

# INPUT 输入



## AN OBITUARY



E. "Ted" Bradshaw

Ted, the Executive Secretary of IFATCA died from injuries received in a road accident in ZAGREB, Yugoslavia on 30th November, 1982.

Ted was in Zagreb to organize the next IFATCA conference.

He was still an active controller in Prestwick and should have retired in 5 months.

Rest in peace Ted, and may your kindness be remembered as an example to all controllers.

# INPUT

the magazine of the  
EUROCONTROL GUILD of AIR TRAFFIC SERVICES

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# OUTPUTOUTPUTOUT

At last it's all over, our last goodbye, swinging all the way we troop out joyfully to obscurity. In other words this is our last issue as Editorial Team. We are no more

Rob Bootsma - the Legal Eagle - takes over as Editor from the first issue in 1983. That bondsman and bulwark of beaming boisterous beatitude - Bootsma.

J.E. van Belle, for some quaint reason known only to himself would like to thank all the people who took a lot of trouble (and some who did not!) to come up with contributions during his two years as Editor.

One thing we hope we proved during our two years was that - given the encouragement - people in the Operations Room will write.

So to this issue. Nothing new or mind-bending about it. Exept for the Forum, and a piece on Meteosat 2.

Perhaps we are a little less serious than usual (save your laughs for later) but as it's our last issue, and as it's inevitable, you may as well - as the saying goes - lie back and enjoy it!

## PRESIDENT'S MESSAGE

J. Gordts

Summing up.....

Having reached the second half of this 10th EGATS year I am tempted to make a quick check on the state of affairs.

A comparison between the agreed AGM activities and their actual results indicates that we are not doing so badly!

The main activity, our Fuel Economy Forum, has taken place and we may, all points considered, declare this event a success for EGATS.

The Forum preparation and organization have involved many members who have all performed their tasks with a 100% of energy and enthusiasm and in some cases : Danny Grew, Kees Scholts, Fred Lenoble and Roger Pierrard we even estimate a score of 200%.

My initial estimation of the EGATS potential is herewith confirmed and we will most certainly pursue this initiative.

The Forum-session itself contained a number of statements and discussions which may not have satisfied the controller-public because they were not estimated to be of direct, practical use. We have anticipated this reaction and have recorded the entire session and we will, during the coming weeks produce a full analysis of the vast amount of forum information.

Our aim is to present all intere ted parties with a practical summary which is also to contain some basic suggestions in relation to applied Fuel economy.

It goes without saying that Walter Endlich's "shopping list" will find a place of honour in this document!

As a follow-up or as a continuation of this Forum we are already planning a second, small(er) - Scale Session in January or February 1983 thus complying with a request of the German pilots' Association "Cockpit Verein".

Maybe some other pilots' associations will show interest to join this venture. Apart from the provisional forum information which you will be able to read about further on in this issue you, therefore, expect to find us producing a lot more papers, plans and diagrams still using our temporary headquarters: room 58 (which Mr. von Villiez was kind enough to put at our disposal).

As a next, main initiative we wish to present a study (or lecture) on "Stress in ATC" this initiative is presently being organized by our EB in cooperation with specialists and will, possibly, be backed-up by the Eurocontrol Medical Authorities.

As current affairs we wish to mention several technical proposals and coordinations which our Technical Committee is handling in a continuous dialogue with the Maastricht Ops. and Systems divisions.

Together with the Eurocontrol Staff Committee and the Union Syndicale our Professional Committee offered assistance during VIP visits to our centre by the Dutch, Luxembourg and Belgian Ministers of Transport. The Professional Committee was also very active in representing EGATS on informative

## KOP OF MUNT



Voor belegging of als hobby hebben wij steeds een ruime sortering op onze afd. munten en edele metalen

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issues to: KLM and many other concerned parties on the political as well as on the operational level.

Though these contacts were intended to be kept as professional as possible we have occasionally been confronted with rather hostile attitudes of fellow associations and we have, regrettably, been obliged to adopt a militant attitude.

We have indications, however, that since the Concept IV decision of November 23rd the relations with our European fellow associations have somewhat improved thus giving us reasonable hope that the situation can be normalized in the not too distant future.

We are of course well engaged in a number of local activities such as:

- negotiations with Eurocontrol Ops. regarding the operational purpose and value of Duty Flights.
- negotiations with Eurocontrol Ops. regarding possible EGATS participation in LOA discussions.
- participation in tripartite discussions (Union, Staff Committee, EGATS) with regard to the proposed early pension programmes for Controllers.

You will appreciate that, whilst we are using every occasion to improve our professional condition in- and outside Eurocontrol, we can only do so if we find enough support from our membership.

The actual team of EGATS officials have reached a level of activity which will be hard to maintain unless:

- the necessary enthusiasm and motivation are kept

and  
- a fair balance of goodwill and cooperation is present

We assure you that the feedback from the members is important to us because it will stimulate our future line of action and since the workload seems to be steadily increasing we must make sure that we can find enough manpower to make our future activities possible and also to assure confirmity in our management.

In this context I wish to mention as an example of smooth handover and continuity a pending change in the editorial staff of our INPUT magazine: our present editor Mr. van Belle will cease his activities as main editor and Mr. R. Bootsma will fill his post.

I wish to express our thanks to Mr. van Belle who, together with his team, was able to produce the high-quality anniversary issue which I am sure, we will continue to use as the flag of 10 years EGATS!

We wish Rob Bootsma the best of luck and promise him full support.

And to all of you

a merry Christmas and a Happy New Year.

# 1982 FUELECONOMY FORUM



by **Geoff Gillett**

Nearly 200 international participants attended the EGATS Pilot/Controller Fuel Economy Forum on Thursday 25th November 1982.

The Forum was the highlight of several activities to mark the tenth anniversary of the foundation of the Guild.

The majority of guests arrived early in the morning in time to take part in the briefings and guided tours of the Operations Room.

The morning events were followed by an anniversary luncheon for over 100 invited guests, which was served in elegant style in the Officers' Mess of the German Air Force.





In his opening speech, the President of EGATS, Jan Gordts, expressed appreciation to the Director of the Maastricht Centre, Dr.H. Von Villiez and to the Commanding Officer of the Military Unit, Lt. Col.R.Sauerland for enabling the Guild to conduct the Forum and for the provision of facilities and assistance in the realisation of such an ambitious event.

He added that it might have been the last opportunity to see the Centre working for traffic below flight level 300!

In reply Dr.Von Villiez wished the Fuel Economy Forum as much success as the previous Pilot/Controller Forum on Flow Management had been.

Lt.Col.Sauerland expressed pride in the good relationship which existed for all to see, between the military and civil personnel working in the unique multi-national environment of the Maastricht UAC.

The luncheon was supported by FOKKER AVIATION who provided the dining room with an attrac-

tive display of their products. In thanking the FOKKER representative Mr. Knook for his kind generosity, EGATS Vice-President Geoff Gillett expressed appreciation of the fact that some costs had not been too severely cut!



#### Guests transported to "Hotel Maastricht"

The Forum itself took place at the Hotel Maastricht, a most appropriate venue since the summit conference of the European Heads of State had also taken place there earlier.



#### Technical presentations and panel discussion

At the start of the Panel Session, Jan Gordts outlined the objectives of the Forum:

- To provide a platform for Pilots and Controllers to discuss the practical and

most efficient application of fuel economy measures;  
 - to bring about increased consciousness for fuel economy.

In addition, he said that ATC might have to consider a new objective, supplementing those of safety and expedition: economy. At 3.15 pm the Chairman of the Panel, Mr. Walter Endlich, introduced the panel members: Miss L. Austin

UK Guild of Air Traffic Controllers  
 Mr. R. Bootsma  
 Eurocontrol Maastricht  
 Lt.Col. W. Ehrhardt  
 German Air Force, Frankfurt



Capt. W. Jennes  
 VNV (& Europilote)  
 Major W. Lynd  
 United States Air Force  
 Mr. J. Marx  
 LTU  
 Capt. S. Rasmussen  
 Danish Airline Pilots  
 Association  
 Mr. A. Scheers  
 Belgian Guild  
 Capt. J. Velenturf  
 BAA (& Philips Aviation)

Reiterating the objectives and the scope of the Forum, the Chairman emphasized that it was not the intention to duplicate or compete with other activities in this field, e.g. a Seminar on fuel economy which had been held at the Eurocontrol Institute for Air Navigation Services

at Luxembourg in October, 1982.

The aim was rather to supplement such activities, investigating how short term measures could be introduced in the day to day operations. To this end he had prepared a "Fuel Economy Shopping List", based on the suggestions of many operators and ATS organizations. Rather than involving itself with longer-term activities, e.g. the reduction of vertical separation above FL290, the Forum should be restricted to what could be done here and now.

In an attempt to be better informed about fuel economy matters beyond the immediate responsibility of Air Traffic Controllers, EGATS had sought professional advice from experts on such topics as jetfuel, airframe, propulsion and flight management. These experts set the Forum scene with presentations, suitably illustrated by visual aids:  
 - Management Systems in Air Transport  
 A.G.L.M. Weijs  
 Hollandse Signaalapparaten



In his presentation Mr. Weijs stated that industry has the technology to introduce systems which can readily support fuel economy measures but the political preparedness for introducing such systems on

an international basis had yet to come.

