



EUROCONTROL GUILD OF AIR TRAFFIC SERVICES



the magazine of the EUROCONTROL GUILD of AIR TRAFFIC SERVICES

ISSUE:

1990-4

WITH THANKS

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PRESIDENT'S MESSAGE



The year 1990 will undoubtedly become registered as one of the famous "crisis" years in our future history books. Though it started rather joyfully with the demolition of the Berlin wall and consequently with a promising approach between East- and Western Europe there was, all of a sudden, the shockwave of the Gulf crisis, threatening the world peace.

The aviation world, already suffering from congestion problems and lengthy delays became, once more, confronted with rising fuel prices resulting from an unstable economy while the air industries suddenly felt the menace of a forthcoming recession.

Life in Eurocontrol Operations was similarly a weird mixture of hope and fear: there was the good news about Haren and the Maastricht development but there was the disillusion of the ETS proposal and the failure of our Staff Committee.

EGATS itself was not without its troubles: there was a turbulent AGM which seemed to threaten the very existence of our Association and many talks and meetings together with a huge amount of goodwill were needed to bring EGATS on the road again.

A crisis, however, seems to exist mainly in the minds and the souls of the people; it is in fact an abstract condition which can be countered by firm and positive thinking.

We had our share of misfortunes in the past but we could always recover and look for a new future.

EGATS members should therefore feel confident that the same history books which quote the crisis will also quote the revival and in most cases the restoration raises more attention than the defeat!

Reviving EGATS is, of course, a task

for all of us and a first major duty is and remains the defense of the professional interests of all our members! The EGATS Executive Board has published a report on the Maastricht Development Plan; this report was made with the consent and cooperation of our members and we hope that we will soon be enabled to discuss it with the Eurocontrol Director Engineering and with the Director of the Maastricht UAC. The EGATS EB has in the meantime also made plans to cooperate with the Union Syndicale in matters of professional nature.

We hope (and let these be my Christmas you!) that all elements such as ETS, career structure, promotion chances, etc... will find a quick solution. Knowing, however, the complex and time consuming procedures of our multi-national institution we must prepare for lengthy and persistent negotiations, we must make sure that our viewpoints are known and must therefore continue to collect transmit the ideas of our membership. Together with our Technical and Professional Committees the EGATS Board looks positively towards 1991!★





from

the secretary

Dates to put in your agenda:

19-20-21 February: Air Traffic Control Exhibition in the MECC, details in this INPUT.

11 March: Annual General Meeting. The date published in the last issue of INPUT was wrong, AGM 11.03.1991. Altea Hotel.

Persons willing to be elected in the Executive Board, nomination forms will be distributed shortly. If you cannot make yourself available for a function in the Executive Board or one of the

Committees, please hand in a day for E.B. work by working a duty for some of the E.B. members, so they do not have to do everything in their own time.

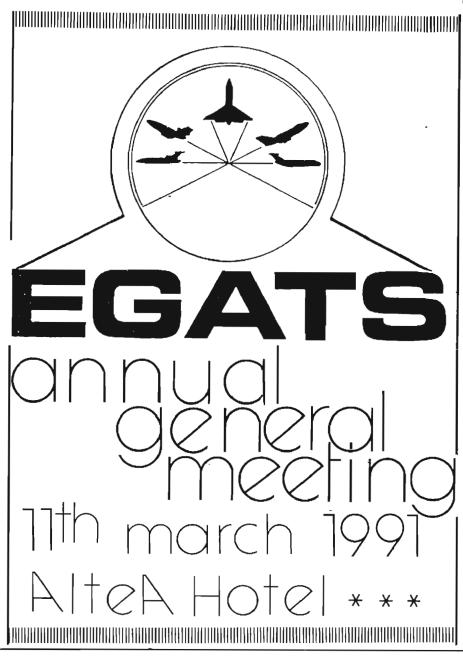
Please, give your name to the secretary and arrangements can be made when necessary and possible.

For the coming IFATCA Conference in April next requests will be made by the secretary.

In order to inform yourself about EGATS business, please, read the info board in the Operations Room. Also on the CCTV there is an EGATS page, page 91 which will be updated regularly.

Merry Christmas and a Happy New Year.

Kees Scholts.







Dear Colleagues!

Another year has passed. Another year of traffic increase, stress and frustration. But we made it

again. Again we succeeded to keep our clients satisfied. Only a few incidents happened, which were, of course, mistakes by control staff. Colleagues concerned were punished - end of story. Nobody cares about the background of these mistakes (evtl. frustration due

to wrong personnel policy?).

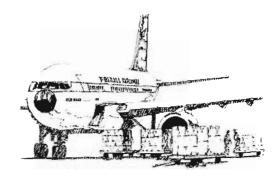
A restful period begins now, where you can gain strength for next year's traffic. Certain umbrellas will be closed for a period of time. You don't have to worry about how to spend Christmas bonus, 13th month salary or increase in salary. You are lucky compared to colleagues of national authorities. The only thing you have to face now are rumours spread by administration. Rumours about team changes, promotion, etc... But you are used to this since years. Take it as an attempt by administration to keep you alert during this quiet period.

Soon, you will see in the Operations Room Christmas greeting cards again from satisfied airlines (the presents attached to them you will never see). Airlines which thank Eurocontrol for a perfect working administration, especially the "Caisse Maladie", for a fantastic backup of controllers, for a good canteen support and for a little bit of safety and efficiency in air traffic control (the minor part).

Soon you will find in your locker the "Info circular" again, starting with the words "We did a great job again this year". Keep calm!!! You know who is responsible for the good reputation of Eurocontrol amongst the airlines. You better prepare yourself mentally for next year's traffic increase. Relax!!! You will realise soon enough

when traffic goes up again. It will be

that time when you will find in your locker the umbrella circular again, in which it is mentioned and strongly recommended that Eurocontrol is working with <u>five</u> miles separation. Then wake up!!! High traffic period is coming. All the rest is no problem. The only thing you have to be afraid of is "back pay". This can cost you a fortune.



Do not care about career prospects, promotion, defreezing of your salary, which would nowadays result in an adjustment of your salary to salaries of national administrations.

You are stuck as underdog in the Operations Room. You know exactly your position. When something happens on your screen, you will be number one to hang. Be careful what you write in the "Daily Log", you might hang yourself. Just do the work for which you get money. The difference to what you earn is tremendous. Forget the people within the organisation, who carry around papers, being higher graded than you. Forget these guys who were strongly against Eurocontrol until they got Eurocontrol salary. Forget the fact that you are with the organisation since years and the above mentioned guys just join Euro with a higher grade than you. Don't think about the money you lost since years due to salary freezing.

