Meeting

thursday
14th april 1977
at 1930 hrs
in the „Euromotel"



Visit to Fokker

On the 3rd of February the Guild organised a visit to the Fokker factories in Amsterdam. Our "Luxury Transport" departed on schedule from Maastricht UAC with 31 people on board, all of us being welcomed by Danny Grew on behalf of the Guild. A brief stop was made en route to have coffee, and then we arrived at the Fokker factory reasonably close to our ETA. Mr. Swing received us on behalf of Fokker, and after refreshments were served, the visit proper began with a lecture, illustrated by films, about the assembly, sale and overhauledage of the various Fokker aircraft, such as the F27, F28, VFW614, and A300B. It became obvious from various facts and figures quoted to us that the F27 Friendship has been a very successful aircraft, selling in large numbers all over the world. By comparison the other aircraft have not yet acheived such wide recognition. After a brief tour of the milling department, lunch was made available in the Fokker canteen.



After lunch, the highlight of the visit was reached, particularly for our more technically minded aviation enthusiasts, with a walk down the assenbly lines of the F27 and F28. There followed immediately another two films giving further insight into working at the Fokker factory, and about the performance characteristics of the F28 Fellowship. The party then departed from Fokker to visit the Aviodome Airmuseum at Schipol, where we stayed for about one hour. In addition to the old aircraft and models of both aircraft and spacecraft, we were surprised by yet another film, called "Flightplan of the Future", in which we saw that their 'future' was in fact our 'past' when notice was taken of the equipment used. Thereafter, Martinair welcomed us cordially in

the person of Mr. van Vliet, who gave us a slide-show covering all aspects of Martinair and its associated businesses. A visit to the heavily loaded planning board in the logistics department, preceded a social drink during which, among questions and jokes (we hope), the words "flow control" were often heard. We had dinner as served on board Martinair aircraft.

Mr. Vliet very kindly and at short notice arranged a visit to the loading of a Martinair cargo DC10 which brought to a conclusion a very interesting and constructive day. The journey back was wet, inside and outside the coach.

We hope that the further planned excursions will all be as successful and well - supported as this one.

Martin Germans

„Eurocontrol” route charges system - the facts and the fiction

The International Air Carrier Association represents airlines which specialise in charter operations. The paragraph below is to be found in their brochure "Charters - Yesterday, Today and Tomorrow."

"EUROCONTROL. IACA has taken a very strong position with respect to excessive Eurocontrol charges. It speaks for the charter industry to that body in a stand against unreasonable actions by Eurocontrol to increase costs."

Several nations have adopted a policy of recovering the costs of air traffic services from the airlines and private consumers. These "route charges" are used to subsidise the control of upper and lower airspace, plus the installation and maintainance of ground navigation facilities.

Although IACA appreciates that route charges are certainly not used merly to finance Eurocontrol Operations or Maastricht UAC, there seems to be fairly widespread belief that airlines are being financially penalised in order to keep the Centre running. This is used by some as an argument against the existance of any Eurocontrol Centre, and against the Organisation.

By a Multinational Agreement, the Eurocontrol Member States implemented a route charges system which came into force on 1st November

1971. By bilateral agreements, the Member States requested the Organisation to collect these charges on their behalf and to reimburse them.

For this purpose, the Central Route Charges Office created by Eurocontrol, collects the basic data on every flight from National Administrations, calculates the charges, sends the bills to the users, collects the amounts, and every month reimburses the National Administrations. (Only receipts corresponding to collection costs of the charges are not reimbursed.)

Four non-member States have requested the Eurocontrol Organisation by bilateral agreements, to collect the route charges on the

same basis, under the same conditions (Austria, Spain, Portugal and Switzerland). The policy of route air navigation facilities costs recovery is determined by Ministers of the participating States, acting in their double capacity (for the Eurocontrol Member States) of national authorities and members of the Permanent Commission.

The recovery rates have been and will be as follows:

Nov. '71-Oct. '73	15%	basis: 1969 costs
Nov. '73-Oct. '75	30%	basis: 1971 costs
Nov. '75-Mar '77	60%	basis: 1973 costs
Apr '77-Mar '78	60%	basis: 1975 costs
Apr '78-Mar '79	75%	basis: 1976 costs
From 1st Apr 1979 no decision.		

The latest figures concerning reimbursements to the National Administrations are:-

	1975	1976
Belgium/Luxembourg	2,529,000-	5,445,000-
Federal Republic of Germany	17,285,000-	29,439,000-
France	12,775,000-	24,896,000-
United Kingdom	16,466,000-	29,093,000-
Netherlands	2,912,000-	6,026,000-
Ireland	1,254,000-	2,030,000-
Switzerland	2,785,000-	6,164,000-
Portugal (Fir Lisboa)	1,250,000-	1,880,000-
Portugal (Fir Santa Maria)	841,000-	861,000-
Austria	2,735,000-	4,777,000-
Spain/Continental Firs	6,706,000-	10,943,000-
Spain/Canaries Firs	1,089,000-	2,150,000-
	\$68,627,000	\$123,704,000

N.B. If Eurocontrol did not exist, airlines would certainly still have to pay route charges, but to each State separately. Without the benefit of a centralised agency, the costs of administering the collection of such charges would be bound to increase, creating even greater operating expenses for the airlines.

Roger! (I think)

Whilst there is ever-growing controversy over the use of bi-lingual R/T phraseology in ATC, it might be assumed that two nations sharing a common language would employ the same expressions. This is not the case, however, comparing the standard terminologies of the United States Air Force and the Royal Air Force.