Such sentiment has a familiar ring in Eurocontrol ears.....

- Development of Jet Fuel Prices and the influence of Jet fuel Prices and availabilities
- Messrs. Duym & Marbaix
- Petrofina



These presentations reiterated just what had happened in this field in the last decade and then attempted to predict the level of price increases and the specification of new types of fuel, expected in the future.

- Aircraft design with a view to fuel economy
- Mr. H. Wickardt
- Chief Performance Engineer
- Fokker Aviation

The great advances in aerodynamic design, particularly in accommodating supersonic wind flow on aircraft surfaces, operating



at sub-sonic speeds, had produced a gain in fuel economy in the order of 8%.

Nevertheless, fuel costs currently represent almost 50% of some airlines operating costs.

- Aircraft Engine Influence on Fuel Conservation.
- Capt. M.C.Muir,
- Chief Engineer, Flight Operations
- Rolls Royce



Capt. Muir in a relaxed and informal presentation offered a number of practical suggestions: two engine taxiing; reduced thrust on take-off (reduced thrust not only giving fuel saving but also reduced wear on engine parts); achieve un-interrupted climb/descent; maintenance of accurate mach number at optimum cruising

level etc.

In conclusion it was estimated that if all these measures were combined, the

expected + 8% rise in oil prices could be offset by an equivalent reduction of consumption.

- Assistance to Pilots by Flight Management/ Performance Computers  
Messrs. D.Ivanoff & P.Camus



Flight and Support Directorate Airbus Industrie.

In this presentation it was stressed that in spite of all the computer systems introduced in aircraft, the concept of "man in control" is not lost. The objective was to use all available automation and to develop still further improvement of safety. The

introduction of RNAV systems is playing an important part in amongst others the reduction of fuel consumption with the enabling of direct routes to be accurately flown.

The main tasks of the Flight Management Systems were to support the area navigation and to provide suitable (ergonomic) guidance and display functions.

"Look-ahead" features and auto-thrust control systems will be introduced, taking into account the current flight path.

A tactical/conversational mode of flight management system would give the possibility of answering ATC questions related to separation en route and to Top-of-Descent times.

At the end of the first session, the Panel Chairman made an initial resumé of the proceedings and posed the following questions for consideration during the coffee break:

- To what extent will Flight Management Systems facilitate the cooperation between Pilots and ATC?
- Can all airspace users afford sophisticated FMS equipment?
- If not can they meet today's ATC clearances with the required accuracy?
- Do the FMS equipped aircraft have advantages over the non-equipped?

#### Press Conference

At 18.00 hrs, the first Panel Session was terminated and snacks and refreshments were offered during the coffee break by courtesy of NLM CITY HOPPER and HOTEL MAASTRICHT;

During the recess, Messrs. Gordts, Bonne and Horsman briefed the Press Representatives on the business of the day. The specialist aviation press

will be provided with more detailed data.

The Guild was fortunate in receiving considerable assistance from HOLLANDSE SIGNAAL-APPARATEN for printing and secretarial costs incurred in the event. Furthermore, the secretarial services performed by Mr. Danny Grew and his wife Denise (formerly of Britannia Airways) were a mammoth task meticulously performed.



#### Panel Session part 2 - Questions and answers

At the resumption of the Forum Panel Session, the Chairman reiterated that whatever measures Air Traffic Controllers would take in their endeavours to help in the saving of fuel they would never infringe upon, the prime responsibility of ATC, viz. the provision of SAFETY.



Capt. Jennes, representing IFALPA said in a more light-hearted moment, that it was the Airline Management dream that aircraft should ideally depart

with minimum fuel and arrive with the maximum, a philosophy which gathers more depth the longer one thinks about it!

In presenting a case for the International Business Aviation Association (& Philips Aviation Division) Capt. Velenturf outlined how aircraft departing/arriving to and from secondary airports were frequently penalised by the major airports. He went on to say that "recently a suprising change of attitude, started by Maastricht controllers, had spread to "Dutch Mil" and "Belga Radar"". This change took the form of an increased willingness to offer more direct routings, in spite of the required increase in coordination.

Major Lynd, a flight navigator with the USAF operating on C130 and C9 types, said he was pleasantly surprised just how fuel conscious some European ATC units were. He had been under the impression that only the USA was concerned.

Varied questions were discussed between Panel members and experts from the audience and eventually centred on the allocation of optimum flight levels and the assignment of direct routes, off the established network.

Mr. C. Dieben, Head of Operations Division Maastricht gave an illustrated reply to these queries by reference to daily practices and experiences at Maastricht UAC.

He said that direct routings and economic levels could often be assigned because of highly motivated staff, excellent civil/military cooperation and the availability of an advanced system.

Multiple coordination procedures at the interfaces between Düsseldorf/Brussels FIR/and Maastricht UIR and the close

cooperation of all concerned, were also explained in this context.

The descent of aircraft inbound to Gatwick, a matter of importance to several operators present, was referred to by Miss L. Austin of London ATCC. She explained there was a problem of telephonic communication with lower airspace controllers, but that initially imposed level restrictions abeam Lydd were nearly always lifted.



Capt. Velenturf concluded that ATC has the national borders in the wrong place!

Mr. R. Bootsma (Eurocontrol Maastricht) had asked to what extent were the requested flight levels contained in repetitive flight plans realistic, bearing in mind changing Met. conditions.

In reply Capt. Rasmussen and Capt. Leonard explained that the RFL in RPL's was the level to which the aircraft could climb at maximum weight, the plan by necessity having to be prepared (perhaps by computer) well in advance. However, on the actual day of the flight when the aircraft weight was known, the RFL could well be higher.

Mr. Bootsma made the point that it was essential for the Pilot to make known his change of RFL as early as possible on the frequency.

Another questioner from the floor suggested that it would be better if the military aircraft were to fly only at night! To this Lt.Col. Erhardt replied that perhaps Mondays-Civil, Tuesdays-Military would be another possibility!

Mr. H. van Hoogdalem restored the truly practical aspect of the Forum's objectives, by stating that initially the Session had been pre-occupied with experts' dialogue, without much immediate benefit in the short term.

If pilots would inform controllers of the top of initial descent time on contact, there was a good chance that the controller could arrange it. This was something controllers could implement "with effect from 0800 tomorrow morning!"

(Information indicates some success with several aircraft already).

These views were strongly supported by many pilots, especially by Capt. D. Leonard, representing the British Airline Pilots Association, Capt. H. Döhler of Lufthansa/Condor and Capt. C. Denke of the German Cockpit Association. Capt. Döhler and Capt. Denke then described the CDA (Continuous Descent Approach) currently tested at certain airports in Germany and also applicable at Heathrow. They expressed their satisfaction with the relevant trials, which were explained to the Forum by Mr. Rainer Grimmer of Bremen Approach Control.

Mr. Stan Scheers of Brussels APP/TWR and Major de Pouillon from the Belgian Air Force outlined that similar procedures had also been designed for Brussels airport. Their systematic exploitation, however, would depend upon

the introduction of civil/military coordination procedures similar to those existing between Maastricht UAC and Belga radar.

There appeared to be a real "thirst for information" on a multitude of subjects and although not really within the scope of the Forum, questions about reduction of vertical separation and vectoring techniques (e.g. Zone of Convergence-ZOC) also arose. Mr. Vachierey, Head of the Division for Technical Studies of ATC and Navigational Systems at Eurocontrol H.Q. expertly commented on ZOC to an attentive audience.

#### Panel Session closure

Discussion on these and many other interesting points continued so intensely that the planned closure had to be extended by 45 minutes. In closing the Panel Session. Jan Gordts expressed thanks to all concerned and in particular to the Panel Chairman for moderating the discussions. His invention of the "Fuel Economy Shopping List" would probably become a new tool in air traffic control. Most of the participants then adjourned to the "Re-fuelling Area". to continue the discussion and exchange of ideas in a more informal atmosphere, until the "wee small hours"! Many had, during the course of the day, taken the opportunity to renew old acquaintances or to make new contacts with fellow-travellers in the world of aviation.

#### In conclusion

Though the main event of the 10th Anniversary has passed, it should be seen as only the beginning of a new era, where ATC could play a major rôle in reducing the huge quantities

of fuel unnecessarily consumed by aircraft.

It is the intention of EGATS to produce a follow-up to the Forum in document form and to encourage further the exchange of information between pilots, industry and controllers.

Just how successful was the event?

Many participants from the various groups attending have expressed great satisfaction that a comparatively small Guild has been successful in organising a Forum of such ambitious proportions and that on the big day all went according to plan. That we were able to demonstrate our daily work to the biggest representative group of Airline and Aviation Industry personnel ever to be seen at the Maastricht UAC, was a worthwhile achievement in itself. The quantity of Pilot/Controller dialogue was less than originally envisaged, however, a wealth of information on peripheral systems, was also made available to the Forum, especially by the experts from ROLLS ROYCE and AIRBUS INDUSTRIE.

