OUTPUT

August 2003 Vol.8 - Iss.2

EUROCONTROL GUILD EGATS

OUTPUT - the EUROCONTROL Guild's publication of Air Traffic Control

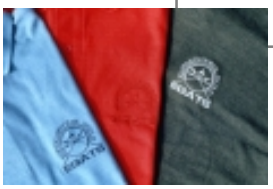
AIRPOWER 2003
Zeltweg Airshow

SES - Single European Sky
A initiative by the European Union

IFATCA 2003 Regional Conference
Looking for a volunteer

GFL 2004 Invitation
Come and join us...

Our new merchandise has arrived
Polo-Shirts, bags, caps etc.



ESSA TWR & ACC
How nice a workplace can look like

Short Stories
Some good fun

1968 - 2003

To Glen's Eurocontrol colleagues and friends:

These are just a few words to thank all of you who came to Glen's funeral, sent flowers, cards and expressed, in so many ways, your sadness and condolences.

I was truly touched by your kindness and the genuine affection so many people had for Glen. He said he wanted to 'go in style' and you all ensured that he got his way.

Glen left us all much too early. He left behind a great set of colleagues who I know he truly appreciated and valued. Glen loved his job and he spoke about many of you with great respect and affection.

Thank you all for the substantial amount of money you collected in Glen's memory. As some of you may know, Glen died from quite a rare cardiac condition called Brugada Syndrome. He didn't know that he suffered from Brugada and most young men who die from this disease are also totally unaware of their condition. Further research into the genetics of Brugada and possibilities for early screening and detection is being carried out. But, like with all rarer illnesses, the researchers would benefit from more funding.

I will be donating the majority of the money collected at Eurocontrol in Glen's memory towards research into Brugada Syndrome. The remainder will go to a local animal sanctuary because I also want to respect Glen's great love for animals especially cats and dogs.

Carol

Wijngaardstraat, 1
6212 GS Maastricht

Editorial

EGATS ... works

... even in this hot summer!

Dear members,

you are holding the biggest OUTPUT ever in your hands. Usually summer editions are lacking interesting material as nobody wants to write anything and most people are on vacation.

This time it is somewhat different.
Included in this OUTPUT you find the new IFATCA publication (exactly in the middle, so that you could eventually take it out and pass on) - a document for the members of the European parliament made by some friends from IFATCA and myself, explaining the **SINGLE EUROPEAN SKY initiative** of the European Commission.
This document explains the background of ATC and looks into the future role of ATC and Air Traffic Management in a broader view. Some articles in this document might not offer you any news but it certainly is a very comprehensive collection of material and it explains what IFATCA and also EGATS are working on.

Furthermore we announce the sale of our new merchandise. Several requests from members in the past made us think on what we could offer as PR articles. The new selection you find on the following pages. All items are sold at prices recovering our own costs only - we see that as a service towards our members. Hope you will enjoy these Polo-Shirts, bags, lanyards etc.

We are also approaching the next IFATCA regional conference in Porto coming October. Last time it was a big success to have a newcomer invited to this mind opening event - so we do it again! Have a look at page 8.

I also would like you to carefully read the article on page 25 about the air race that Damian Glennon together with a friend will participate in. The EGATS Executive Board decided to add a sum to all money pledged to this event - relative to the money you will give.
It's for a good thing.

Enjoy the summer! Carpe diem!

Patrik Peters
EGATS President

Have a look ...

... at our new merchandise!

Slazenger

"SLAZENGER Active Wear"
Polo-Shirts
in three colours & four sizes.

All shirts are featuring an embroidered EGATS logo and are available in sizes **S**, **M**, **L** and **XL**.
The grey and blue shirts are 60% cotton/ 35% polyester quality; the red ones are 65% polyester/ 35% cotton.
All are washable at 40° C. (normal machine-wash).

PRICE: 15,- Euro

Attention !

Members outside the Maastricht UAC:
To reduce our work-load - please arrange for bulk-orders.
We also prefer ad-vance payment.
(EGATS will pay shipping for orders bigger than 100,- Euro)

For more information and orders - please write to:
output@egats.org

Lanyard
w. embroidery:
EGATS...works!
www.egats.org
Guild
1,50 Euro
EGATS - Eurocontrol

Still available:

Our EGATS stickers and ballpens!

For free!
(in reasonable numbers)

Polos, Caps, Bags, Pens ...

available in the OPS room from the Executive Board members.

5,- Euro

EGATS Baseball Caps

Good 100% cotton quality. Easily adjustable with strap and metal buckle.