Can you match the equivalent terms?

USAF

1. military power
2. afterburner
3. flare
4. touch and go
5. mobile control (RSU)
6. full stop
7. maintenance man
8. pattern

RAF

- a. reheat
- b. talk down controller
- c. roller
- d. land
- e. circuit
- f. visual circuit
- g. run in and break
- h. undercarriage

9. practice diversion
10. 360 overhead
11. alternate (airfield)
12. initial
13. go to alternate
14. landing gear
15. drag chute
16. speed brake
17. initial approach fix (IAF)
18. low approach
19. instrument letdown
20. final controller
21. closed pattern
22. channelized radio frequency
23. pitchout
24. gear check
25. base leg
26. overshoot final
27. arresting cable
28. downwind
29. MA1A
30. missed approach
- i. air brake
- j. overshoot
- k. pattern
- l. break
- m. finals (position)
- n. hookwire
- o. downwind
- p. barrier
- q. overshoot high
- r. fly through
- s. three greens
- t. stud
- u. dive
- v. alpha point
- w. brake chute
- x. divert
- y. diversion
- z. P.D.
- aa. engineer
- bb. caravan
- cc. very
- dd. cold power

Fast recognition

Concordes cruising at speeds of 1,350 m.p.h. are now in regular airline service linking Europe with North America, South America and the Middle East. Passenger response to the time-savings on Concorde routes has been excellent. British Airways and Air France Concorde flights serving Washington are consistently fully booked, with both airlines also reporting heavy advance booking for some months ahead.

It is beyond argument that speed is the airline industry's most saleable product to the regular business traveller who provides the bulk of airline revenue on most long-distance flight. Concorde gets there in half the time, opening up a wider window for scheduling departures during saleable hours of the day and offering consequent reductions in boredom, fatigue, and disturbance to the body's "clock".

A three and a half hours transatlantic flight can be tucked into a morning, afternoon or evening, and the Pacific spanned in a working day. Surveys carried out in the United States and Japan have well illustrated the worldwide appeal, especially to business travellers, of Concorde's time savings.

Concorde passengers are travelling in the world's most thoroughly tested airliner.

Certification for airline use in late 1975 followed the satisfactory conclusion of over 5,000 hours of flight testing by eight Concordes - more than three times as long as a typical subsonic aircraft programme. In addition, there have been exhaustive material testing, thousands of hours of aerodynamic research in subsonic and supersonic wind tunnels, and comprehensive systems testing on specially-built ground rigs.

Two complete Concorde airframes have been devoted to ground testing, one for static tests

and the other for fatigue tests. The object of the latter is to ensure that the number of hours built up on the test airframe is always three times greater than that acquired by any airline Concorde. All that adds up to the most extensive test programme ever achieved to guarantee the safety of a civil aircraft.

(BAC Bulletin)

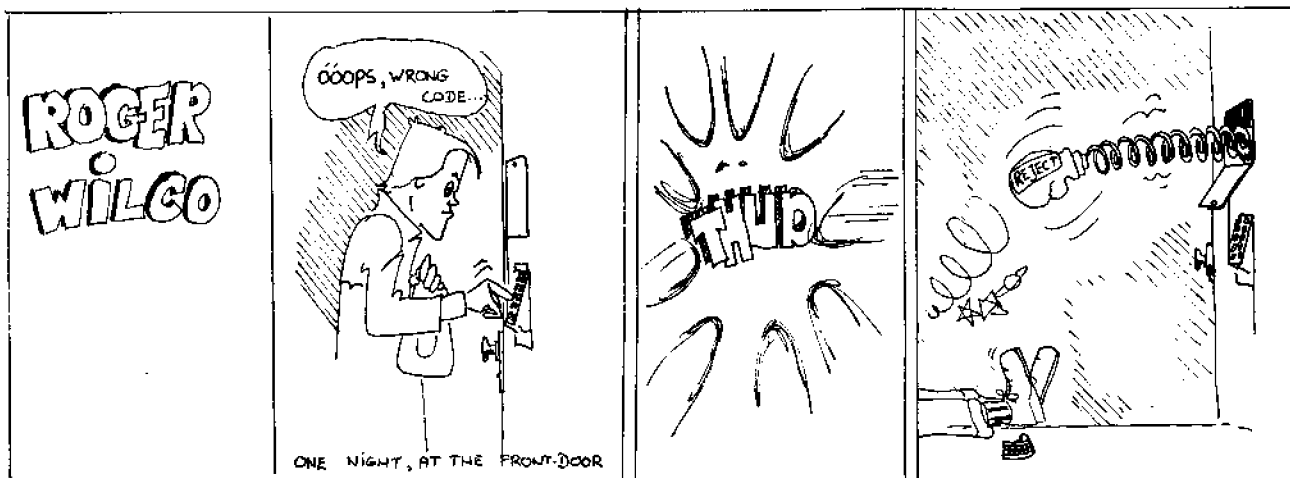
B.P.C.

In keeping with continuous development at Maastricht, a new and unique position was recently created. Its title being the Balcony Planning Controller, it will normally be manned by one staff member. However, during visiting hours and feeding times, there will also be a Balcony Planning Assistant. Although not yet specified due to administrative delays, it is expected that it will carry out the following functions:

1. Control of dangerous flights, displayed in the appropriate colours.
2. Identification of all aircraft and persons at the main door, and transponding on the correct code.
3. Keeping a log on all official and semi-official rumours.
4. Warning landing aircraft and staff with sports cars of holes in the approach road.