Now that the basis has been established, there surely will be further occasions when we can discuss in depth with our pilot colleagues.

It is important here not to overlook the fact that not only for controllers, but also for pilots, there was an excellent opportunity to benefit from the informative nature of the Consultants presentations. In this environment of rapidly changing technology, pilots too have to undergo a continuous educational process.

#### A prestige event

The Forum has marked an

important milestone in the history of EGATS and in that respect, it has surpassed all expectations.

The good reputation of Eurocontrol Maastricht and of "Lippe Radar" has been greatly enhanced and many favourable comments have been received by Executive Board Members of EGATS, praising the Guild for a high degree of professionalism.

All of these things encourage us in other less spectacular day-to-day activities.

Finally, let it be said that this event was truly an example of multi-lateral cooperation at its best.

The Guild received the full support of Management, both during the planning phase and on the big day, without which the event could

not have succeeded.

That so many people gave so generously of their free time to assist, demonstrates that the concept of European cooperation is very much alive and flourishing. The naming of individuals to whom thanks are due would not be possible, since they are too numerous.

Nevertheless, the Executive Board, of the Eurocontrol Guild of Air Traffic Services wishes to express its appreciation to the Panel Members, Consultant Companies, Sponsors, Management both Civil and Military, Guild Members and helpers.

Your valuable support we gratefully acknowledge.

Maastricht UAC-December 1982.

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ROBERT LASSON and DAVID EYNON:

PUNCH, December 5

# THE FRILL IS GONE



*Scene: The Virtually International Thriftwing Airlines Terminal, located between Tedium and Monotony Bay, N.Y. At the end of a long line, two travellers strike up a conversation.*

**WATELIST:** I think there's some movement at the head of the line.

**JETLAG:** Nah, they're only three days behind schedule. This must be your first flight on Thriftwing, eh? Hey, the line is moving! Come on!

*(WATELIST stares blankly at grilled window of toll booth.)*

**JETLAG** (*pushing around him and shoving bills through grille*): Forty, please.

**WATELIST:** Tokens? What do I need with—

**JETLAG:** Buy the tokens. You're holding up the line.

**WATELIST:** Uh, thirty. (*Grunts from jab in ribs.*) Forty! Thanks.

**JETLAG:** Stick with me, you won't go wrong. Now—as we go up the loading ramp, don't give any handouts to the standbys. And stick close behind me when we hit the cabin. This baby looks at least fifty per cent overbooked.

*(JETLAG skillfully knocks down an old woman and straddles a double seat until WATELIST catches up.)*

Well, at least we won't have to strap-hang across the Atlantic. We must be ready for takeoff. The pilot has turned on the "No Spitting" signs.

**INTERCOM:** This is your pilot, Corporal Fledgling. Thanks for choosing Thriftwing today. While we're preparing for takeoff, your flight attendants will demonstrate our latest safety equipment.

**FLIGHT ATTENDANT:** In the unlikely event that we lose cabin pressure at high altitude, these oxygen masks will appear in the vending machines. When the mask drops down—

**WATELIST:** Vending machines!

**JETLAG:** And you weren't going to buy tokens!

**FLIGHT ATTENDANT:** Should we be forced to abandon the aircraft in water, place two tokens in the slot under your seat and a life jacket may disengage, like this. But don't worry—that's never happened in my three days with Thriftwing.

**WATELIST:** Pay for safety equipment?

**JETLAG:** But there's free shark repellent—and a gift compass.

**FLIGHT ATTENDANT:** At this time, ladies and gentlemen, we are ready to take your orders for dinner. We have two choices this evening. First choice is something brown and something green. Or, Chef's Surprise, a brand new creation by the same team of Thriftwing chefs who

introduced Szechuan Blintzes and Bulgarian Poptarts.

**WATELIST:** What the hell could their Chef's Surprise be?

**JETLAG:** Don't ask. Stick with the brown and green. At least you can identify the colors.

*(Movie screen drops down at front of cabin.)*

Oh-oh! Here comes the movie. Quick! Buy a headseat.

**WATELIST:** What? Pay good tokens to hear . . . (*reads title from screen*) "The Miracle of Industrial Rubber"?

**JETLAG:** Not hear. The headset gives you *silence*. The movie soundtrack is piped over the plane's P.A. system.

**P.A. SYSTEM:** "Industrial rubber is a miracle you probably take for granted. But imagine if all the items made from this magnificent substance were to disappear from your daily life—look at what you'd lose. Your automobile would be first to go. Then—"

**WATELIST:** How do they get away with this?

**JETLAG:** Because no Thriftwing flight has even been skyjacked. The movie is why. It comes on automatically. Even the pilot can't turn it off.

**INTERCOM:** This is your corporal again, ladies and gentlemen. We're approaching an area of high turbulence, and for the next 20 minutes you can use the pay toilets for only a *single* token.

**WATELIST:** He's all heart. I think I'll take a snooze. How does this seat go back?

**JETLAG:** Three tokens. In here.

*(Fourteen hours—and two re-runs—later.)*

**INTERCOM:** Corporal Fledgling again, folks. We have been cleared for landing, and at this time the flight attendants will pass out forms to complete with your name, citizenship and a local forwarding address in the event that Flightwing locates your luggage.

**WATELIST:** Is that the airfield down there? Why aren't there any buildings?

**INTERCOM:** This is your purser speaking. I would like to announce that we still have 14 boxes of Bulgarian Poptarts in the duty-free shop, and that this flight absolutely will not land until every Poptart has been purchased. Thank you.

**WATELIST:** How long can they circle?

**JETLAG:** Longer than you can go without Poptarts. Get me a box, too. They make wonderful bookends.

**INTERCOM:** Corporal Fledgling again, ladies and gentlemen, reminding you that those passengers wishing to reserve personal transportation accommodations from the runway to the terminal building should notify the flight attendants now. Thank you, and thanks for flying Thriftwing.

**WATELIST:** Transportation to the terminal? How far can that be?

**JETLAG:** Forty-eight miles. Wanna go halfies on a mule?

## FRANCE BLAMED FOR AIR DISASTER

France's highest legal reviewing body, the Council of State, has ruled that the French State was entirely responsible for an air crash between two Spanish aircraft near Nantes on March 5, 1973.

The air disaster, in which 61 passengers and seven crew were killed as an Iberia DC9 collided in mid-air with a Spantax Coronado, occurred during a French air traffic controller's strike.

The Council of State said that the replacement military controllers committed "serious mistakes involving the state's responsibility".

In 1980 an administrative tribunal in Nantes held that 85 per cent of the damages should be paid by the state.

The French Ministries of Defence and Transport and the Spanish insurance companies appealed against the ruling.

Flight International  
28 August, 1982

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## FLEXIBILITY? Fred Le Noble

For quite some time now the Brussels West Sector has had the benefit of the ACT Exchange with LATCC. I think that in general we may say that this automatic exchange of flight plan information has decreased the sector workload and created more time for the other tasks to be carried out by the sector controllers. Reading this, one may wonder why I am writing this. The reason is simple; in combination with a very inflexible level Allocation System, controllers at both ends regularly have to telephone each other to ask approval for flights which are not at levels specified in this system.

The ACT Exchange passes flight details at an early time to the adjacent unit thus enabling the receiving sector controller to plan the traffic. Computer-to-computer acknowledgement of receipt is accepted as a sufficient guarantee that the information sent is properly received.

In spite of this the level Allocation System as laid down in the LoA forces the controllers of the sending unit to check if flights not at "correct" levels can be accepted as offered in the ACT.

Time and again I have opposed this procedure because it takes up coordination time in a very unuseful way. Would it not be much simpler if the receiving unit was to advise the inability to accept the terms offered. If this method was to be accepted we would really benefit from Automation in ATC.

When passing estimates verbally the receiving unit accepts the terms specified or gives the items which, for them, need modification and specifies an alternative,

Why not do so with ACT Exchange?

Together with this I would like to place a large question mark to the Level Allocation System in general.

It is commonly agreed that a LAS is a great thing when technical problems arise and a basic separation system is needed, it can also be used as a simple means of flow regulation. But it makes ATC very INFLEXIBLE. A few examples.

Traffic via COA is not allowed to enter LATCC airspace at FL310. It is, however, the most popular level on that route. The distance between COA and the point where a possible conflict with traffic from the EHAM FIR might occur is so long that an amendment of the LoA specifying a standard release for descent would solve this in a satisfactory manner and increase the flexibility.

Traffic to EBBR is required to cross the UIR boundary FL250 or below.

The existing release for climb and descent east of DVR, gives enough flexibility to enable controllers to descend traffic in a more economical way than provided for the LoA.

The same for traffic into e.g. EGKK FL280 at KOK is judging from comments from pilots far from the desired level when they still have + 100 nm to fly to their destination.

A similar situation exists at CMB.

Officially traffic departing from EHAM or overflying the EHAM FIR has to be at FL230, 250, 330 or higher at NEBUL. Why? Traffic to Paris can without problems be coordinated in a way that a large block of airspace is blocked by descending traffic.

But how frustrating can it be when you see longrange traffic which is unable to accept higher than FL290 stuck at FL250 or even worse be descended from FL290 to FL250 just to be climbed shortly after transfer.