If you can forget all this, although you are confronted with it every day, you might be able to decrease your frustration and to concentrate on your radar screen, which makes incidents more unlikely to happen.

You know that you are underpaid, overtrained and overstressed. But YOU ARE THE BEST!!!!

In this sense I wish you a Merry Christmas and a Happy, successful and airmissfree New Year.¥

Name of author withheld on purpose (anybody who does not understand???). Anyway, the list of authors would be too long to publish in this edition.

(2)

Dear Sir,

I am a controller with some (22 years) experience in Air Traffic Control.

Recently, I was reading a EUROCONTROL report: "Report by the SSR Mode S Working Group to the Committee of Management"- Working Paper: CE/90/165/100 dated 16.09.1990 Item A.5.

I found this report very interesting but completely beyond my understanding. Some reports publish statistics about traffic load traffic per Flight Level which I find interesting and even understandable but this report by the SSR Working Group was too difficult for a normal grade B3 controller.

Therefore, I am writing to enquire whether a better informed controller -

a B2 perhaps - could explain the following abbreviations contained in this 10 page report:

EASIE

PEMT

GDLP

GANTT CHARTS

FANSTIC

ATLAS

EURET

CNS/ATM

DG 111

STNA

CAA/RSE

ADLP

MAFALDA

RTCA MOPS

DLPU

TUB

PRF

SRPs

SICAS (P)

ZOC

ACAS AECG

RAs

EUROCEA, RTCA

ICAO (This one I know!)

Does anyone know them all?

If yes, you must be a genius or at

If yes, you must be a genius or at least a B2: if not, you must be a B3:

Not promoted | Not motivated = B3 ... bad luck | Not well paid

I am sure there are politicians who understand these things though they do not seem to understand the need for an early retirement of a controller who has been working for this Organisation for more than 18 years and at an age of 58 is still sitting in front of a radar screen handling 28 aircraft simultaneously. Ask for the statistics!!!

There are many travel agencies, however there is only one which is aware of and can assist with the special and individual wishes of EUROCONTROL AND EGATS travelling staff:

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PUTTING FINE SENTIMENTS TO THE TEST

The transport ministers of the 22 European Civil Aviation Conference (ECAC) states have agreed to coordinate the region's air traffic control (ATC) systems under the aegis of Eurocontrol, whose Director General is Keith Mack. Here he tells Philip Butterworth-Hayes about how his organisation's aims to achieve this goal and some of the problems he expects to encounter along the way. _____

For Keith Mack and Eurocontrol the greatest challenge now is to put into effect the ambitious and laudable plans agreed by the 22 states of ECAC to harmonise their ATC equipment and procedures. He will oversee a dramatic shift in the role of the organisation which, since its original convention was changed in 1981, can now take responsibility for managing all, and not just the upper, airspace of the member states.

It is an extra-ordinarily complex task. Europe's ATC organisations differ hugely in constitution and resources, from the semi-independent radar-rich bodies in the north-west of the continent to the southern civil aviation authorities, some without radars and most tied to strict state-policy spending limits. It is, in reality, as much a diplomat's job as an air traffic control manager's.

"Rather than setting ourselves up as one authority in charge of everything", he said, "we are proceeding pragmatically. We already have 43 control centres in place - you could spend a long time getting agreement between them. But as they are there, we should go ahead with what we've got after all it doesn't matter to the pilot how many centres the message goes through just as long as it gets there".

Mack hopes to have а integrated network - with the excep-

tion, perhaps, of Iceland which is remote from the continent - by 1998. He hopes all ECAC states will join Eurocontrol. The Brussels-based body is looking at ways of supplying less well-developed European states with new equipment by negotiating funding-packages with suppliers - who could be reimbursed through en-route charges. "Where there is now no radar there will be, where there are no modern computers there will be; where different systems interact they must be made compatible", said Mack.

Cooperation at this level may be difficult but it is not impossible. Mack can point to a number of successful European ATC cooperative efforts, completed or in the process. INTNET and RADNET will integrate flight-plan data and radar information between four Eurocontrol states and seven ATC centres -Amsterdam, Brussels, Maastricht, Düsseldorf, Bremen and two military facilities. One the airport road in Brussels European flow-control management building is un; der construction. This will provide all ECAC ATC centres with airline-schedule data so airport and airway bottlenecks can be identified at an early stage. There is the on-line data interchange (OLDI) programme, which has already connected 18 centres with a common flight information message network. Then there is ASTERIX, a standard radar data protocol un;der development. A further data communication standard is being considered. But Mack is realistic about the problems facing Eurocontrol. "One of the main dangers is not just fragmentation, but the approach to fragmentation being fragmented itself. We have to make sure we are not diverting efforts. "For there is really only limited number of people in Europe who can plan and execute what is needed to be done". The difficulty is demonstrated by the lack of progress within the organisation itself to agree on a limited number of official languages: eight at the last count, with the prospect of more when new states join.

The prospect of Eastern European countries joining Eurocontrol is one which Mack welcomes - because it could free-up north-south airspace above central Europe - but one which he also recognises will provide new challenges. Traffic in this region is likely to grow rapidly while the area's ATC systems will need much updating. If it is difficult to find a few common human languages, what about the problems of finding common computer languages especially when individual states, like France, have developed unique computerised ATC networks?

"It is very difficult to get agreement on this", said Mack. "No one state has a monopoly; it calls for a process of continual working at the problems, to find a common standard". This is especially true now as new ATC systems are rapidly becoming available. "The fundamental requirement to increase capacity is to reduce the load on the controller. There is no shortage of airspace, but there is a shortage of ATC capacity - and this is related to how busy a controller is".

Key to this will be the automated data link between the flight-decks and the ATC computer Mode-S, which should ease the situation considerably. Other new systems, such as onboard traffic collision avoidance and satellite navigation, are regarded with more caution by Mack than, say, by the FAA. "We regard TCAS as an electronic extension of the pilots eyeballs, a last ditch safety effort ... In Europe's congested airspace the question is how often will the pilot take unnecessary avoiding action? The balance will have to be right". Eurocontrol is presently working with ICAO on setting up a datacollection project from TCAS-equipped aircraft within Europe, looking at the potential difficulties caused by operating simultaneous ground and airborne conflict alert systems. And as far as satellite navigation is concerned, Mack believes that a Europe covered by comprehensive ground-based navigational aids, good communications systems and modern radars would not need satellite



navigation at least until after the turn of the century.