Furthermore, negotiations are taking place with a prominent radio and television organisation for exclusive rights to retransmit all speech, so that the local public can also enjoy Air Traffic Control in their own homes.

The time, financial effort and preparation for this new position could perhaps have been used elsewhere. Nonetheless, it is nice to see some colour added to our environment.



„Say again your type”

A number of new aircraft types have appeared in the European airspace over the past few months and, to keep you up-to-date, basic data on some of these has been tabled below:

A) BOEING 747 SP (SP = Special Performance) ICAO code: B7SP

Type: Shorter, lighter version of the B747 with a somewhat simpler wing but retaining the high power of the basic B747, giving faster cruising speed at higher altitudes and, with its bigger fuel tankage, greatly increased operating range.
Engines: 4 turbo fan. of 48,000 Lbs/213.5 kN each.

Max. weight: 660,110 Lbs./299.370 Kgs.

Climbing tas: 420 Kts.

Cruising tas: 510 Kts.

Operating HT: FL 390-450.

Max. range: 5,712 NM's.

Pax: 360.

In service with: PA, IR, SA, RB.

B) BEECHCRAFT KINGAIR 200

(Also known as the C-12 with the USAF, and as the U-25 with the US Army)

ICAO code BE20, C12, U25.

Type: Light transport and communications aircraft.

Engines: Two turbo-prop of 850 SHP each.

Max. weight: 12,500 Lbs./5680 Kgs.

Max. cruising speed 285 Kts.

Max. range: 1,900 N.M.'s.

Operating HT: FL 200-270.

Pax: 10.

C) CESSNA CONQUEST

ICAO code C441.

Type: Light business aircraft.

Engines: Two turbo-prop of 625 SHP each.

Max. weight: 9850 Lbs./4468 Kgs.

Max. cruising speed: 285 Kts.

Range: 1945 NM's.

Operating height: FL 200-260.

Pax 7.

D) I.A.I. WESTWIND 1124

ICAO code: BK 24.

Type Business Jet.

Engines: Two turbo-fans of 3700 Lbs./16.8 KN thrust each.

Max. weight 22850 Lbs./10.364 Kgs.

Max. cruising speed: 431 Kts.

Range: 2440 NM's.

Operating height: Up to FL 390.

Pax: 10.

E) PIPER PA 31T CHEYENNE

ICAO code PA31.

Type: Light business aircraft.

Engines Two turbo-prop of 620 SHP each.

Max. weight 9000Lbs. /4082 Kgs.

Max. cruising speed: 283 Kts.

Range: 1350 NM's.

Operating height: Up to FL 260.

Pax: 5.

Paris air show 1977

This year the Paris Air Show is again being held at Le Bourget from June 2nd until June 12th. This is a chance for everyone to get a more intimate view of some of the civil and military aircraft which are currently, or shortly due to be operating in the Maastricht airspace. A number of people have expressed interest in going to the Show and EGATS TRAVEL has tentatively planned to arrange a 2-day trip to the Paris Air Show on the 10th and 11th of June.

Negotiations with hotels and the Air Show's administrators are still in progress, and therefore final details are not yet available. However, it is estimated that the price, which will include transport (by coach), accomodation, entrance fee to the Air Show and a morning sightseeing tour of Paris, should be well under 100 guilders.

Provisional Programme

- Friday morning
Coach departs 0630 from EHBK to LFPB
- Friday afternoon
At the Air Show
- Friday evening
Transport to hotel; evening free
- Saturday morning
Sightseeing tour of Paris City
- Saturday afternoon
Free
- Saturday evening
Coach departs 1800 from Paris City for EHBK.

An alternative proposal is for a one-day trip, also by coach, on the same-week-end. To give the committee some idea of the demand for a trip, those interested should fill in the form below and return same within the next few weeks to Locker No. 70 for the attention of Mr. D. Grew.

cut off here

I, the undersigned would like to join the EGATS trip to the Paris Air Show.

Preference: 2 day trip ☐
 1 day trip ☐

Name:

Signed:

Date:

On our behalf

Together with its other activities, EGATS has revived and renewed its Operations Committee. The work of this Committee will be to consider and endeavour to obtain improvement in the operational area. That is to say that for and through the the assistance of Guild Members, efforts will be made to strengthen some weak areas in the day to day tasks of ATC staff. With this in view, an 'Operations Committee and Guild Communication' sheet has been prepared. These can be found in the Guild mail case near the notice board. Four particular points have been specified for staff members with comments and suggestion as yet unexpressed.

Items 3 and 4 have been listed to allow a list to be compiled of technical defects which could have operational consequences. Members are requested to cooperate in compiling this information in their own interest.

Whenever possible, the Operations Committee will endeavour to evaluate and study future projects prior to implementation. This would act as a pre-operational filter to improve such projects and make them more immediately effective and acceptable.

It is hoped that Members will participate in this effort by volunteering their comments and suggestions.

To begin with, here follows the proposed format for the executive control message. The ECM will be a major part of the project to replace our current radar strips with an electronic display.