Especially in a time when fuel saving is written in capital letters in every airline's manual we as Air Traffic Controllers should be the first to apply procedures in a safe but flexible manner. In this respect it is ridiculous that aircraft, even for two or three minutes, are held down to most uneconomical levels

just because someone wrote that level in a Letter of Agreement. Things like that can never be justified to either pilot or airline.

No one will argue a low level for traffic reasons-----but for a piece of paper!!!!

It is therefore that I hope that EGATS will continue to stress the necessity to have ACTIVE controllers participate in negotiations of those parts of the LoA's which affect our day-to-day work at the sector. Should this happen, I am sure some parts of the existing LoA's would look quite different if they would be there at all.

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## A TECHNICAL BREAKTHROUGH

Geoff L. Gillett

At this time of the year, it is customary to review previous activities and to compare all those good intentions with actual results.

In the field of Technical Committee activity, we feel that it has been a period of success.

What brings us to that conclusion?

Firstly, a dialogue has been established between the Guild and Management and a systematic procedure introduced, for the submission, evaluation and follow-up of proposals originating from Operations personnel. Our intention has always been to offer an additional channel of communication to the existing one-via Supervisors to Operations Officers, not on a competitive basis but as a supplementary one.

Does it work?

Not perfectly, but it is getting better.

It takes longer than it should because one has to overcome human factors as well as technical ones. Not the least of these could have been some doubt about each others motives.

The Guild has never claimed to act as a representative, unanimous body of opinion for the whole of the Operations Room.

Such claims would exceed our intentions and certainly our capabilities. Let it be said loud and clear, that the sole objective of the Technical Committee is to try to improve the operational environment

in which we work, for everyone's benefit, but in particular for the users of the system.

In a few words - a professional interest in our professional environment.

There are few flowers given or expected for many hours of additional voluntary effort and often one may ask why bother?

Occasionally, one finds oneself in conflict with colleagues and with superiors alike, so much so, that politics or relegion would seem less controversial than technical matters. Hang gliding or grand prix racing would seem less hazardous than entering into proposing changes to controllers!

But farewell philosophy and back to the facts! Many recently introduced modifications have found their way into operational use by the efforts of your Technical Committee - the underling is intentional. Operational requirements are being prepared for other proposals and the evaluation of still more items is in hand.

The reduction of most deviation line update requirements will come a step nearer, thanks to Technical Committee proposals originating in 1980.

How many "Wrong Fix Designations" have you made, since you fingered your first TID?

A list of some 30 items has been processed systematically, though it must be admitted that not all proposals have merit, or are necessarily desirable on closer examination.

But let us not rest on our achievement.

Evolution is a continual process and in the world of aviation it goes faster than most. We have seen improvement in Operations Room lighting, air conditioning and at the working consoles, with the introduction of the much improved ODS displays.

Even to be seated, is more comfortable than in the past. However, the proliferation of paper, sellotaped to consoles, back, front and sides and on all working surfaces, still offers a challenge to the tidy-minded types.

For those looking for a higher level problem, accurate wind acquisition, processing and display, would keep you busy for several years!

Many are surprised that operations personnel should have an interest in such matters, or that they have the skills or talent required to succeed in dealing with such problems, outside their normal area of responsibility.

I believe that there exists a wealth of potential expertise in our Division, which would welcome new and challenging tasks.

Evidence of this can be seen in the organisation which was required to bring about the recent Fuel Economy Forum which EGATS so successfully staged. Those of us who participated in the organization of the Forum benefited from the equivalent of a mini-management course and acquired a most useful experience at no cost to our employers.

Of course Technical Committee activities are not so glamorous as those of the Travel Section or "Input" magazine production, but I believe that they are of prime importance.

If we are to avoid the situation whereby our ATC systems are developed entirely by engineers and remotely located planning divisions, we as operational people must involve ourselves in technical matters.

During the last two years, we have initiated the re/activation of the Technical Committee and more recently we have moved into a phase of useful productivity.

Some existing committee members will take a well-earned break and new ones will be needed to replace them. So the scene is set for the new year.

A much improved working relationship now exists within the Operations Division.

Who can meet the challenge of continuing the good work of your Technical Committee?

Geoff Gillett  
Technical Committee  
EGATS-December 1982

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FROM UNITED KINGDOM NOTAM  
A758/1980 :

Where there is a reference in this Notice to a point of time, the time referred to shall be deemed, if it occurs during a period of summer-time, to be the time fixed for general purposes in Great-Britain by or under the Summer Time Act 1972(e) and if it occurs outside that period to be Greenwich Mean Time.  
= All times local.

# NORMS SPORTS PAGE

## SAILING (OR NOT)

One can sum up the sport of sailing in one word - hope. Strange, you may think, but as you set out on your boat looking skywards (seawards as your confidence grows) all you desire - all you need - is wind.

You also hope that you will reach your destination. Hope springs eternal etc. but you won't get far without a breeze.

The wind that chills carries you far. You may freeze to death en-route but at least you're moving.

Some say that sailing was invented by Noah, but we aficionados (not a new Spanish hooch) are fully aware that men were sailing long before he of the maritime menagerie.

As long as there is water on this planet you will find people in it, on it, or both. Buy yourself a plank, or borrow the wife's ironing-board, launch it, stand on it holding a handkerchief aloft and there you are - a sailor. A rather hopeful one, but none the less a sailor. Captain of your good ship.

Of course, you can also spend vast amounts of your ill-acquired moolah on a genuine ocean-going yacht. Navigation then becomes your major problem. You may have a compass, but if not it is easy to remember that North is up, South down, West left and East right. Quite simple really, It won't get you far but at least the map - or chart as we sailors call it - will be the right way up

You may notice that the chart is not yet coloured, but don't worry because you now see all the numbers provided. You can choose your own colours, but the standard green for cloud and blue for sea are probably best. Naturally there will be more blue than green, but if you don't like blue then despair not, simply throw away the colour pencils (or oils if you are artistic) and join up the numbers into a pretty pattern. Then you can try following the resulting course on your boat. Should be interesting and you might let me know how you get on.

Avoiding other boats is another problem. Just remember that a boat coming from your starboard (right) has right of way, therefore you - presumably coming from port - must give way. You could of course carry on, and share your port with the sailor foolish enough to insist on rules of the sea. This is not advisable with ocean tankers several miles long and of vast tonnage.

A few hints and tips on sailing.

### Equipment

- A. Large scale (serious sailing)
  1. Money
  2. One boat
  3. Spare boat
  4. Parrot for shoulder. A stuffed one is better, live one's have an infuriating habit of giving unwelcome advice.

5. Wooden leg. Oak is the best wood for this, although one hears that the Americans have pioneered an aluminium model with simulated Maple finish thus eliminating the twin problems of wood-worm and wet-rot.
- B. Small scale (amateur like me)
1. Wife's ironing board, Don't

tell her what you want it for.

2. Handkerchief. Preferably white, coloured ones may be mistaken for distress signals.
3. Life jacket.
4. Bottle of Glenfiddich Scotch. To keep out the cold.
5. Open ferry ticket. In case you get lost or sink.



SAILING (wrong)



SAILING (right)

# ESA METEOSAT-2



## The Meteosat programme

The meteorological satellite programme, based on a project for which the preliminary studies were conducted by the French Centre National d'Etudes Spatiales (CNES), was included in 1971 in the optional applications

programme of the European Space Agency (ESA). Eight of the eleven Member States of ESA participate in this programme: Belgium, Denmark, France, Germany, Italy, Sweden, Switzerland and the United Kingdom.

ESA's first meteorological satellite, Meteosat I, was launched successfully on 23 November 1977 by a Thor Delta 2914 launcher from Cape Kennedy. Meteosat I functioned perfectly until the end of November 1979 when a failure of the power supply subsystem terminated two of the satellite's three missions, leaving only the data collection mission in operation.

The second meteorological satellite, Meteosat 2, enables the European meteorological services to continue to improve the precision of their weather forecast. In addition, with its coverage area extending far beyond the geographical limits of the countries participating in the programme, Meteosat 2 maintains Europe's contribution to the World Weather Watch, a programme set up by the World Meteorological Organization (WMO). Meteosat 2 integrates in a world network of geostationary satellites comprising, in addition to the European satellite, the American satellites (GOES) and a Japanese satellite (GMS), spaced out on an orbit above the equator.

#### Coverage area

Meteosat is located above the Atlantic Ocean at 0° longitude (i.e. in the equatorial plane) and will monitor continuously the cloud masses and the surface of the Earth visible from the geostationary orbit. It thus provides a large amount of meteorological data affecting Europe, the Middle East and the whole of Africa. The satellite observes continuously the same part of the terrestrial globe, noting any variations from one observation to the next. Such variations foretell various meteorological events that are very difficult to observe by conventional means due to the low density

of weather stations, particularly at sea and in desert areas.