The next few years will be critical to the development of harmonised ATC systems within Europe. ATC organisations have always suffered from lacking the political clout of airlines when it comes to deciding on how to expand air traffic within the continent. "In my national experience", said Mack, "it was always practically impossible to object to new flight operations as it is legally impossible for anyone to prove it is that one particular new service which broke the camel's back". The traditional role of ATC organisations has been seen as restrictive rather than creative. But Mack's view of Eurocontrol is different: to provide airspace capacity for governments and businesses to grow as they want. "In doing so", he said, "we shall expose the problems of airport capacity", which he believes will be a bigger problem than harmonising ATC systems, an issue now largely recognised and addressed by European governments. If ATC constraints are relieve the European liberalisation process and a more harmonised ATC structure will help double traffic between now and the turn of the century. The problem now is to find the airports to handle this traffic.*

ODID-3

Aix-en-Provence 24 October 1990 by Jeff Gasté, controller Aix-en-Provence,

translated by Vic Day, Eurocontrol

The initial ODID III trials took place at the Eurocontrol Experimental Centre, Brétigny, from Monday 17 September 1990 to Friday 19th October 1990.

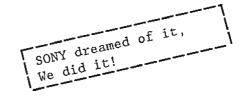
This experiment was intended to test the concept of the use of high resolution colour screens for all controller tasks.

The specifications had been prepared by a working group comprising:

- representatives of the States concerned: Michel Rouvier and Jeff Gasté for the Aix-en_Provence Centre, Michel Jemelin for the Geneva centre.
- a team from CENA, Christine Bailleul, and Francois Marque, assisted by Corrine Garoff, Human Factors expert from Société Bertin.
- from the EEC, project leader, Malcolm Prosser with Jo Riu, and Dave Young for the software production,
- the Eurocontrol sub-group chairman Vic Day from Brussels HQ.

The first two weeks were used to debug the system. Certain items needed to be reviewed:

- traffic sample problems,
- numerous flight profile problems concerning entry/exit flight levels of the flight plans, and the proper distribution of data to the sectors.
- improvement of the structure of the input commands, reduction of the number of actions to modify the data.



The relative flexibility of the programming system used by Eurocontrol permitted us to obtain almost all of the necessary modifications, often without modifying the actual programs. All the window parameters, colours, visual display elements, are managed by a data base (ORACLE) and can be rapidly changed.

After two weeks the system was judged sufficiently useable to begin training the Aix controllers (Yves Pesard, Jean-Pierre Etienne, and Jacques Mezil) as well as those from Geneva. This training period began with a process of learning the commands, using the mouse (the only input device) and learning the colour coding rules, using a low traffic sample of about twenty aircraft in one and a half hours for all three measured control positions:

- two planning positions (PLC) corresponding to two organisations (Org. 1 and Org. 2) and
- a radar position (EC) common to both organisations.

Once the skill and the knowledge of the working environment had been reached by all the participants, the volume of the samples was adjusted to attain 100% of a busy traffic level.

A second step is foreseen in 1991 (January and February). Important modifications have been requested: change of colour coding, improvement of certain functions, changes to the method of message exchange.

This new version will be validated during the first week. Afterwards, the

Operational Display and

Input Development

participating controllers will come to Brétigny for another training period, followed by three weeks of measured exercises.

Two additional controllers from Aix will participate in the experiment by manning the sectors adjacent to the measured sectors. This will permit more realism in the execution of the control tasks.

A simulation such as ODID III needs many people:

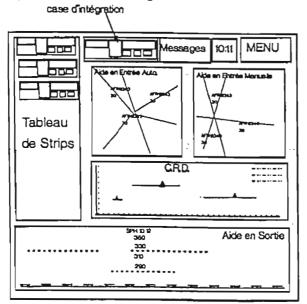
- around ten French and Swiss controllers,
- pilots from Brétigny ,
- six "controllers" for the adjacent sectors:

in total, about 40 people.

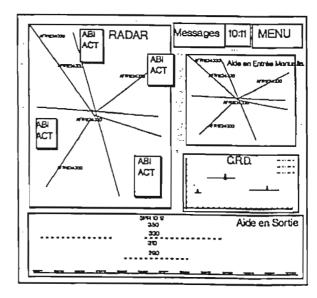
THE TWO ORGANISATIONS

Two different organisations will be studied. The difference between them concerns only the "Planning" function (PLC). The aim was to present the same information to the controllers, but in a different manner:

- ORG 1: presentation of the data in an alphanumeric sty0x, tabular flight data (electronic strips) without a radar image.
- ORG 2: presentation of the data in graphic style, no tabular data but a dynamic radar image.



- ORG 1: presentation of the data in an alphanumeric sty0x, tabular flight data (electronic strips) without a radar image.

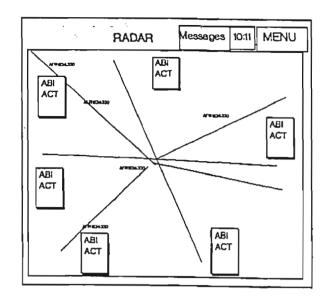


- ORG 2: presentation of the data in graphic style, no tabular data but a dynamic radar image.

The two organisations will also have additional decision tools: an entry-aid window, an exit-aid window and a conflict risk display (CRD), described later.

The radar position is common to both organisations and comprises: a radar image, window lists of flights due to enter the sector and not yet visible, a zoom window and different selection fields (buttons) for the mouse.





THE COLOUR CODING

A colour code common to all positions

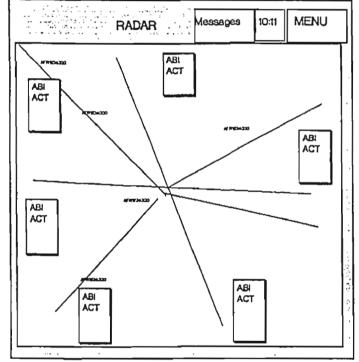
has been adopted which permits the display of different states of the flight and the coordinations carried out through the system.

- White is used for "assumed" flights, that is those which are in R/T contact with the sector, and for which an "ASSUME" input has been made.
- Pink and 'salmon' correspond to flights which will shortly enter the sector. Between 10 and 5 minutes before sector entry, flights are

shown in pink; changes to entry levels are possible. A dialogue can be started, requiring a system response. Less than 5 minutes before sector entry, the exchange is reduced to an 'update of information' from one EC to the next.

- These communication messages via the system are displayed in yellow inside a communications window, on the tabular data, and on the radar label at the level where modifications were requested.