ETA	BPN	FL	C / S	CFL INFO	SSR	TYPE	DEP	DEST	BPX	NEXT RP	HOLD
1047	BKD	♦ 290	LH123	330	0346	B727	EGLL	EDDF	NTM	BKD ♦47	—
1045	CMB	-350	SK566	350	'0122	DC9	LEMD	EKCH	ALS	CMB ♦45	—
			BR213	270	0332	HS21	EGLL	EDDF	NTM	KOK-46	—
1040	SPI	♦ 210	00SJC	210	2770	B707	EBBR	LSGG	BLL	SPI-40	—

(N.B. 'FL' = as now printed on radar strips)

Kindly remember, your comments to the Ops Committee, whether positive or negative, will be appreciated.

Tony Weymes

Some of the other subjects under review by the Ops Committee are:

- Relocation of the flow control position
- Alleviation of West sector frequency congestion

- Change of range scale for West radar
- Relocation of OEC Tx switch
- TID and scope for OEA
- Rearrangement of Wx display, and inclusion of EHBK
- Delegation of flight levels for EBBR in/outbounds
- Delegation of Rhein airspace to resolve border problems at DIK
- Possibility of UR7E northbound

Action

Letter to the Director

Dear Sir,

It has come to the notice of the Guild that the budget for Controller Familiarisation flights has been cut by 50%. Could you please confirm for how long this situation will exist?

It is very important that all control staff have at least one familiarisation flight per year together with where possible, a visit to an adjacent centre.

Such a reduction will have a direct affect on the controllers' awareness of cockpit/company procedures and therefore on operating efficiency.

In this respect the Eurocontrol Guild of Air Traffic Services cannot support any reduction in the availability of familiarisation flights and strongly recommend that this decrease be reconsidered.

Yours faithfully,

R.S. Bartlett,

President, EGATS.

Food for thought?

Dr. F.S. Preston, Principal Medical Officer, British Airways, on the subject of food and the controller:

Are you one of these diet cranks who cut out breakfast and rush off on duty with a cup of black coffee and a cigarette? If so, you may be endangering not only yourself but the safety of aircraft under your control.

The body, if it is going to function correctly, and particularly the brain, demands a constant level of circulating blood sugar. This is the fuel we require to operate in a normal and rational manner. Normally, when we eat a meal, the blood sugar level rises and due to the fact that most foods we eat are converted into sugars and fats in the body, this high post-meal level, will last for 2-2½ hours when it gradually falls.

Starvation, on the other hand, will lower the blood sugar and one can include in this the missing of the odd meal. In such a situation the blood sugar will fall to a level at which the body begins to operate on a low key. The brain and nervous systems are amongst the first affected and there is a noticeable falling-off in brain power, particularly the ability to exercise judgement and make decisions.

Normally the body can mobilise extra sugar by breaking down stored fat - the stuff you have tacked around your waist and elsewhere. But this of course takes time - and in fact it might be several days before you begin to mobilise these overload tanks we carry around and so notice you are getting leaner.

The odd-meal-misser is in a different category. He has all the problems of a falling blood sugar level, with its subtle effects on brain power, without the ability readily to reverse this process by mobilising his fat reserves. He is therefore very much at risk as far as instant action is concerned and certainly as far as instant decisions are concerned.

There is an additional hazard to the night-shift controller. Due to the fact that we have in-built bodily rhythms-so-called "Circadian Rhythms" - the body's ability to digest and absorb food during the long watches of the night is markedly reduced. In fact most of our digestive processes shut down and we are even less able to increase our blood sugar on demand at night.

Skipping meals is not a good practice, but skipping breakfast is probably the worst sin of all. Why is this? The answer is that during the night our blood sugar, together with other bodily systems, falls to a low level. This is quite usual because the body normally "rests" at this time - that is for all people who work during daylight and sleep during hours of darkness. As controllers, however, are not in this category,

you have to fight your bodily rhythms while you are controlling at night. Amongst these rhythms are a falling blood sugar and body temperature. So, the moral is obvious - if you want to remain at peak performance, one of the things you must do is to maintain an adequate blood sugar level. Do **not** omit meals while on duty. This can put you in jeopardy. A quick boost, if necessary, can be got from drinking two cups of hot, sweet tea. Remember you need fluid replacement as well as energy. Coffee is not so good as it acts on the kidneys to produce further fluid loss - the proverbial race-horse situation!

("The Controller.")