#### Objectives and missions

Meteosat is designed to carry out three main missions:

1. - Image production:  
This mission involves scanning the Earth's surface and the cloud masses located within the satellite's coverage area at half-hour intervals and the three spectral bands. The image thus produced can provide a certain amount of information on:
  - cloud cover and in particular
  - sea surface temperatures
  - wind velocity and direction
  - water vapour distribution in the upper layers of the troposphere,
  - radiation balance
2. - Dissemination:  
This mission involves the dissemination of cloud-cover images or of meteorological data derived from those images. The aim is to provide as many users as possible with access to the data produced either by Meteosat or by other means (e.g. data-collection platforms, the American Goes satellite).
3. - Data collection  
In addition to image production, Meteosat collects local information gathered by automatic or semi-automatic stations called data-collection platforms. The aim of this mission is to gather information obtained locally, to complete the images produced by the satellite.

#### General description of the system

The Meteosat programme is based on the implementation of a complex system whose main

components are a geostationary satellite, tracking facilities, the data processing centre, user stations, and data-collection platforms.

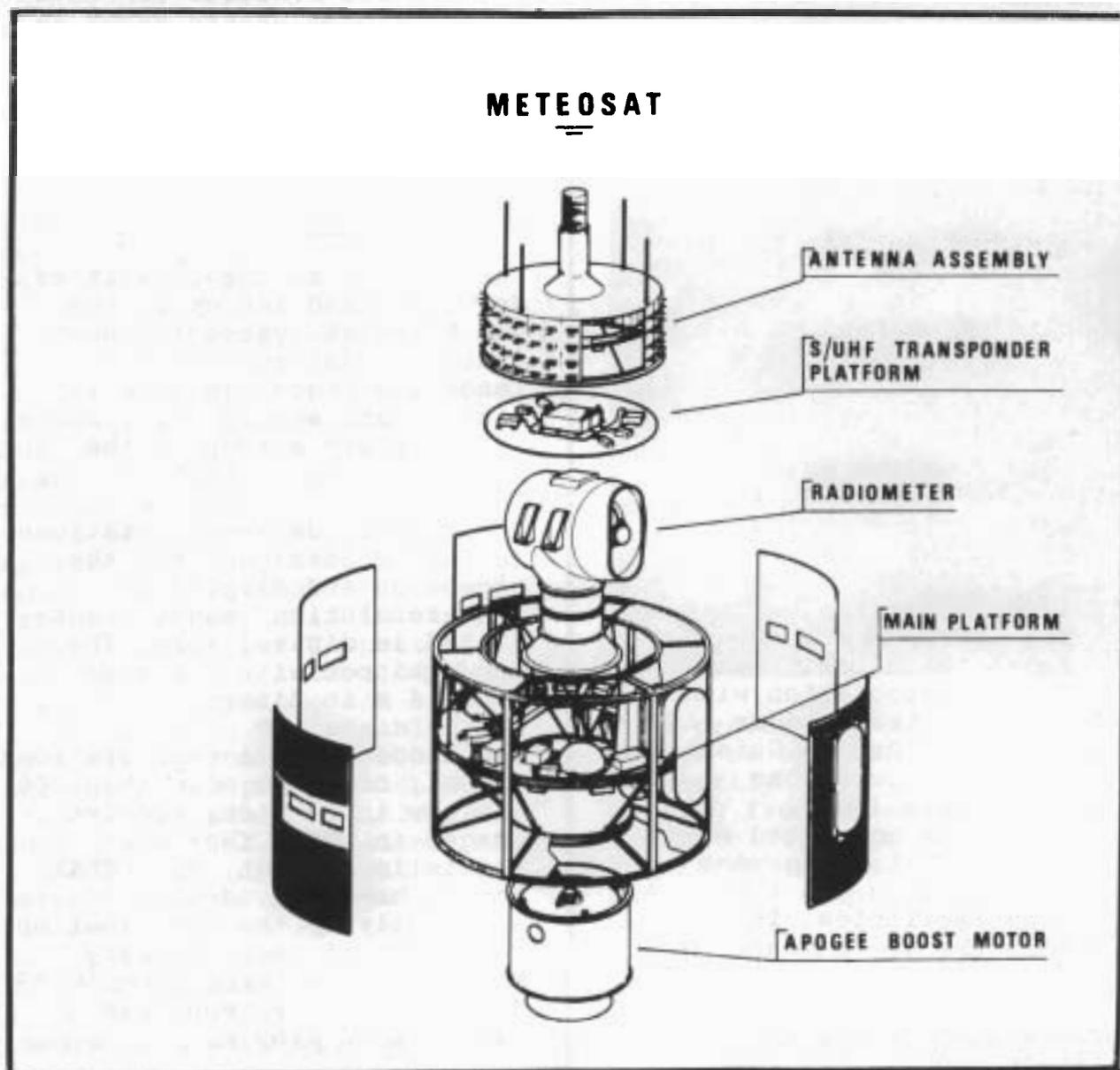
#### The Meteosat satellite

Meteosat 2 is a geostationary satellite, spin-stabilised at 100 rpm, with its spin axis perpendicular to the orbital plane. The spacecraft is of cylindrical shape 3.20 m high, with a diameter of 2.10 m. Its mass at launch is nearly 700 kg, including the Mage 1 apogee motor (340 kg) and the securing

devices. The satellite is of a relatively simple design, which involves a double structure:

- a primary structure which bears the mechanical stresses, and comprises a main platform carrying the support equipment and an upper platform bearing the antennas and most of the communications equipment;
- a secondary structure carrying the six solar panels and the heat shields.

The payload consists of a high-resolution radiometer and a data-transmission system.



The radiometer is an electro-optical instrument whose main element is a 40-cm-aperture Ritchey Chrétien telescope. It can produce simultaneously, in 25 minutes, three images of the Earth, one in the visible band of the spectrum, another in the thermal infrared and the third in the water vapour spectral band.

The data transmission and information relay system comprises a transponder and an associated antenna system. It operates in the L, S and UHF bands.

#### Tracking and data-processing facilities

To carry out its meteorological mission, the satellite works with the following ground facilities:

- the Data Acquisition, Telecommand and Tracking Station (DATTS), located at Michelstadt near the European Space Operations Centre (ESOC) at Darmstadt in the Federal Republic of Germany. This station is responsible for acquisition of the radio-metric and housekeeping data of the satellite, and of messages from the data-collection platforms. It transmits tele-commands and meteorological data or images for dissemination. Finally, it carries out the ranging measurements needed to locate the satellite, working in association with a land-based transponder (LBT) at Kourou (in French Guiana);
- The Meteosat Operations Control Centre (MCC), Darmstadt, is entrusted with the operational management of the satellite and the tracking facilities. It monitors the performance and operation of the satellite and all associated elements, including the orbit and attitude restitution calculations;

- The Data Referencing and Conditioning Centre (DRCC), Darmstadt, is responsible mainly for processing the image data and for the formatting needed for their subsequent exploitation;
- the Meteorological Information Extraction Centre (MIEC) Darmstadt, extracts specifically meteorological information such as wind fields, sea surface temperature charts, cloud system analyses and radiation balances, from the processed images.

These last three centres, MCC, DRCC and Miec, are in fact utilisation consoles connected to a computer centre known as the Meteosat Ground Computer System (MGCS), which is located at ESOC and linked with the DATTS by a high-speed terrestrial circuit.

#### User stations

In addition to the facilities developed and set up by ESA, the Meteosat system includes stations that receive the image and processed data in digital and analog form. These stations are set up at the request of the users.

The primary data-user stations (PDUS) are designed for the reception and display of high-resolution images transmitted in digital form. They are equipped with antennas about 4 m in diameter.

The secondary data-user stations (SDUS), of which more than 200 are now in service, receive images in WEFAX (Weather Facsimile) format. The WEFAX format has been adopted internationally by the Coordination committee of Geostationary Meteorological satellites (CGMS). The receiving antenna has a diameter of 2.50 m.

### Data-collection platforms (DCP)

These are electronic units comprising external sensors, a transmitter and an antenna. These automatic or semi-automatic platforms take measurements of the local environment and transmit them to the DATTS via the satellite.

They can be installed in extremely varied environments and on various forms of support, namely on the ground, on buoys, aboard ships or on aircraft. They are supplied and installed at the request of the users.

Some of these platforms, called international platforms, operate throughout the area covered by the various satellites. They are operated in accordance with an established procedure and programme recognised internationally by the CGMS.

Regional platforms, on the other hand, operate with a single satellite.

### The meteorological images

From its geostationary position, the satellite observes the cloud cover in the visible and infrared regions by means of a radiometer which in 25 minutes produces three images (the first in the visible, the second in the thermal infrared and the third in the water-vapour infrared spectral bands) with a resolution of 2.5 km in the visible and 5 km in the infrared. The visible images are composed of 5000 lines with 5000 points each, while the two kinds of infrared images consist of 2500 lines of 2500 image points each. Line scanning is done by rotation of the satellite, which spins at a rate of 100 rpm. The passage from one line to the next is achieved by means of a step-by-step

movement of the optical axis of the telescope, synchronised with the satellite's rotation period.

The raw images received on the ground in digital form are of sufficiently high quality for immediate use. However, in order to improve their geometric and radiometric properties and to render them compatible with the international WEFAX standard, the images are processed on the ground before being re-transmitted to the satellite for dissemination.