Two colors:
Green w. blue peak & logo
Mustard w. burgundy peak & logo

5,- Euro

Ticket Wallet

Boarding pass, airline tickets, passport, credit cards - all this fits into this nice wallet. Your travel documents right where you need them...

..for only 5,- Euro

Travel Pouch

And for 10,- Euro

you get this travel bag, which easily accommodates your digital camera, cigarettes, travel documents etc. Comes with shoulder strap. Several compartments for money, credit cards and more.

Luggage Tag

Little stainless steel aircraft with laser engraved EGATS logo, imbedded in transparent rubber. Address sheets in the back.

Label your luggage with the exclusive EGATS luggage tag for

3,50 Euro.

Skiing in Serbia or Canada - the choice is yours!

GFL 2004 in Kopaonik/Serbia

(4 hrs. by bus from Belgrade)

- 18th - 25th January 2004
- www.GFL2004.co.yu
- Price ca. 500,- Euro/7 days (incl. 6 day ski-pass)
- Transportation not included
- Organisation fee 70,- Euro
- As the registr. date has already passed, you will be entered on a waiting list.
- For further info:

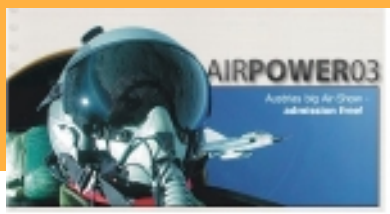
  Karl Haegens
  MASUAC - Team B1/ext. 1333/locker 251
  Phone: +32 (0)14 50 60 80
  E-mail: k.haegens@pandora.be

NATCA Skifest in Whistler/Canada

(3 hrs. north of Vancouver)

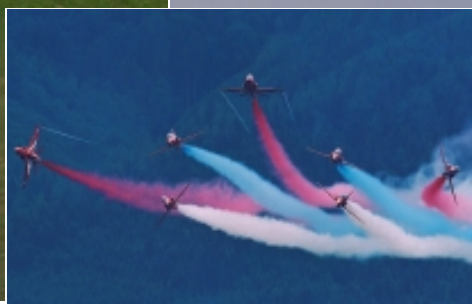
- 21st - 28th February 2004
- www.natcaskifest.com
- Price ca. 840,- USD/7 days (incl. 4 day ski-pass)
- Air-transportation not included
- Incl. Après Ski party, Dinner, Lunch etc.
- Ground-transp. from/to Vancouver incl.
- Registration date: 1st October 2003
- For further info:

  Patrik Peters
  MASUAC - Team B2/ext. 1333/locker 257
  E-mail: president@egats.org



Airpower 2003 - The biggest Austrian Airshow

AirPower03, staged jointly on 27 and 28 June by the Austrian Federal Army, the Province of Styria and Red bull, attracted 250,000 spectators to Hinterstoisser Airbase in Zeltweg. Alongside a demonstration by the Austrian Federal Army, the altogether 20 hours of aerial action included the world première of the Red Bull Air Race, an extremely rare opportunity to see the world's six best aerobatics teams, and the most spectacular aircraft of the past, present and future.



Invited by the Austrian Air Traffic Controller Association AATCA, we arrived in Vienna on the evening of the 26th of June. Bernhard, one of our colleagues of the Vienna ACC gave us the full tourist program for Vienna, first by car - later than "per pedes". We enjoyed a warm summer evening in this very lively, friendly and historic capital. Early next morning, we were picked up by Edith & Alfred (President of AATCA) and in a truly breathtaking race driven to Zeltweg. My hands are still sweaty, Edith!

Just when leaving the car, the program started - right in time. Turkish Stars, Red Arrows, Patrouille de Suisse, Patrouille de France, Frecci Tricollori and many more were giving a fantastic show - spiced with some single aircraft performance shows - like the SAAB Viggen, Eurofighter, F-15, C 130 etc. One of the highlights of the day was the Red Bull Air-Race where pilots had to manoeuvre their special acrobatic aircraft through a tight parcours (see above).

All this and the very nice company of our colleagues made this event a real success. Once again: Thank you, Edith, Alfred and Bernhard!

AirPower at home: the AirPower03 DVD!

The greatest aircraft, the most exciting maneuvers of all display teams filmed by their on-board cameras, and all background information on the pilots and what they fly: you can get your copy of the AirPower03 DVD starting now in the online shop at www.airpower03.at. Order now and we'll ship starting from lae August. 130 minutes of the best action and the most entertaining moments – for only € 19.90 if you order it before September 14!