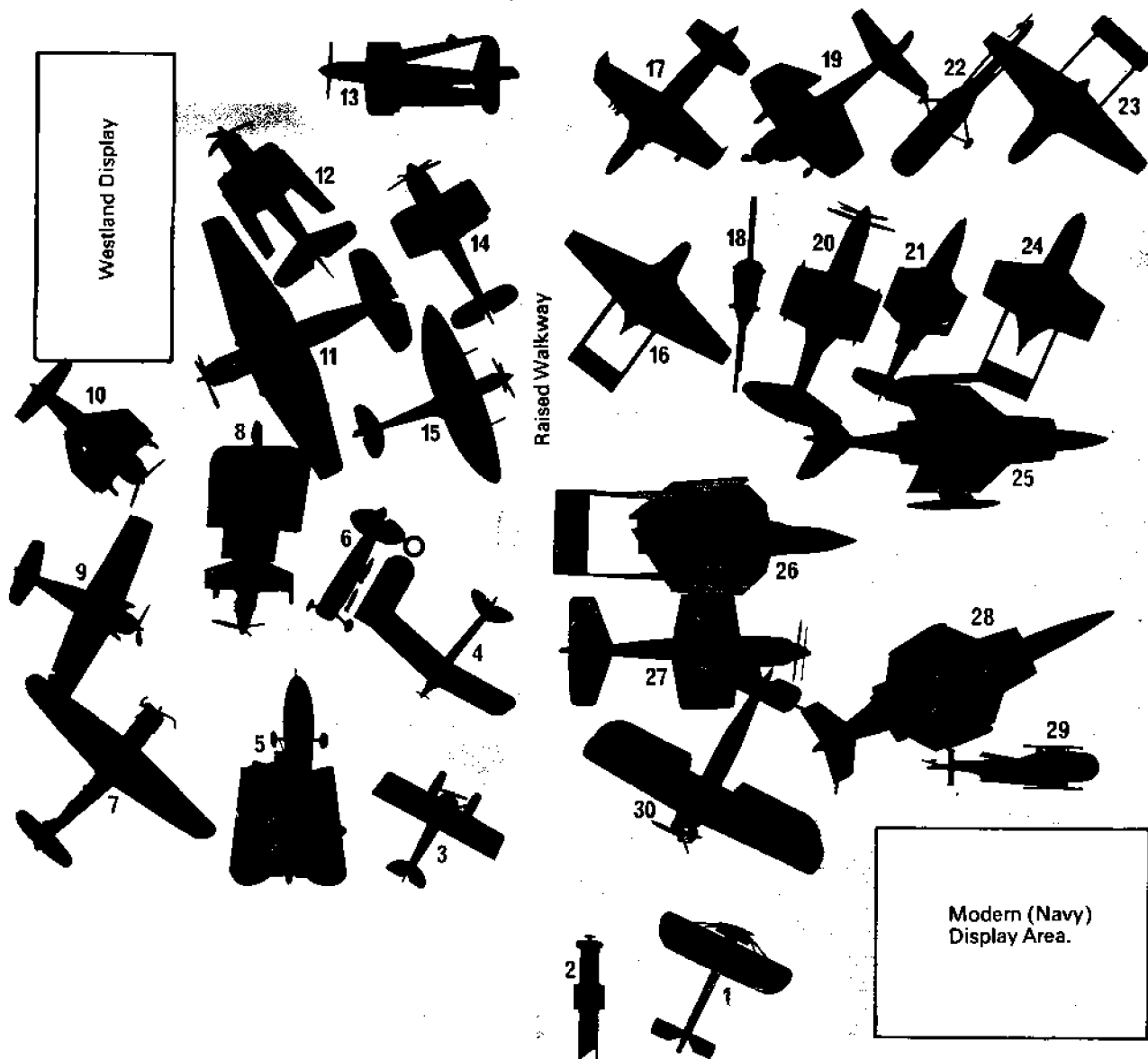
The fleet air arm museum

The West Country in England has long been a favourite tourist area. Before the opening of the M4 motorway, most traffic from the east would head out across Salisbury Plain, past Stonehenge and on into Somerset. Those taking this route could not fail to notice the small town formed by the Royal Naval Air Station, Yeovilton. So many motorists passing along the A303 stopped to watch the flying activities that in 1963 a small public enclosure was opened for them. To add interest, the Commanding Officer at that time decided to place the three historic aircraft on the Station (Seafire, Martlet and Swordfish) nearby. Many came long distances to see them.

Placing the aircraft in the open produced problems over maintenance, so it was decided to place them under cover in a hanger. The interest shown and the impetus added by the celebration of the 50th anniversary of the Royal Naval Air Service - predecessor to the Fleet Air Arm - in 1964, led to the decision to establish a Museum, where famous old aircraft could be housed, weapons and other exhibits could be displayed, and all kinds of records, photographs and documents be assembled and catalogued. For thirteen years the Fleet Air Arm has scoured the world to bring together a unique collection of aircraft and exhibits illustrating the development of naval aviation since 1910. In many cases, the aircraft are the only surviving examples of their type. Often they were found in strange, remote places, and, but for the Museum, a number of types of aircraft would have disappeared.

In World War II the most outstanding naval aircraft was the Swordfish, known affectionately as the 'Stringbag'. These aircraft sank or

- | | | | |
|----------------------------|------------------------------|-----------------------------------|----------------------------------|
| 1. Humber Bleriot | 9. Grumman Manlet | 17. Supermarine Attacker | 25. Supermarine Scimitar |
| 2. Short 184 Seaplane | 10. Chance Vought Corsair | 18. Hiller HTE 2 | 26. De Havilland Sea Vixen FAW 2 |
| 3. Sopwith Baby | 11. Grumman Avenger | 19. Douglas Skyraider | 27. Fairey Gannet AEW3 |
| 4. De Havilland Tiger Moth | 12. Grumman Hellcat | 20. Westland Wyvern | 28. Blackburn Buccaneer Mk. I |
| 5. Supermarine Walrus | 13. Fairey Firefly 4 | 21. Hawker Seahawk | 29. Saunders Roe P.531 |
| 6. Gloster Sea Gladiator | 14. Hawker Sea Fury F.B.11 | 22. Westland Whirlwind I | 30. Fairey Swordfish |
| 7. Blackburn Skua | 15. Supermarine Seafire 17 | 23. De Havilland Sea Vampire T22 | |
| 8. Fairey Fulmar | 16. De Havilland Sea Vampire | 24. De Havilland Sea Venom FAW 21 | |



damaged 30 warships, numerous U-boats, and over 350,000 tons of enemy shipping. Today the Museum has the only surviving specimen which can still fly, and the story of its survival is similar to that of many exhibits.