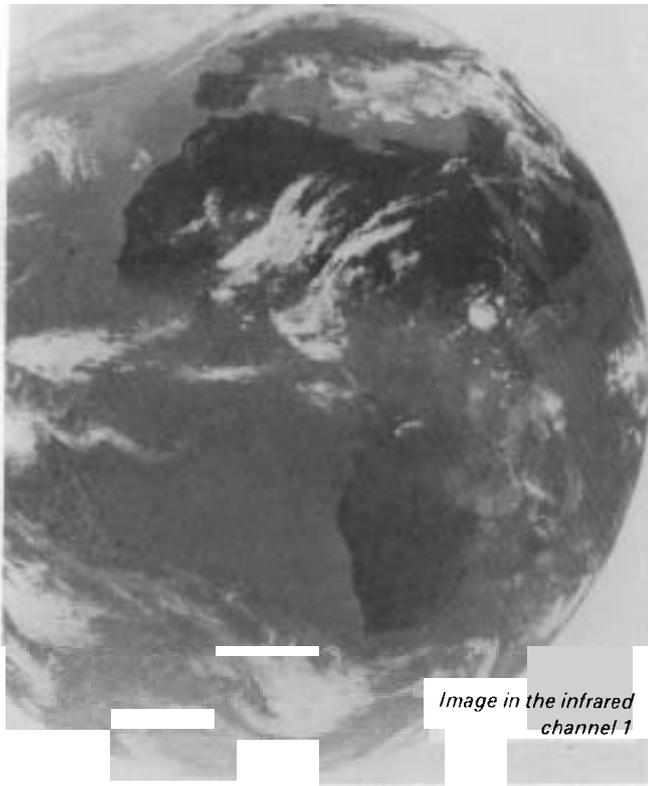


This processing consists of a series of operations designed to rectify any image distortion arising from movements of the satellite with respect to the Earth and to introduce radiometric amplitude corrections.

The images are transmitted to the users at different rates depending on their nature (digital or analog) and format.

In any case, the rate is relatively high and the maximum interval between the transmission of two images to one station does not exceed three hours.

The meteorological products extracted from the images can be used in many different ways. Exploitation of the infrared images makes it possible to determine the sea surface and cloud temperature with an accuracy of  $1^{\circ}\text{C}$  (the cloud height can be deduced from the temperature). Wind speed, particularly in the tropics, can be calculated from the movement of small clouds used as "tracers".



Meteosat is also used as a relay station to transmit to users processed images, some images produced by the American GOES satellite and received by the Lannion station, and some meteorological information. Meteorological products, extracted from the images (wind fields, radiation balances,

temperatures, etc.) and messages from data-collection platforms are forwarded by the Global Telecommunications System of the WMO (GTS), which is connected to the Darmstadt data-processing centre through the Regional Telecommunications Hub (RTH) at Offenbach, near Darmstadt.

#### Meteosat and meteorological research

Throughout its operational life, Meteosat transmits large quantities of information which increase our knowledge of meteorological phenomena and enable forecasts to be made with greater precision.

In the first instance, the meteorological images lead to a better understanding of the overall mechanism of the movements of the atmosphere. The main contribution in this area is the observation of inter-hemisphere air masses and of energy fluxes connected with perturbations affecting the inter-tropical convergence zone.

Study of atmospheric circulation at medium latitudes (such as Southern Europe) also constitutes one of the interesting applications of the mission, particularly at the time of seasonal transition when interactions generally occur between tropical air masses and those in temperate regions.

Thanks to its ability to observe weather systems over the large part of the Earth's surface, and the frequency of its observations, Meteosat can provide a substantial contribution towards understanding the atmospheric processes which influence our daily weather. In view of the performance of the radiometer, notably in

the infrared, it is possible to obtain important information relevant to the study of energy transfer and particularly of radiation balances.

Apart from these purely scientific objectives, the information transmitted by the satellite is of immediate value to weather stations for the rapid detection of hurricanes and violent storms, enabling them to issue short-range forecasts and warnings which can save human lives and limit material damage.

### Launching and positioning

Meteosat 2 was positioned by a series of manoeuvres, telecommanded over a network of VHF Earth stations. This preliminary stage, which took about 30 days, had three main phases:

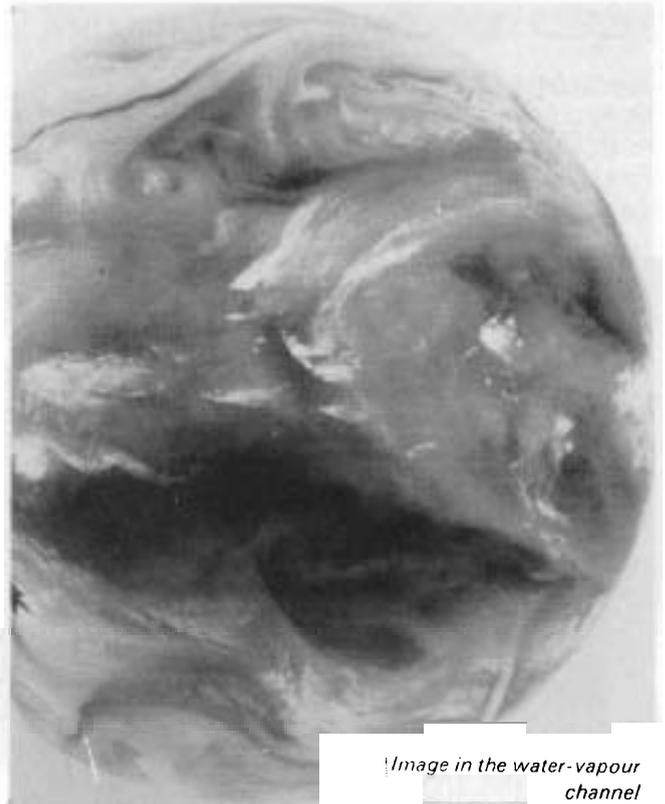
- the launch sequence
- the transfer orbit
- the drift and positioning orbit

#### The launch sequence

The launch sequence is the phase between lift-off of the European launch vehicle, Ariane, and the satellite's injection into transfer orbit. This initial phase, which takes about 17 minutes, includes all the events connected with the flight control of the launcher's three stages. Meteosat 2 was launched in tandem with the Indian satellite "Apple".

#### The transfer orbit

The launch vehicle placed two satellites, Meteosat 2 and Apple, in an elliptical transfer orbit with a perigee of 200 km and an apogee of 35 800 km, and will spin them up to 10 revolutions per minute. After separation of the two-satellite composite from the third stage,



*Image in the water-vapour channel*

and the separation of the two satellites from one another, the European Space Operations Centre (ESOC) at Darmstadt in Germany, acting through the NASA station on Ascension Island, activated by remote control the VHF telemetry transmitter, and through the Malindi station (Kenya) initiated a series of manoeuvres whose purpose was to increase Meteosat's spin rate to 100 rpm and to orient its spin axis in the optimum direction for firing the apogee motor. This operation, which took place 16 hours after launch was controlled from the Kourou station (French Guiana) and brought the satellite into its drift and positioning orbit.

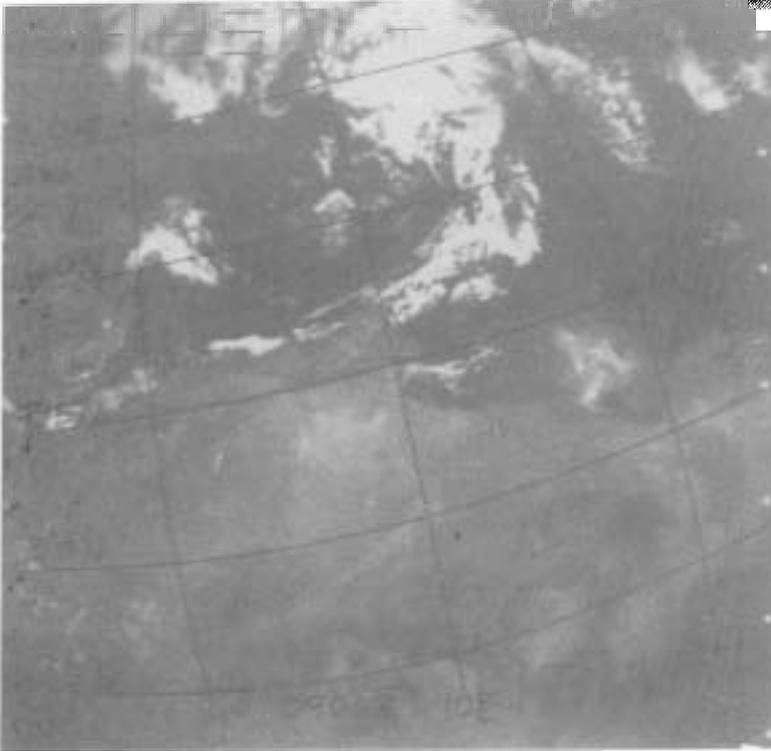
#### Drift and positioning orbit

On this orbit the satellite drifted slowly eastwards for four weeks, passing over Central America and the Atlantic until it reached longitude 0°. The satellite was then stationed in its final position above the Gulf of Guinea by means of orbit manoeuvres.