Regional Conference 2003 Porto

The Executive Board invites you to join us for the IFATCA Regional Conference 2003 in Porto 17th-19th October

It is EGATS policy to have one non EB member, who has never attended an IFATCA conference before, join the EGATS delegation.

The following rules apply:

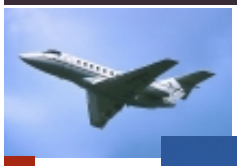
- ✈ Be an EGATS member and not an EB member,
- ✈ Be an active controller at Maastricht UAC,
- ✈ Have never attended an IFATCA meeting on behalf of EGATS,
- ✈ Agree to, and attend the whole meeting.

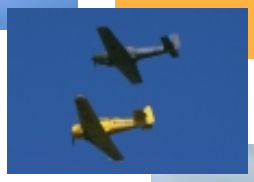
If you are interested in attending, please inform the EB by E-mail by not later than 12th September. EGATS agrees to reimburse the travel expenses, the hotel and the registration fees.
Should there be more than one candidate, willing to attend the conference, the EB will draw the name in a lottery.
Attending an IFATCA meeting can be a very professional fulfilling event. It makes one feel more part of the bigger world of air traffic control and puts our issues, strengths and weaknesses on to a broader perspective. The member who attended the Annual general meeting last March, was so impressed by the work that was being done, and by the issues that were being discussed, that he joined the EGATS EB!
More information regarding IFATCA or the meeting is available via http://www.ifatca.org/ or contact anybody of the Executive Board.

THINK!

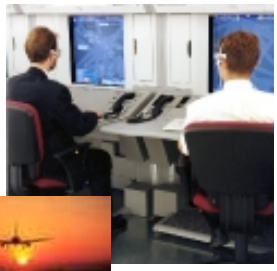
Summer 2003

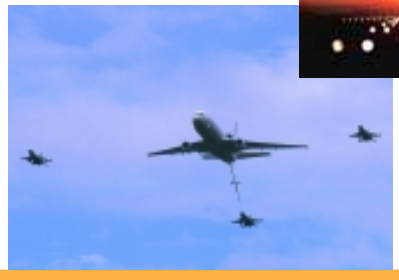
IFATCA - The International Federation of Air Traffic Controllers Associations





Single European Sky -
a European Union initiative





The IFATCA Office
1255 University Street, Suite 408
Montreal, Quebec, H3B 3B6
Canada
Fax: +1 514 866 7612

Aims and objectives of IFATCA

The International Federation of Air Traffic Controllers' Associations (IFATCA) has a membership of approximately 40.000 air traffic controllers. IFATCA is a professional organisation with no industrial or political affiliations. The federation was founded in 1961 by air traffic controllers from 12 European countries. Subsequently, it was grown in stature and now represents more than 125 Member Associations world-wide. The aims and objectives of the Federation were formulated in Amsterdam in 1961, and have remained the foundation of IFATCA.

The main ones are:

- ✈ **To promote safety, efficiency and regularity in international air navigation;**
- ✈ **To assist and advise in the development of safe and orderly systems of air traffic control (ATC);**
- ✈ **To promote and uphold a high standard of knowledge and professional efficiency among air traffic controllers;**
- ✈ **To protect and safeguard the interests of the air traffic control profession.**

Today IFATCA is well represented in the international forums involving ICAO, EUROCONTROL, the European Union and others.

The changing nature of the present ATM system involves many facets ranging from the status of the ATS providers to the reduction of separation standards. However, there is one constant in the process and that is safety. There is a need to establish a common baseline from which standards can be applied. At the same time, the application of safety standards must be transparent to all parties so that confidence is created.

It is essential that the responsibility for safety regulation should be totally divorced from the provision of ATS. It no longer remains an option for the ATS provider to be the regulator of the same environment. The commercial elements of ATS are not necessarily compatible with safety requirements, which should be mandated by an independent State authority.

IFATCA believes that sufficient resources should be directed towards establishing robust and independent safety regulation at national, regional and global levels to encompass ATM equipment, procedures and personnel.

IFATCA supports the CNS/ATM philosophy that the responsibility for separation remains with the ground-based organisation and that the human remains at the centre of the control loop.

IFATCA believes that Safety is the absolute priority and that it takes precedence over every aspect of the current and future ATM system.

Many view the voiced concerns of controllers as being barriers to progress. This view point is unfounded as controllers accept the advances that the enabling technologies in CNS can bring to the way that they control air traffic. Controllers accept the technology as a progressive development in the evolution of the air transport industry. It is often the way change is implemented rather than the change itself that is opposed.