This Swordfish was sold by the Admiralty in 1945 and bought by Fairey Aviation, who afterwards dismantled and stored it. In 1954 Fairey set out to recondition it, but numerous

parts were missing or damaged. For months a search went on at junkyards, scrap dealers, spares dealers and different stores. Late in 1955, certain items having had to be made, the Swordfish took to the air. In 1959 it appeared in the film 'Sink the Bismark', re-enacting the attack by the Fleet Air Arm. When Westland took over Fairey's aviation interests in 1960, this Swordfish was presented to RNAS Yeovilton.

Another search was then instituted for spares. With help from many sources and voluntary work for numerous hours by Service personnel, it once again flew in 1970 and continues to fly on special occasions.

A search for a specimen and spares of another aircraft (Blackburn Skua) has led to a lake in Norway where one was shot down during a wartime raid. A Barracuda has been recovered from a bog in Ireland, and an Albacore was found in the hills of southern India.

Long before aircraft flew, the Royal Navy was experimenting with man-flying kites for observation purposes, and there is a replica and records of this. Nearby is a rare Sopwith Baby Seaplane, nicknamed the 'Jabberwock', which flew from ships in many parts of the world during the 1914-18 war. Another treasured possession (saved from a scrapyard) is the Walrus, christened the 'Shagbat', which did anti-submarine patrols and saved many lives in its Search & Rescue duties in World War Two. Besides the aircraft, many other interesting exhibits are to be seen, such as several scale models of ships and of an airship station, uniforms, medals, and dioramas of the Battle of Taranto and the attacks on Scharnhorst, Gneisenau and Prinz Eugen.

One of the most unlikely features is a Wall's "stop me and buy one" ice cream tricycle. On the introduction of Radar in early 1940, a number of these carts were commandeered in order to train Direction Officers (air defence controllers) in controlling interceptions. The tricycles were pedalled by Wrens and were fitted with a metronome to control speed, a compass and a radio receiver. The "bomber" trikes were set off on course, then the "fighters" were pedalled at a slightly higher speed under the guidance of the Direction Officer using his Radar. The system was cheap, effective, used no precious fuel, and was without serious hazards.

The Museum's latest acquisition might be quite a surprise to those of us who have not yet even had the opportunity to control one - nothing less than a Concorde. Prototype 002 made its last flight on 4th March 1976 when it was flown from Fairford to Yeovilton by Captain Brian Trubshaw who had also been the pilot on its first flight at Filton in 1969. In addition to the flight testing carried out, Concorde 002 made a demonstration tour of the Middle East, Far East and Australia in June 1972, flying 45,000 miles and visiting 12 countries. 002 has made 439 flights, was airborne for 723 hours and 29 minutes, and flew supersonically for 173 hours 26 minutes. It is now positioned alongside the Museum, having been specially prepared for public exhibition.

Due to lack of hangar space, there was once a serious danger that some irreplaceable aircraft would disintegrate from the corrosion caused

by exposure to the elements. An appeal was launched by the Museum, which relies on public sponsorship, for funds to finance an urgent rebuilding programme. The response has been tremendous, but still more money is needed as the number of exhibits is increasing all the time. Hopefully, the money will be found. Too much of aviation's heritage has already been lost forever. By preserving aircraft from extinction, the Fleet Air Arm Museum presents a unique collection not to be missed should you be in that part of the world.

(Information extracted from various Fleet Air Arm Museum programmes, and "Aviation in the Royal Navy" by kind permission of Cdr. D.C.B. White, OBE, Director)

Internal affairs

"Management attitudes towards staff may have a considerable effect on the efficiency of the ATC system. Such matters as training, shift systems, rotation of operating positions, rest facilities and reaction to human error can bear upon the morale and, therefore, the efficiency of the controller. The aim should be an atmosphere of mutual confidence and respect between management and staff."

(Final paragraph, "Future ATC systems" from "The Controller")

Attitudes

Several controllers were upset by an article in the December "INFO", in which management expressed disappointment in the response from the operations room of the free flu vaccinations. Figures quoted that only 5% of operations staff were inoculated, as opposed to 100% of the Directorate (3 persons), and 100% of the canteen staff (6 persons). In the event of an epidemic, it was stated that whilst practically all controllers would be off sick, the Directorate could rely on a full canteen service. One phrase used was "....the interest of staff is not in keeping with the wish of management to protect the services as well as possible".

Not mentioned was the fact that vaccinations were available for only a limited period during office hours, by no means covering the shift rotation times of Operations and other shift workers. Neither were the well-publicised dangers of side-effects discussed. It should also be noted that one controller, who was included in the 5%, spent Christmas day in bed with a temperature of almost 40° C, losing four kilos weight in 24 hours; the reason? he had 'flu! On behalf of the Guild, a letter was sent to management in protest against the tone of their article:

"Dear Sir,

With reference to the article in "INFO" dated the 15th December 1976, on „Vaccination against Flu" and its references to the control staff:

I would like to point out that if full consideration had been taken of the working system of the control staff the percentage participating in the service may have been greater. I refer to the General Services Division notice MAS-A/325.2-15.11.76 in which only two hours of the mornings of the 19th and 22nd of November were made available for vaccination. This making the service not available for the majority of control staff.

With regard to the numerical comparison table, even if only one person of the Directorate staff had participated it would have still given a percentage factor of 33.1/3%.