### Earth stations

During the launch and the transfer and drift phases, ESOC was maintaining telemetry, tracking and control links with Meteosat by means of the Agency's

network of ground stations at Kourou (French Guiana), Malindi (Kenya), Carnarvon (Australia) and Redu (Belgium). This network was complemented by the support of the Ascension Island station of the NASA network.



Just for the sake of interest compare this 1969 photograph from satellite "ESSA 6" with this one from METEOSAT



**METEOSAT**

1979 MONTH 5 DAY 15 TIME 1225 GMT (NORTH) CH. VIS 1-3  
NOMINAL SCAN/PREPROCESSED AREA EUROPE CAT. 102201016

courtesy ESTEC, Noordwijk.

## ABOUT TRAINEES, TRAINING OFFICERS AND TRAINING SYSTEMS

Clemens Degenaar

Due to an unfortunate combination of circumstances our centre has a continually decreasing number of trainee controllers available. This is a fact to be much regretted, not only because of the loss of new faces, but even moreso, because it amounts to a painful lowering in the amusement value that trainees provide for the rest of the personnel during their training period.

The consequences are two-fold: firstly, controllers who are approaching middle age remain, due to lack of new blood, among the so-called "youngsters" with a resulting social behaviour pattern at work, which leads to embarrassing attempts to maintain this "youth" outside work.

A second side effect reflects itself in the self satisfied, slightly top heavy group of training officers who are presently almost free of the trainee syndrome, and hold meetings for the sake of the meetings.

The characteristic nervous tics that we used to appreciate so much, when they were in charge of two or three trainees are now almost unnoticeable, and in short, all the fun has gone out of it.

So it seems that nowadays the agenda for a training officers' meeting only contains anecdotes of colourful recitals of past experiences. The one who tells the best story is automatically elected the training officer for the next month and is allowed to accompany the one remaining trainee, who also incidentally is now over 40.

During such a meeting a certain caution is required. It occurred once that one of the

less experienced in this bid for power permitted himself the liberty, whilst also speaking out of turn, of recounting an anecdote which he found so funny that tears were running down his cheeks. Unfortunately as he realized too late, the "hero" of his story, then a trainee (it happened in the early 60's) was now sitting opposite him chairing the meeting. The inexperienced story teller was "hammered" into silence but not before the damage was done.

This is of course totally unacceptable, and it is rumoured, that the training officer involved was never again his old jovial self.

From the trainee it is expected that he makes constant but unremarkable progress, shows willingness and flexibility, and bows to established authority and procedures. Fortunately there are few who fulfill these expectations, and those who do also don't make it, which is just the way it should be.

Studying the group of trainees, we see a select group, who at an early stage clearly show that they understand matters far better than the training officer, which can lead to abrasive near violent scenes. The naive young trainee does not recognize the danger of his continual enquiries, when the training officer can't give satisfactory answers and other colleagues listen amusedly until finally they too get involved.

An excellent aid in these situations are the book-like files of the letters of agreement. These magnificent creations have never been fully understood by anyone, not even by those who wrote them, and therefore,

they have to be changed all the time. They do provide a very effective escape route for a hard pressed training officer. Even the superior trainee will give up the battle when they read to him in a loud voice previously unnoticed and apparently insignificant paragraphs from the Ops. Manual. Normally while this is taking place there are usually 3 telephone lines lit up and 6 estimates (2 urgent) waiting to be passed. Of course there is always the exception to the rule who never gives up even in a situation like this, and thereby can badly damage the progress of his training.

The well intentioned but rather dim trainee has a high entertainment value. Usually through some fluke of nature he got through the course, which amazed himself as much as anyone else, and is now stimulated to enormous lengths to prove himself. His efforts will often give his coach palpitations of the heart and attacks of light hysteria, whilst providing the uninvolved colleagues with many fondly remembered moments of hilarity.

You get training officers sitting (after a trainees' swinging' coordination with a blank stunned look on their faces, with a silent telephone pressed into their painfully bloodless ear, whilst the trainee has moved on rapidly preparing some new catastrophe. Some training officers can take a surprising amount of this kind of near criminal trainee activity, but eventually it gets to them all and the sudden sweat attacks can be easily observed, normally followed by funny colour sequencies on their faces - violent purple, parchment white, deathly green - and finally in extreme cases a light to moderate foaming at the mouth. Older training officers acquire a fatalistic outlook to their work which has the interes-

ting side effect of giving them an aura of mystique and self confidence, which the ladies in the Ops. Room find more than a little attractive.

There are training officers who make their feelings and doubts known at length in the form of a verbal monologue normally delivered in a rising voice and sometimes accompanied by tears. The record for one of these monologues is just over 43 minutes held by an ageing bearded training officer, whom we'd all considered to have one of those inferiority complexes normally associated with beards, when he suddenly burst lose with a stream of invective against his trainee, which should have been recorded for posterity, so inventive was its content.



The only way to stop such an attack is to shock the training officer into silence by some act of total apathy or stupidity preferably both. Trainees usually manage this by, for example, passing and receiving estimates for a prolonged period with the telephone upside down-reporting the suspected un serviceability, and occupying half the maintenance staff for a couple of hours changing plugs etc.

There is also some mental stress for the trainee in these tear stained, foam mouthed, tension filled scenes of every day life, and some of them have to be very carefully accompanied, indeed steered, to the canteen for a life-saving cup of coffee. A few who left unattended have been found hours later by maintenance people in the cellar wandering around with sunken eyes mumbling estimates, and forcing coffee coins into cracks in the workbenches.

Then there are the "know-it-all" type of trainees who often know the least, but they do have the saving grace of combining amusement value with the element of surprise. Fortunately they mostly have the best of good luck in their work, with a much practiced guardian angel watching over them. Their unvectored climbs through and forgotten radar vectored aircraft always pass each other with closest proximity, of 5,2 nm. The poor coach when he starts to breathe again never dares to ask if it had been so planned and so lives in eternal doubt about his luckiest trainee.

Probably we all had a little of each of the above categories in us during our training, and sometimes almost too much.

So ATC has its little secrets, which we prefer to keep to ourselves, but which are never so visible as in our (good old) training days.



## HOW TO MAKE 10.000 FRIENDS IN ONE EASY LESSON

### A personal view in IFATCA

Ph. Domogala

Recently, a lot of Associations very seriously reconsidered their affiliation to IFATCA. Among them GATCO of U.K. and APCA of France, but for different reasons: GATCO because it felt that IFATCA was going to be too militant and was shocked by the fact that it was considering industrial actions. APCA because IFATCA was becoming too expensive for what it was and because they expected it to be more effective during the last PATCO strike.

During the last IFATCA conference in Amsterdam the Federation came to a crossroad; either to become a Trade Union Federation, and the application for membership of IPCS (British Civil Service Union) was there to remind everybody, or to refrain its ambitions and to remain what it was created for at the beginning - a professional body representing International Controller's Associations.

After the lengthy closed sessions of Comm. A during the last conference, one could expect the problem solved. In fact, we all wished that so much that we all considered it done.

Alas it is not so, because some associations, the most militant ones, are applying a kind of blackmail to the Federation. In simple terms: either you go the way we want or we leave. This should not be a problem if the Associations involved were small ones, however it becomes more of a threat if the biggest Association - Canada - is among them.

It seems to me that they forget one basic principle: we are not all identical.

- Asking to be more militant is easy when your own Association is already a Trade Union.
- Asking for 51% minimum controller representation to be eligible and to remain in IFATCA is easy, when you represent nearly 100% because the law of your country enables you to collect dues for all controllers whether they like it or not.
- Asking for a raise of IFATCA contribution is easy when you are paying for your members an average of 14 SFR (and the Third World controller is paying 20 SFR)
- Making reflections like: "You should speak English because you are a controller" are easy and cheap when you are working in your mother-tongue.

I really believe that a lot of problems the Federation is facing now, are due to a fantastic lack of communications and understanding. First, the rigid-but-effective Anglo-Saxon logic always conflicts with the more vicious-but-accurate Latin compromises. The command of English Language by some of the members causes the second problem. In a situation where some controllers whose mother tongue, education and working language is English (e.g. British) are confronted with others whose mother tongue is Arabic, education French and working language English (e.g. Moroccan) problems are bound to arise.