Co-operation must be both at the level of the workstation on the ground and in the cockpit. It is only by mutual co-operation with the systems and tools that will support ATM control activities that a control service can be provided with safety and efficiency, and provide the experience to grow in the future.

Nicolas Y Lyrakides
Executive Vice-President Europe
IFATCA

POB 28990
2084 Nicosia
CYPRUS
Tel +357 99 68 50 80
Fax +357 22 49 10 39
E-mail : evpeur@ifatca.org

Published by IFATCA - Summer 2003

Introduction

Dear Reader,

You fly, we care – Daily there are approximately 27 000 civilian flights carrying many passengers, freight and crews through the European Skies. Have you ever asked yourself how this is achieved ?
Four dimensional Chess might be a good description of this highly complex interaction between aircrews, and air traffic controllers. Hidden in their towers, approach and area control centres, a workforce of approximately 16000 Air Traffic Control Officers are controlling, on a 24 hours basis, every movement of an aircraft from the moment the aircraft starts engines to commence its flight - till it shuts down the engines at its completion.

What first drew your attention to air traffic control? It might have been triggered by the recent accidents in Milano-Linate and Ueberlingen where you suddenly appreciate the safety critical nature of our profession and the consequences of any failure. Or when you find yourself as a passenger at an airport and your flight is being delayed because of Air Traffic Control restrictions.

The European C ership of the Vice-President and Commission Ms Loyola de Palacio decided in 1999 to redu by Air Traffic Control. The achievement of this goal through the creation of the Single European Sky – SES.

The International Federation of Air Traffic Controllers' Associations – IFATCA represents more than 40.000 controllers in 100 countries world-wide. This global body of professional representation has through its European region participated in the preparation and deliberation of the current legislative proposals.

This leaflet will give you further information on the current proposed legislative framework and submits measures to improve them.

IFATCA hopes that these proposed improvement measures will enhance the current legislative framework and assist the European Aviation Industry to increase it's efficiency in a safe manner.

We continue to care while you fly.

Marc Baumgartner
President
IFATCA

Single European Sky - a general introduction

In the light of harmonisation and the enhancement of competition within the European Union, the European Commission under the leadership of the Vice-President and Commissioner for Transport Ms Loyola de Palacio del Valle-Lersundi started a EU initiative for a **Single European Sky.**

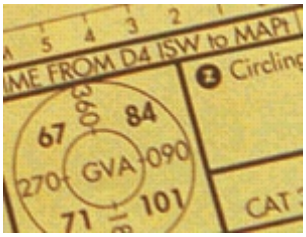
The main aims of this process are:

- **create a common European Airspace (regulations, strategically administered and a common airspace structure for the upper airspace)**
- **Harmonise the flexible use of airspace**
- **Introduction for of an authorisation scheme for exploiting certain airspace**
- **Functional separation of the Regulator and the Air Traffic service provider**
- **Social dialogue in order to motivate the social partner to agree to this changes.**

This process should be finished by 2005 and introduced in the EU member states. It is anticipated that countries applying to join the EU under the enlargement process will be expected to join the Single European Sky programme.

After discussions with all the aviation stakeholders and a report delivered by the High Level Group which was composed of the representatives of the Civil Aviation departments of the EU Members States plus Switzerland and Norway, there are four legislative proposals in front of the Council and the European Parliament for debate and adoption.

The International Federation of Air Traffic Controllers associations (IFATCA) represents approximately 40.000 Air Traffic Controllers in 100 States around the world. The European (42 excluding Spain) countries of IFATCA have been involved, contributing during the process of the development and final draft of the legislative text.



On the 19th of June 2002 some Air Traffic Controllers' Unions took strike action in protest at some aspects of the Single European Sky project. The Unions were asking Ministers of Transport of the European Union to oppose the elements of competition and the economic regulations which are being proposed in these new regulations. They believe that this has the potential to lead to chaos in the European airspace and that the necessary investment (long-term) into safety of the flying passengers and the ground infrastructure would not be assured .

What is Air Traffic Control?

The task of Air Traffic Control is that every flight from the moment of the closure of the doors until the landing, is controlled. Every movement of the flight, every change of the flight path and altitude have to be approved. Air Traffic Control is responsible for ensuring that the internationally defined separation minima (vertically 1000ft; laterally 5 nm) between two aircraft are always maintained. Air Traffic Control is responsible for the optimisation of safety and flow of air traffic between departure and landing independent of the weather and flight conditions or the overflown region.