- Green is the identification colour. It indicates the field selected, to avoid mistakes on input.
- Red is linked to the alerts generated by the system and equates to our current 'safety net'.
- All flights which do not, or no longer, concern the sector, either because they will not enter the sector or they have left the sector and have been assumed by the next sector, are shown in grey.
- Other colours are used for the maps, two slightly different shades indicating the geographical sector limits, for display of routes, and military zones.



THE RADAR POSITION

The screen isdivided into 5 windows different sizes. In increasing order o f importance, and from top to bottom of the screen, there are:

- The telephone communications window (not yet functional) to in it is at e telephone calls to other

controllers.

- The time window (digital clock).
- The message window. The messages from adjacent control positions (PLC and EC) are displayed in this window. The messages concern either requested or proposed modifications to the levels.
- The menu window which allows access to the display parameters in the radar

image: offset, size, display of routes and zones, display on all radar labels of selected information (type of aircraft, departure, destination, speed, company etc.) above the callsign.

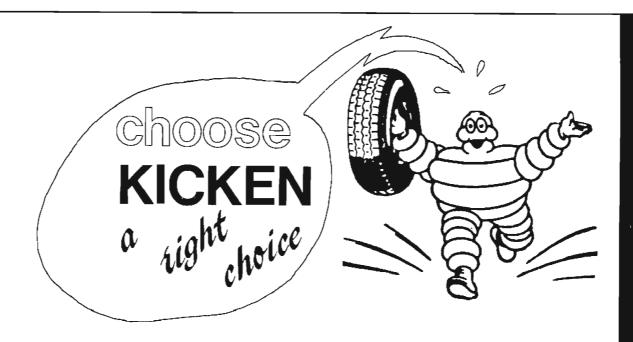
The radar window, where the radar tracks are displayed. The controller can directly modify the cleared flight level or the sector exit flight level of a flight by selecting the fields with the mouse. This selection opens a window containing the possible levels. It is only necessary to click on the desired value with the second button of the mouse. To enter values for headings, direct routes, or rates of climb-/descent, or to add a 'warning' it is necessary to open an extended label which contains all the flight plan data for the concerned flight. Removal of this supplementary data is done by repeating the selection.

- Several windows, called entry windows (or ABI/ACT) are superimposed on the radar image. In a reduced size, they contain the lists of pending flights at the different entry points to the sec-

tor, and not yet visible as a radar label. They enable access to more complete information than the displayed data (Callsign, flight level and exit point). Flights can also be "assumed" by selecting through these windows, which are also moveable around the screen. The contents of the radar label are variable. Its colour follows the colour rules for the state of flight (see colour coding). The callsign of the flight, its actual level (AFL) and the sector exit point form a minimum information block.

Where the flight must begin its descent within the sector due to the proximity of its destination (eg. for NICE or GENEVA in sector UA), this exit point is replaced by the two letters indicating the destination (MN and GG in the example).

A "leader" joins the label to the symbol indicating the flights position, and the previous positions show its direction of movement.

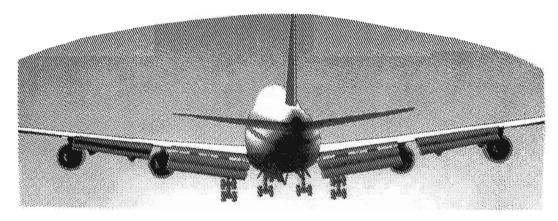


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- The identity of the following sector (abbreviated sector name) shown at the end of the label, once the data has been displayed in the next sector.
- The cleared flight level (CFL) and the exit flight level (XFL) are displayed if they are not the same as the actual flight level (AFL). Thus, for a cleared flight level which has been coordinated as an exit level, only the AFL is displayed. All additional data to this minimum label indicate that at least one action is necessary to the
- An integration window for new strips. By clicking the strip displayed in this window it will be removed and placed into the tabular data. When several strips are awaiting integration, the state is given by a numeric counter.
- A dynamic table of strips. Flights are arranged in this table above (or below) the entry point designator according to the laid down operations room procedures. When the flight crosses this entry point designator, the strip is automatically relocated above or below the exit point designator. There are no intermediate sector points, which is not presently the case



flight, before the label will return to the minimum size.

- Intermediate flight levels can be introduced: the minimum level to be passed by a flight climbing into the sector, or the possible level in non-level flight when leaving the sector. These levels (SLI and SLO) are permanently cross checked with the actual flight level (AFL) and removed when the conditions have been satisfied.
- It can be interesting to pass information to the next sector, such as headings, direct routes, or speeds concerning a pair of flights at reduced separation. These data remain displayed in the radar label until manual removal.

THE PLANNING POSITION Organisation 1

This time the screen is divided into nine windows:

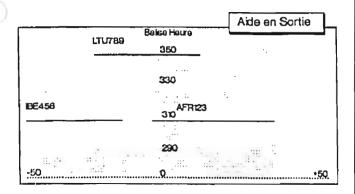
- Two equivalent to those of the EC, telephone and time.
- A basic menu (without radar adjustment functions).

(verification of entry and exit levels only). The entry or exit level values can be modified, if required, by selecting the relevant field and then entering the new value in the same way as for the EC. It is also possible to add or remove the display of an associated "warning" which will be displayed on the radar image.

 Two windows for entry and exit assistance. These windows are pseudo radar images. They may be called down for any flight which will enter the sector (if it has not yet been assumed). The entry aid is automatic and is displayed whenever a new flight is presented in the integration window; the exit aid is called down whenever required. These windows do not contain dynamic data. They are a sort of snapshot, centred on the entry point, showing the calculated position of the flight prior to entering the sector together with the flights which are in potential conflict with it. A filter on the flight levels allows only the appropriate flights to be displayed. Example: a flight, level at FL330 entering the sector at 10h00. At 09h50 the flight strip data is displayed in the integration window and the entry aid is automatically displayed. In this window, the flight can be seen at its plotted position for 10h00 and the plotted position of all other flights at FL330, as well as those in climb or descent which will cross the level. This permits the checking of conflicts at entry when several different centres are sending traffic via the same point.