Associations of Controllers are coming and staying in IFATCA to seek International recognition and to improve contacts with fellow controllers worldwide, and with one aim :

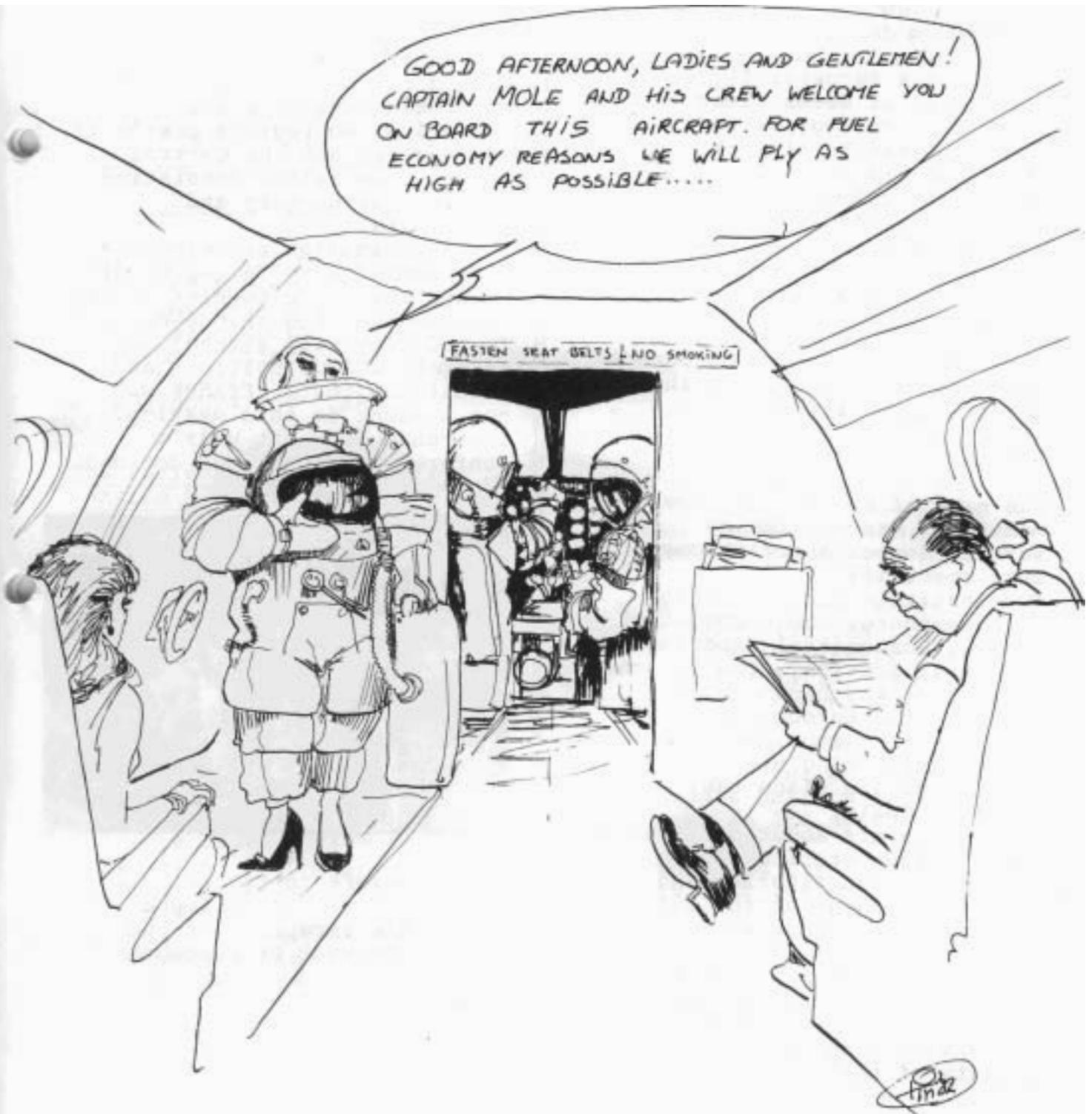
TO IMPROVE THEIR CONDITION  
to worldwide standards.

IFATCA's aim is to define those standards, and to fight (legally) to have them implemented everywhere, using ICAO, ILO, Interventions to Governments etc.

When this will be achieved then Air Safety and service to Users will be maximal.

Let's not deviate into politics and let's forget the influence struggles. Who or what Association is to lead IFATCA is unimportant, because who or whatever rules has to work for OUR aim.

GOOD AFTERNOON, LADIES AND GENTLEMEN!  
CAPTAIN MOLE AND HIS CREW WELCOME YOU  
ON BOARD THIS AIRCRAFT. FOR FUEL  
ECONOMY REASONS WE WILL FLY AS  
HIGH AS POSSIBLE.....



## IFATCA REGIONAL MEETING LUXEMBURG

Kees Scholts

Again an IFATCA meeting. This time the 8th Western European Regional meeting in Luxembourg, October 28th-30th 1982. Chariman: the new RVP. Mr. Adrian Enright. Your delegates: Domogala, Scholts, leNoble (he was in Luxembourg already).

In so far a successful conference as it seems clear that after six years of struggle for our position it looks like that our presence is (finally) accepted as a partner assisting in the work of the Federation. A change that started in Roma last year and that, luckily, continued.

Whether it is because of our "low profile" tactics on the finalizing political steps with regard to our future is not that important.

The name of Eurocontrol was mentioned many a time by several member associations, more specific: The Institute of Eurocontrol in Luxembourg, the Eurocontrol future, Eurocontrol experimental centre in Brétigny, the Eurocontrol radar that was blown up in Ireland, the Eurocontrol early retirement scheme, Eurocontrol that is improving the Greece ATC system and plans they have for Spain. Working papers about Air Traffic Flow Management, IFATCA's future and constitution and the re-alignment of the European region were discussed.

A general problem by all m.a.'s appeared to be the familiarization flights. As we pointed out we are also trying to improve the quality of them. The south

European ass. still face the problems of no radar coverage and sometimes bad radio coverage. Some of the problems may, however, be solved within the next two to three years.

There is a general feeling that more technical and professional input is necessary for the regional meetings. IFATCA policy for the region should be determined.

The proposed re-alignment of the European regions was discussed but no workable solution was found yet. As you know there are two regions presently, the Western and the Central region, the latter consisting of Austria, Hungary and Yugoslavia.

The Scandinavian associations have formed a so called Nordic Group. They have regular meetings between them and in the near future they will streamline their IFATCA delegations as to cut the costs. France was not present at this meeting. The venue for next year's conference was not yet decided.



from left to right:  
Fred, Kees and Philippe  
at the reception of the  
burgomaster of Luxembourg.

## LATEST RUMOUR

As there are not enough vacancies for promotion in Maastricht it will be subject to an examination.

Thanks to my good relation with important people at headquarters, I obtained a document, very helpful for all candidates. In fact it is nothing less than the examination questionnaire.

Written examination for expert ATS.

1. Write your name correctly in this box:

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(10 marks)

2. What does the word "CUMULONIMBUS" mean to you?

- A Roman Emperor (94 -32 before Christ)
- A thundercloud
- A synonym for "CARAMBA"

3. The Paris airport "ROISSY/CHARLES DE GAULLE" is called after which famous French President?

- Charles de Gaulle
- Honoré de Balzac
- Bourvil

4. An aircraft is declaring emergency and trying a forced landing on the ocean. What will be your first action?

- Inform the pilot and his passengers about the temperature of the seawater.
- Warn the appropriate Search and Rescue Centre.
- Notify the Royal Canadian Mounted Police.
- Apply for leave.

5. May aircraft take off simultaneously from the same runway in opposite direction? If not, explain why.

6. Between FL200 and FL350, you have 5 aircraft holding over BUB. After weather improvement, they request landing instructions. In what order will you handle these aircraft?

- Starting from above.
- Starting from below.
- In alphabetic order (e.g. Alitalia, Braniff, Condor etc.)

7. Two aircraft are approaching each other at the same level. What is your action?

- Turn your head away.
- Turn both aircraft right  $20^{\circ}$ .
- Turn 1 aircraft right  $15^{\circ}$ , the other left  $10^{\circ}$ .
- Transfer both aircraft to London on 129.6.

8. Technical digest

- On the control panel of a radar, you will find a masterswitch marked "ON" and "OFF". In which of these two positions may you expect the best result? Explain.

- When the pressure is rising, the QNH rises; when the pressure falls, the QNH falls. Explain this phenomenon.

- What kind of problems could occur when instructing a balloon to make an ILS approach.

- When you say to an aircraft: "traffic information: a Boeing 707 at your two o'clock.....", do you use local time or GMT?

What is your action if the pilot carries a digital watch only?

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# EGATS ANNUAL GENERAL MEETING 24 FEBRUARY 1983

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## NEXT COPY DEADLINE MARCH 1<sup>ST</sup>

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### SKIMEETING

Golden Flight Level:  
Bardonecchia, Italy, some 80 km  
west Torino  
22-28 January, 1983  
Further details on the  
publication board soon.

EGATS ties and scarfs will be  
available shortly.

Next AGM: 24 February, 1983  
20.00 hrs

T shirts and Sweaters are  
expected before X-mas.  
Stickers are always available.  
Kees Scholts/Martin Germans

### FOOTBALL MEETING

ECC 1983, 24-29 May, 1983.  
Meet you in Vienna.

### Latest news from Lebanon

The controllers of Beirut, in  
a letter, send their kindest  
regards to all of us.

In Beirut, one controller was  
killed during the bombings the  
others "only" suffered material  
and psychological damages.

The airport is enormously  
damaged and it will take  
some time to restore it to  
normal operations.

They wish us, according to  
their own words, "a Merry  
Christmas and a Happy New  
Year in a better and more  
peaceful world"!



# 1995 ..... ?