May I suggest that in future years a priority be given to the control staff and their working system, when arranging such vaccinations. In conclusion I believe that the vaccination was on a voluntary basis and therefore the individual reference to the controllers as unjustified."

The following reply from the Director was received some four weeks later.

"Dear Mr. Bartlett,

To my regret I cannot agree to your argument that "if full consideration had been taken of the working system of the control staff the percentage participating in the vaccination may have been greater". I am afraid that you have overlooked the fact that staff have been asked first by Office Notice to make themselves known, if interested, and only after having received the applications (of which very few from control staff) we have organised the sessions accordingly.

It is, therefore, obvious that the conclusion that this service was not made available for the majority of control staff is unjustified.

As to your last remark I believe that there has never been the slightest doubt that the vaccination is on a voluntary basis. The article in "INFO" is only giving the results of the undertaking per division, followed by an intentionally overdrawn example of what could happen in the event of a serious epidemic as an extreme worst case. I am convinced that the unprejudiced readers have understood that this text should not be taken to the letter but merely as an incitement in the hope that there will be more **volunteers** next year.

I can assure you that if a large number of control staff would apply next time for this vaccination we shall certainly continue to take consideration of the working schedules of control staff as well as maintenance staff; naturally in so far as the possibilities of our Medical Service permit.

CANTEEN FACILITIES

(See also "Food for thought?") A full canteen service is a luxury unfortunately not enjoyed by all staff. The popular approach of statistical analysis shows that the requirement for regular meals and drinks is not particularly well catered for.

Canteen availability: During office hours 100%

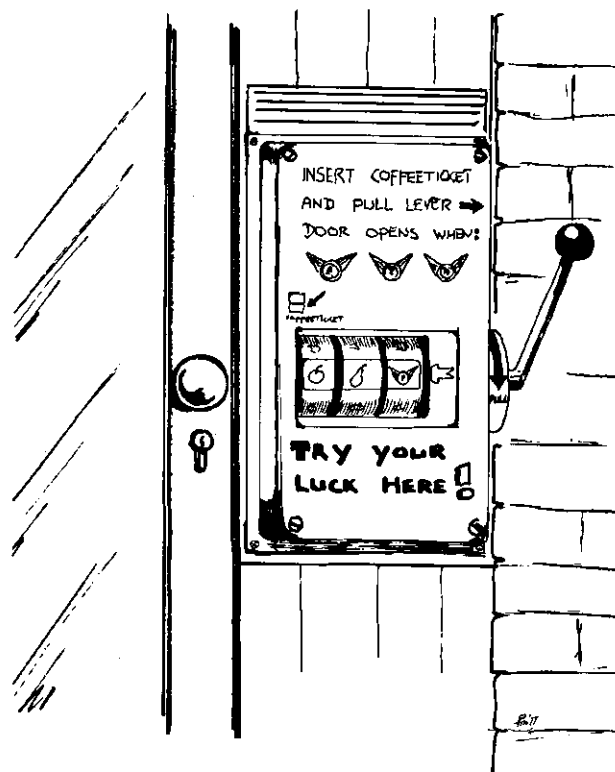
Canteen availability: Operation weekdays 46%

Canteen availability: Weekends and public hols 15%

Canteen availability: Operation year 35%

For the majority of the working day no food is available at all. The only machine providing hot drinks (coffee or chocolate) is unserviceable with monotonous regularity.

Information is frequently given about the canteen operators' difficulties in maintaining profit levels. However, is the service provided to watch-keeping personnel really adequate?



Yes, it's true

At a start-of-cycle briefing, an ATS assistant had to inform the supervisor that, during his time off, another assistant had flown to Bulgaria along with his volleyball team. He should have been back, but due to fog the return flight was still stuck on the ground at Sofia. Obviously, the poor bloke was unable to report for duty.

SUPERVISOR: (completely serious) "Yes, but he **can't** take leave, we are undermanned today!"

REST & RECREATION

Restrooms: one ladies', seating for four; one gentlemen's, seating for twelve - the only accommodation other than the canteen for civil controllers' use during break periods.

Dormitory facilities: none.

Recreation: two table tennis tables for \pm 550 staff; one football pitch, changing rooms - none (visiting teams and spectators are also normally barred from the Centre grounds for security purposes).

Possibilities: opportunity to include further amenities in the new extension to the main building - no further rest facilities provided for civil staff.

Alternative: the "barracks".

Upon completion of the new wing, office staff, who were working under far from ideal conditions in the temporary outbuilding, were moved into new, much more acceptable surroundings. The outbuilding, nicknamed the "barracks", was then converted for just that purpose, to house German Air Force Personnel until a new Mess was built. Now that the Mess (complete with bar, sauna etc.) is almost ready, Maastricht staff have been informed that the condition of the "barracks" has deteriorated to the extent that it must almost certainly be demolished.

With a little foresight, and some repair work effected on a self-help basis, the "barracks" could well have provided a solution to controllers', and indeed, to all Maastricht civil staff's requirements. There stand the potential sports changing rooms, showers, rest rooms, hobby rooms, and even (controversially) dormitory facilities for shift workers. Because of the facts presented, the Guild, in conjunction with the Staff Association, requested urgent consultation with management in a bid to save the building from destruction. The prospects of its remaining, they were told, were unlikely.