- The EXIT Aid Window:

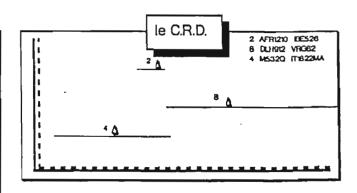
This window is available for every flight. It is a graphic image of the vertical plane of the exit conditions for a flight. At the top centre is the



name of the exit point and the ETO for that point. At the bottom is a scale of 50nm either side of the point. Five (soon seven) levels are displayed, centred on the subject flight. A line corresponding to 5 minutes flight time shows the reduced separation limits with the next sector. The idea is that this line does not touch the line or symbol of another flight at the same level. The occupation of other adjacent levels is also visible. The possibility will exist to directly allocate a new XFL by directly clicking on the value in this window. If the flight is not at its requested level (RFL), this will be shown on the screen.

- And lastly, the Conflict Risk Display (CRD).

This tool has been developed by Euro-control several years ago. A number of French controllers have participated in experiments with this tool at Brétigny (under the project CAPE). The vertical axis is defined in Nm, from 0 to 15, and the horizontal axis in minutes from



O to 30. The system displays the potential (procedural) conflicts within this rectangle showing for each pair of conflicts the duration of the potential conflict and the calculated minimum distance between them. In the ODID exercise it has the defined function of displaying the possible risks, but also will show an estimation of the number of conflicts for the EC.

THE PLANNING POSITION Organisation 2

The differences with organisation 1 are:

- no tabular strip data but a current radar image.
- as for the EC, there will be sector entry windows where flights soon to enter the sector, but not yet visible, are displayed. Selection of a flight will provide all flight plan data. The flight level modifications can be carried out equally from the radar label or the entry lists. The ENTRY and EXIT aid window displays are entirely manually triggered, and the CRD is identical to Organisation 1.

The Opinion of a user ...

The above article is a straight forward translation of a controller's view of the ODID III functionality, as expressed to his fellow controllers at his own Centre. It has a natural tendency to describe Organisation 1, which has been developed by CENA (the French ATC Studies Centre) together with the French Controllers; however, the second Organisation developed by Swisscontrol, although described in less detail in this article, will be equally evaluated during the simulation period in 1991.

The purpose of ODID (Operational Display and Input Development)

The ODID work is carried out in a multi-national forum with participating States from within and external to the Eurocontrol Organisation, with Brussels HQ, Division O3, providing the secretarial function, coordination and sponsorship of the simulations carried out at the EEC (Eurocontrol Experimental Centre).

The purpose of ODID is to define a common method for replacement of paper strips, and the use of colour within ATC, for the whole European area. With this aim, the ODID Group (the membership of which is entirely operationally orientated) is carrying out a series of simulations, two of which have been completed, and the third, ODID III, will use the new technology SONY screens for the first time. The simulation results will be available in Spring 1991.

Owing to the software problems inherent in designing a new system, it has not yet been possible to achieve all the operational functions which were desired, and the contents of the article indicate some of the limitations which have had to be accepted for the simulation at Brétigny. Once the simulation results have been studied, it will be possible to provide a more detailed explanation of the philosophy employed in ODID III, in a further article for INPUT early next year.

In the meantime, it is hoped to mount an upgraded version of ODID III in September/October 1991, where controllers from different Administrations will be able to obtain a "hands-on" appreciation of the new technology and the proposed functionality.*



U.K. Guild honours EGATS member



At the U.K. Guild (GATCO) Function '90 which was held at Bath, near Bristol on October 27th, several presentations were made to people who have rendered exceptional service to GATCO. These presentations are usually made to individuals, elected Board Members or nominated officials.

During the Gala Dinner Dance in the Hilton Bath Hotel, the outgoing GATCO President, Mr. Chris Stock presented an honourary life membership scroll to

Mr. Philippe Domogala, in recognition of his contribution to the ATC profession.

Philippe's activities, in his capacity of IFATCA Regional Vice-President and his support of the U.K. Guild's objectives, together with his concept of a European controller, were mentioned by Mr. Stock in his presentation speech. This was the first time that a non-British controller has received the GATCO Scroll of Honourary Life Member-



ship and it is pleasing to know that this has been achieved by an EGATS member.

In his reply to the presentation speech, Philippe illustrated the change of attitudes towards controllers today (though not in all areas of ATC) by relating an anecdote: "Twenty-two years ago, I failed a pilot course and had to choose another job. I became an Air Traffic Controller, not knowing exactly what it was. A few months ago, when visiting the flight deck of a Boeing 737 belonging to a British airline, a young jovial co-pilot aged about 20 years asked me, "Are you an air traffic controller? That's what I wanted to be. I followed a Controller Cadet training course but failed after one year, now I have to fly this thing!"¥

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SCREENS SCREENED! * * * *

There have recently been reports in the Dutch press about a soon to be introduced new law, based upon European Community directives concerning working with "screens".

As from 31st December, 1992, it seems that personnel who work behind computer screens and presumably also radar screens, will be restricted to a maximum of five hours work behind such a screen, per day.

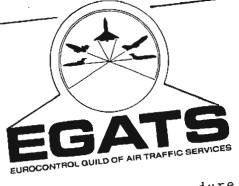
There are some interesting statistics. It transpires that from those whose daily lives are connected with these instruments - 37 % suffer from eye complaints and 20 % suffer from headaches. Also, 37 % of these operators have muscle and joint problems - meaning a stiffening of the joints and back complaints, presumably. How many inhabitants of the Operations Room at Maastricht UAC have had cause for complaint with these same pains and has anybody ever connected the screens as reason for complaint? I doubt it. Maybe our old air conditioning system was wrongly

maligned. Although it was very obviously at fault for some of the discomfort in the Operations Room, mainly the draught blowing at neck level, could it be that one's tense, more or less upright sitting position behind a radar or KDS screen was, or is the cause? After 1992 the employer must ensure that not only does the employee not work more than five hours behind a screen but also that the work has an element of variety and does not constantly call for the same working position. The employer must ensure that monotony is reduced to a minimum and that the working position is as ergonomically comfortable as possible.

It will be interesting to see how Eurocontrol handles this problem given that all the working positions in our Operations Room contain one or more screens of varying description. Remember, this is an EEC rule!

I hope to obtain further details which will appear in a later edition of IN-PUT.





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European A.T.C. Harmonisation and integration programme gathers momentum

The Ministers and their ministerial representatives meeting at the EUROCON-TROL (*) Permanent session today noted with satisfaction that the initial measures had been taken for the implementation of the European ATC Harmonisation and Integration Programme.

A Project Team under the leadership of EUROCONTROL's Director Operations has started work and Liaison Officers have been designated in all ECAC States to facilitate close cooperation between the EUROCONTROL Project Team and the national ATC authorities.

They gave encouragement to the work being performed under the aegis of EUROCONTROL by one or several states, viz.:

- the 4-States EUROCONTROL integration project comprising five ATC centres in Belgium, Netherlands, Federal Republic of Germany, Luxembourg;
- the close cooperation between the Federal Republic of Germany and the Agency in the development and operation of the advanced ATC systems for the control centres at Maastricht, Karlsruhe, Frankfurt/Main and Berlin by integrating their planning, development and maintenance efforts;
- the setting-up of plans for the harmonisation of resources and data exchange between France and Switzerland, and between Portugal, Spain and France.

Ministers increase funds for the expansion of ATC capacity.

Ministers approved a 40% increase (compared with 1990) in EUROCONTROL's 1991 budget, totalling some 260 million ECU. This expenditure will cover the following major activities:

- Phase I of the European AIr Traffic Control Harmonisation and Integration Programme;
- Building of the Central Flow Management Unit which is being developed for Western Europe;
- Modernisation and expansion of the

EUROCONTROL Maastricht Upper Area Control Centre to provide essential capacity for future air traffic growth;

- Studies, tests and applied research for the development of advanced systems to increase the traffic handling capacity of air traffic control in Europe;
- Extension of the capacity of the EUROCONTROL Experimental Centre;
- Extension of ATC training activities at the EUROCONTROL Institute of Air Navigation Services.

"The size of the 1991 Budget is further proof of our firm intention to bring about a significant increase in European ATC capacity as quickly as possible" said Mr. Robert Goebbels, Luxembourg's Minister of Transport and this year President of the EUROCONTROL Permanent Commission.*

(*) EUROCONTROL, the European Organisation for the Safety of Air Navigation, comprises 11 Member States: Belgium, the Federal Republic of Germany, France, Luxembourg, the Netherlands, the United Kingdom, Ireland, Portugal, Greece, Turkey and Malta.

Cyprus will become a Member State with effect from 1 January 1991.





EURO "CONTROL"



A CHRISTMAS STORY

The location: ROYANIEMI in Finland, Home of Santa Klaus, in the AIS office below the tower.

The date: 24 December 1990.

The time: 1700 Z.

Santa Klaus, fully dressed for his delivery flight is arguing with the controller: outside the sledge fully poaded with presents is parked with 12 reindeer all refuelled and ready to go.

No Santa, argues the controller, in 1990 you cannot go like this to Palma,

— by Philippe Domogala —

you need a slot.

- A slot! What in heaven is that?
- Well, too difficult to explain but as CORTA says there is "a general lack of European ATC capacity ..." so everybody needs slots today.
- Who is CORTA? asked Santa. I have never heard of the lady before. Is she important? Shall I talk to her?
- I would not talk directly to her if I were you Santa. She is French and she

needs to be approached by special people - people who know how to handle her.

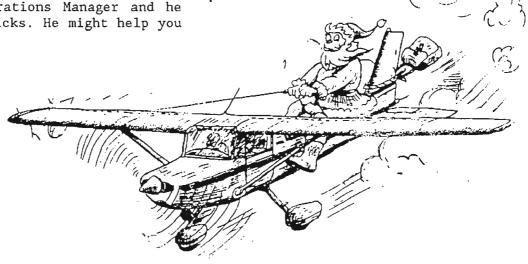
- Is there anybody else I can talk to? asked Santa.
- Of course there is, her German cousin, ATMC. But he is very strict. Discipline. Discipline, and he won't talk to you directly either.
- Who shall I contact then? ...
- Well first of all Santa, are you in the CDB?
- The SEE-DEE-BEE? what in heaven is that?
- Oh! Oh! said the controller you are not with them! It's going to be difficult! The CDB is the Central Data Bank. Something like a big computer where everyone who wants to fly in Europe sends his flight plan 6 months before departure. You then get "in" and put on a list. That's sent to people like CORTA and ATMC, so they will decide how many aircraft will go on what route at what time and so on ...
- If you are not on the CDB you do not exist ... your chances of getting a slot are reducing.
- But thousands of children are waiting for me in Palma and all around Europe tonight \dots I have to go \dots !
- Sorry Santa, I have asked Helsinki, who has asked Copenhagen, who has asked Maastricht, who has asked CORTA and one) you need a slot and two the average delay to Palma this evening is 4 hours ...
- But 4 hours that's too late. I will be delayed and my whole schedule will be disrupted. Thousands of children will be disappointed!
- Well Santa, because it is Christmas, I will do something for you. Go to the "CARLSBERG BAR" down the road of the airport and ask for Mario. He is an ex-Spantax Operations Manager and he knows a few tricks. He might help you

After looking for the bar, Santa finally finds Mario, playing cards with some friends, drinking some beer.

- Not on the CDB hey? he said. "No problem!" so many airlines file a lot of movements in advance and on the day operate far less. There must be some spare ones we can use ...
- How come? asked Santa.
- Well, said Mario, so many airlines do not know one day before departure what they will be able to fly tomorrow, but their Operations has sent their plan 6 months before! You can imagine the accuracy! Plus there are a few bankrupt airlines that don't bother to tell CDB that they went our of business. We will just pick-up one callsign and nobody will ask questions ... You said you had 4 hours via CORTA, let me try ATMC ... Mario went to the phone booth and started divling.
- ... "Allo Hans! Mario here, listen, I have a slot request via your East Cantons (formally DDR) joining SPR to Palma ...

Avoiding Reims and Rhein restrictions, yes ... 2 hours delay! You cannot do better ... Nein! and if I refile via MILANO? ... nochmals Nein? OK I'll take the slot anyway - thanks ... I'll call you back ...

- 2 hours! said Santa but it is still too much!
- Wait a minute! said Mario, we have just started ... let me talk to CORTA.
 Allo, bonjour Jean, c'est Mario, ça va? oui, moi aussi, merci, listen, I have a good friend who is stuck via ATMC ... Yes I know them ... Don't tell me ... to Palma ... What? Barcelona reduced to 2 per 60 without pre-warning? but you do better than the German



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Til Maessen



anyway, hey? 2 and half hours! Thanks Jean we take it ...