Further investigation has revealed that, contrary to all that has been said, the German Air Force have a requirement to keep at least part of the outbuilding for a minimum of another two years, to provide extra recreation facilities for military personnel! There may well be extra space available, surplus to GAF requirements, which could be turned over for use by their civil colleagues. The Guild will certainly endeavour to ensure that the needs of other staff be taken into consideration by civil management before a final decision as to the outbuilding's fate is taken.

IFATCA CONFERENCE 1977

As you all may have learned from the publications board, the 16th IFATCA Conference will take place in Nicosia, Cyprus, between the 25th and 29th April. Since EGATS is a Member Association, a delegation is to be sent consisting of: Ted McCluskey (Bretigny) as

Director, and Koos Zipp, Jan van Eck and Tom van Hal as Deputies. So far, we have received only one application, that of Roger Bartlett, the President, who will BE attending as an Observer. Many of you may not realise that Eurocontrol takes an active part in two Standing Committees,

- Standing Committee I, dealing with technical matters
- Standing Committee VII, dealing with legal matters.

On Standing Committee I, we were asked to produce working papers on "Flow Control" and "Automation in Future Advancements in ATC". The first point, as you all know, we are very much involved with. Jan van Eck produced a very comprehensive paper on an individual Flow Control "Cell" idea, and the ways these problems could be handled.

On the second point, an excellent job was done by Brian Martin, who produced a paper on "Conflict Detection, Alert and Resolution".

On Standing Committee VII, Ted McCluskey wrote a paper on legal liability, which has become a very real and urgent matter in the light of events concerning the Zagreb affair. And I can assure you that not only civil controllers are most anxious about what can happen should you be involved in mishaps like this. From the military side too, I have received information that controllers are most uncertain about their position as regards to backup by their superiors in case of incidents.

All information and working papers from M.A.s will be discussed at the meeting in Nicosia, from which policies and leads will be distilled to be used by ATC throughout the world.

We will, of course, inform you about the Conference and its eventual outcome in the next issue of Input.

Tom van Hal

WHAT DID YOU DO AT WORK TODAY?

Know how much traffic Maastricht UAC handles? No? Here are a few figures to contemplate (expressed in numbers of aircraft).

Brussels Sectors

	1976	1975
busiest month	July	July
	19,913	20,255
quietest month	February	November
	13,975	14,217
annual total	207,353	205,304
% military	5.1%	4.1%

Hannover Sectors

	1976	1975
busiest month	July	July
	14,050	14,292
quietest month	December	November
	9,467	9,046
annual total	138,918	135,890
% military	1.3%	1.6%

Eurocontrol guild of air traffic services

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Welcome to

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 W. Genrich, K. Vent, W. de Love, H. Goldner,
 K. Albert

Military (MATRAC) Members:

K. Prägler, W. Herold, H. Andersen, A. Gerbode,
 P. Schilling, J. de Lange, M. Reitz, J. Präder,
 D. Moellen, H. Peters

And good luck to: L. Newlands (resigned;
 returning to CAA), L. Kelly (transferred to
 Instilux), J. Sawtell (transferred to Bretigny),
 B. Martin (transferred to Brussel H.Q.)

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A step forward in Flight Safety

In order to encrease Flight Safety in the German airspace a closer coordination between German Air Defense units and the Air Traffic Services has been demanded by the military authorities. The Luftwaffe has requested to install coordination elements at the Air Traffic Services as well as within the Air Defense units.

The BFS think it necessary to implement a working group to study the legal, personell and technical aspects of the proposal.

Meanwhile, as a first step, a liaison element of the GAF will take up its work at those stations, where an approval of the BFS is not immediately required, e.g. Maastricht and Karlsruhe. The landline requirements for such an element have been forwarded accordingly.

It is hoped, that in the very near future, 2 working positions of the MATRAC will take up the liaison tasks in order to coordinate practise intercept missions with Maastricht UAC and MUAC, by advising Air Defense Units of IFR-Traffic congestions and boardcast warnings in cases of foreseeable undue proximities.

Pr.

Ifalpa members willing to show support

The European Members of IFALPA, as a result of lobbying by members of Egats at the IFALPA Brighton Conference March 18-19th 1977 will show shortly positive support for the Growth of Eurocontrol. The European Members will also introduce "Eurocontrol" on the agenda for the 1978 conference.

The Egats delegation recieved help from the IFATCA observers, althoach IFATCA is mainly concerned with technical aspects of IFALPA, at conference level.

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Real Specialists in Real Estate.



Wil Huysmans, Property Sales Manager of MESTEROM MAKELAARDIJ O.G., has a message for all those who are staying in The Netherlands for two years or more:

"In Limburg there has recently been significant development in the real estate business. Last year, the value of property appreciated by approximately 25%. It can now be worthwhile for you to invest in real estate, also on short term. Anyone living in Holland for more than a few months would be well advised to look into the possibility of buying a home here. It could be that you can live here, in your own home, while profiting by capital gains. Tax Free."

This advice could be valuable to you. It could mean gold!!! If you wish to own a home here in Limburg, contact Wil Huysmans. He will assist you in buying a home and . . . eventually in selling it.

mesterom
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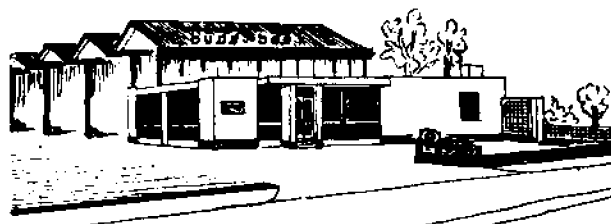
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