- But, said Santa, that is even worse than the previous one!
- Wait a minute! said Mario ... Now we will get you out ... I am phoning a friend who is working in the operations of a British Charter Airline. They are the best to beat the system you know
- Hello Harvey! Mario here! How is the family? Listen I have 2 slots to Palma one at 20.30 via CTL and another one via SPR at 20.00 to exchange for a Quimper or Limoges around 18.30 that you cannot use ... Yes I wait.
- I do not understand says Santa ...
- It is simple said Mario. A lot of airlines, knowing they have 2 or 3 hours average delay on a particular destination, start printing and advertising their departure time 2 hours prior their intended planned departure. Like this they can ask for a slot much earlier and when they get 2 hours delay they can depart on time. But sometimes the delay is less than expected and they are in the shit. As they do not want their system to be discovered so

they start looking around for later slots to exchange ... so we trade

- What a system! said Santa.
- There are plenty of other tricks, the most common used to file a destination further away than your intended destination, this airport not having any restriction upon and once airborne, you divert to your originally planned destination.

But it is becoming risky because something they make you land at your filed destination.

- Ah ... yes Harvey ... it's fine. No problem we will make it QPR between 18.35 and 18.55. You take both of mine ... No problem. Thanks Harvey.
- OFF you go. Have a nice flight. Here is the plan.
- Just like this? said Santa ... they will say nothing?
- It's OK Santa, just tell the controller to show you the routing.
- Many thanks, said Santa, is there anything I can do for you?
- For me? No, said Mario, it's Christmas, it's a gift to you, but

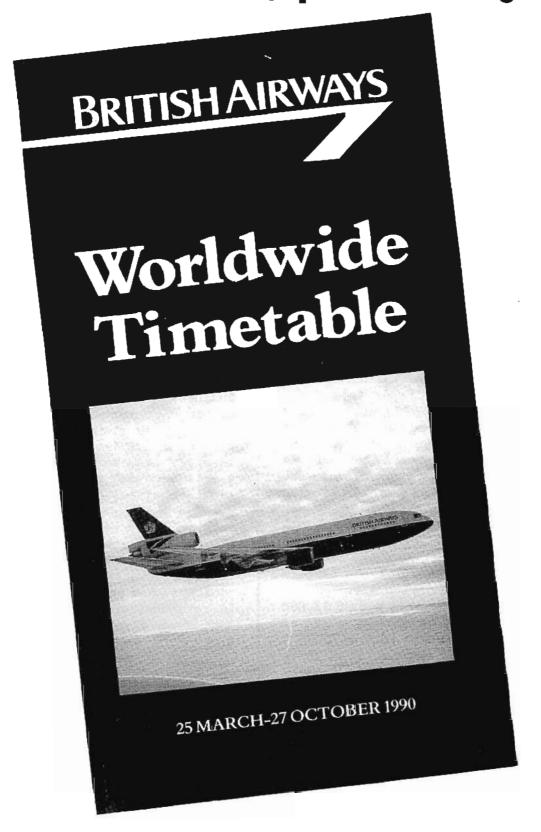
maybe you can do something for some of my friends who are in Palma. There are 3 controllers from Düsseldorf, 2 from Frankfurt and 4 from Maastricht who are stuck on the airport on stand-by tickets for the last 2 days. If you could take them back to Düsseldorf on your way back I would be obliged. Anyway they might help you to reduce the delay on your way back to Rovaniemi ... Merry Christmas Santa! ▼



Merry Chrismas and a Happy New Year!



---- AWFUL? No, just amazing ---



Riding high one service, British Airways looks to conquer the globe.
Understatement has seemingly been a cornerstone of life for the British but not these days for boldfaced Brit-

ish Airways. When the national airline published its annual report last week, lush graphics and slick text trumpeted the positively un-British message of self-congratulation - and a singular

success story. With \$ 404,25 million in after-tax earnings for 1989, up 40 % over the previous year, B.A. has become a cash cow, in large part because of transatlantic traffic. The carrier is not only the world's largest international airline (18 million passengers on international scheduled flights last year, v.s. Air France's 12.7 million), it is also one of the most profitable.

And B.A. Chairman Lord King says there is more to come. Laying out the company's grand strategy for the '90s, he has set his sights on dominating air travel on all major world routes. Said King: "We see no reason why we cannot achieve this ambition".

The fact that B.A. can hope to fly so high is testimony to one of the most remarkable corporate rags-to-riches stories of the decade. Ten years ago, state-owned B.A. had justly earned the derisive sobriquet "Bloody Awful". Widely regraded as the worst airline in the West, it dished out slovenly cabin service, appalling food, chaotic schedules and cumulative losses to British taxpayers of nearly \$ 620 million.

The turnaround began in 1981, when Prime Minister Margaret Thatcher announced to flummoxed B.A. executives that she intended to privatize the airline. To carry out that seeming mission preposterous, Thatcher had selected as chairman Lord King. A Thatcher crony and ardent free-marketeer, the crusty peer had been the highly successful chief of the Babcock International engineering firm.

King swiftly negotiated a cut of 23,000 employees from B.A.'s bloated staff of 57,000. He managed the feat without a single day lost to strikes, even while other nationalized British industries taking similar medicine were wracked by labor unrest. From the remaining staff he won agreements to boost productivity and restrain wages. Within two years, as the balance sheet veered toward the black, impressed analysts were calling the airline "Bloody Amazing".

King's masterstroke was the 1983 hiring as chief executive of Sir Colin Marshall, former CEO of the U.S. carrental giant Avis. Marshall imposed aggressive marketing tactics on B.A.'s somnolent bureaucracy. His approach, which helped prepare the airline for its total privatisation in 1987, has been the key factor in generating an

unbroken string of profits since 1983. "Before, people thought of airlines as transport", says Sir Colin. "We turned that around. Every airline gets you there. The difference comes in marketing and in passenger service".

Nowadays the company's 14,000-member marketing team is perhaps the best in the industry, and the word SELL is plastered on office walls at B.A.'s sprawling Heathrow Airport headquarters. Adopting the methods of such successful retailers as Procter & Gamble, B.A. is the first airline to market each level of cabin service individually, with "brand managers" pushing to sell each class independently. At the same time, it is also one of the first carriers to fuse the functions for marketing and actual airline operations under one executive, director of marketing and operations Liam Strong. "Other airlines are still things" says Strong. "We are marketing a total ambience".

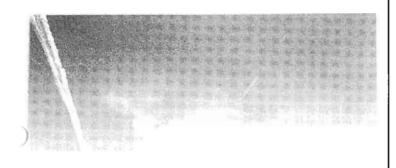
That approach was best exemplified by B.A.'s 1988 creation of a version of business class called "Club", which combined premium fares with a separate cabin, wider seats, gourmet meals, premium wines, hot towels and attentive service. Despite copycat competition, B.A.'s share of the lucrative transatlantic business-class traffic has increased 26 % in the past two years. No less than 80 % of B.A.'s Club seats are filled at full fare. B.A.'s plush first-class cabin, equipped with individual flat-screen, multichannel video monitors, has attracted a 20 % increase in revenues, while the industry's income from first-class travel remains flat.

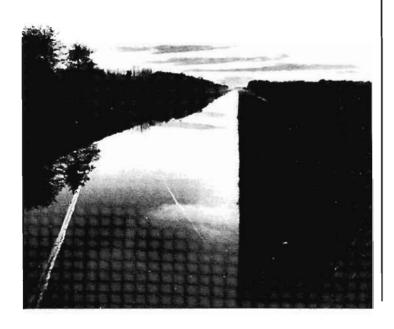
The same marketing drive and endless attention to detail are giving B.A. an edge in other service categories. Once listed at the bottom of frequent travellers' rankings for airline cabin service, food and wine, B.A.'s goldstar offerings for all classes of traveller now rank with the top-rated Singapore Airlines and Swissair. B.A.'s "Galileo" computerised-reservations system is one of the world's most advanced. So is the carrier's troubleshooting network. It includes a telex hot line at every destination on which aircraft crew members can report directly to top management about any snafus, from delayed luggage to a shortfall of cocktail napkins.

Lord King and Sir Colin regularly strap into economy as well as first-class seats to see that standards of customer service are met; an additional 20 staffers ride B.A.'s 224 planes full time. "Sometimes I find a canapé that looks a little limp," rumbles King. "I find out why". While some national carriers, like Lufthansa, offer equally elevated levels of service, industry analysts assert that B.A. is more consistent, and remains so as a fully privatized - and profit-conscious - corporation.

Not all passengers, of course, think so. Some travellers complain that B.A.'s staff is almost mechanical in its service routines; others cite incidents of old-fashioned B.A. truculence in the face of complaints, and grumble over food portions that sometimes seem just plain tiny, rather than nouvelle.

As B.A. prepares to extend its empire, it has occasionally hit air pockets. The carrier failed in a bid to get a





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toehold in the huge U.S. domestic airtravel market when a \$ 750 million bid for 15 % ownership in United Airlines fell through last October. Nonetheless, the two airlines have a comprehensive cooperation agreement that gives the British company's passengers a grand total of 400 destinations worldwide. Since linking up with United in 1988, there has been a 30 % increase in traffic between the two airlines. B.A.'s air fleet, two years younger than the international average, will add 26 aircraft by 1994, many of them mid-range wide bodies like the Airbus A320. Those jetliners are intended to handle a major expansion of service in Europe and the Far East, two key targets in B.A.'s long-term strategy.

In the same vein, the purchase last year of a 20 % share of Belgium's Sabena World Airlines is aimed at giving B.A. a "Euro-hub", linking the airline to other major destinations on the Continent. Joint ventures with an East European airline and Aeroflot are reportedly under discussion.

The fact that British Airways has hit such a high cruising altitude in the past few years does not mean that clear skies lie ahead. As it moves beyond the transatlantic market, the company will be tussling around the globe with top U.S. airlines like American. In the fast-growing Far East markets, B.A. must contend with the low labor rates of carriers like Singapore Airlines, and with the protectiveness of such markets as Japan, where the government is unusually restrictive with route rights, landing slots, and gates at virtually all airports.

Equally worrisome, in the view of most analysts, is the fact that although B.A.'s profits are high, much of the total is earned on the transatlantic run. Industry watchers believe B.A. is losing money on its intra-Europe flights and at best breaking even in its domestic market, where European deregulation has brought fierce competition. B.A.'s weaknesses have been aggravated by a European Commission investigation of the company's Sabena investment. The charge; that the move

creates a monopoly at the Brussels National Airport. If the contention is proved, the deal could be vetoed.

To cope with some of those challenges, B.A. is getting into even leaner competitive trim. This spring the company began a drive to shave as much as 10 % from support-service costs. Despite the King touch, the decision has already touched off a strike by 7,000 electrical engineers, the first such disruption in more than a decade.

Since marketing savvy is what got B.A. up there, the management believes only better marketing will keep it aloft. With that in mind, B.A. plans a full-scale upgrade of its economy service this year, most likely including a new élite cabin for fullfare economy passengers. That should help Lord King's airline stat in a class all its own.

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IFATCA IMPRESSIONS

Have you ever wondered, as I did, what happens at an IFATCA conference? I had the chance to find out when EGATS invited the Union Syndicale to join the delegation to the 7th Regional Conference in Budapest in October. I travelled with Kees Scholts and Ollie Habel via Amsterdam to Budapest with Malev. The advantage of having Kees with us resulted in an upgrading to "business class" through his good connections with the station manager. It was not only my first time to an IFATCA conference but also my first visit to a former east block country. Having seen film of almost car-free cities like Moscow and Peking, I was surprised to find that Budapest has just as bad traffic jams as any capital in the west. The only difference being that the mainly Trabants and Wartburgs on the streets produce a stronger stink of exhaust fumes!

After settling in to the hotel, the evening began with an introductory cocktail. I felt like the new boy at school as everyone seemed to know everyone else. The same people seem to go to all the conferences. However, it was not difficult to break the ice as everyone was very friendly, even those not well disposed to Eurocontrol.

The work started next morning bright and early (9 a.m.) with a report by the EVP Europe. Not being very familiar with the structure of IFATCA I had to learn new terms such as EVP-executive vice president and VP- vice president, presumably not an executive but higher in the pecking order.

Due to the generosity of MALEV in pro-





by John McNeill

viding free tickets to all the delegates, naturally more arrived than had originally been expected. Consequently we were rather crammed together in the conference hall. As befits our status (!) Eurocontrol was placed in the front row, so it was not possible to sleep. Lunch provided a welcome break.

The afternoon and following morning sessions were taken up with reports from the member associations. Recurring themes were staff shortages and poor equipment. Regularly during these reports a voice would come from the hall - "your representative at the Flow West meeting stated that such and such would be in order, is this true?". The answer would invariably be - "no". It seems that national prestige still comes before reality.

The conference finished with another buffet that evening and unfortunately a very early flight the next morning to Amsterdam.

So what was the value of such a conference? For me personally, and I believe for a lot of the delegates it was a nice social occasion, a chance to meet fellow professionals from other countries and find that we have a lot in common.

As regards the conference in general I was sorry to find that they still believed in national solutions to the ATC problems in Europe, understandable perhaps as they don't know any better. But it is unfortunate now that as their voice is being listened to in ICAO etc..., that they are against other ideas from the European Commission and the Association of European Airlines, among others. *