Air traffic controllers operate from both airport control towers and en-route air traffic control centres. They use radio for communication and apply separation between aircraft using both radar and procedural methods. The flight plan data are centrally located in Brussels for approximately 470 sectors (1 sector is a clearly defined volume of airspace). The flow of air traffic is organised by the Central Flow Management Unit in Brussels. Every Air Traffic Control sector has a clearly defined sector capacity (e.g. 45 aircraft in 60 minutes). This sector capacity is defined by many variables, airspace configuration, equipment both on the ground and in the aircraft, complexity, staffing etc..

Should the demand for the sector exceed the capacity available then the sector will be regulated by the imposition of flow. This is to ensure that at all times the sector is operating within safe limits. Since it is difficult to stop aircraft in the air, the preferred method in Europe is to delay flights by regulating their departure thereby delivering to the sectors the traffic within the sector capacity.

Air Traffic Control is efficient

The public service delivery of Air Traffic Control has, as its principle objective, the provision of a safe, efficient and orderly flow of traffic. The in-efficiency of Air Traffic Control in Europe has been heavily criticised in the past. This is only justified to a certain extent since the main task of Air Traffic Control is Safety and only as a second priority efficiency. Like in all high-tech safety related industries the cost of safety is very high.

One problem Air Traffic Control has to resolve is the problem of delays imposed to prevent excess demand overloading the available airspace. Passengers have the basic the right to expect to depart on time and therefore get angry if delayed. Unfortunately the passengers are very poorly informed, that during certain times of day the demand surpasses the capacity of the upper airspace and the airports by many times. The departure information displays at airports stating the actual runway capacity of a given airport would enhance the understanding of ATC and provide more transparency. With a runway capacity of 40 aircraft an hour the logic of the airlines insists on having 45 aircraft depart and at the same time 30 aircraft land.

To permit all the flights scheduled to depart at exactly the same time to take of on time is simply impossible! Internationally agreed separation standards require a departure rate between aircraft of typically one or two minutes, and this under ideal weather and traffic conditions. Controllers are dismayed at the practice of many airlines who market their flights on the basis of punctuality when their own scheduling is a principle cause of delays.

Currently there are approximately 16.000 air traffic controllers in Europe. Daily up to 27.000 movements are controlled making approximately 8.4 Million flights per year. With an annual growth rate of approximately 4 – 5% it is commonly expected that the current movements will double by the year 2020.

That is even taking consideration of a slower increase recorded this past year. Every country is responsible for providing Air Traffic Control as a contribution to the State security. Following the trend of liberalisation of aviation nearly all the European countries have opted for a corporatisation of their ATC providers (except France and Ireland). As a result of this change the previous safe , expeditious flow of air traffic has been replaced by a safe, cost effective flow of air traffic , with the emphasis clearly now on cost management . In order to cut costs, selection and training of new Air Traffic Controllers was stopped and long term investment into ground infrastructures are being neglected.
As a consequence currently the Air traffic service providers have a shortfall of approximately 15 % of air traffic controllers in Europe. In addition , one third of the current workforce in the European Union states will retire by 2007. The increase in traffic over the past year could only be accommodated through the use of overtime working. Although currently the growth rates are lower, the trends are confirmed. IFATCA believes from its own observations that there is a worrying trend of increasing near misses, so called airproxes, which is inversely proportional to the falling numbers of controllers.

In the wake of the 11th of September the currently used cost recovery mechanism is not suitable in times of crisis. Based on the cost of the previous year the Air Traffic Service providers can fix the route charges based on KM/ton/distance for a overflight. As an average 0.70 Euro are charged per Km/ton flown. The downturn of the overflight traffic makes a significant impact on the companies revenues.

The European Commission has initiated through it's legislative proposal a harmonisation on the technical field and attempts to control the cost of air traffic control centrally. The initiative seeks through economic regulations to encourage the merger of the air traffic service providers. This in order to enhance efficiency and to reduce the overall costs. The so-called Functional Blocks of Airspace should facilitate this.

This means that several states are invited to exploit this collaborative enterprise in specific airspace. Part of the needed resources to enhance safety are missing (more Air Traffic Controllers, better equipment and government investment into ground infrastructure). This gives serious cause of concern to the operational Air Traffic Controllers. There is a real fear that this will lead within 5 years, to a total chaos in the European Sky.

Need for Change

There is an absolute need for improvement. In the technical field the Air Traffic Controllers are still working with technology which is based on the techniques of the 60's. The control systems of air traffic control counts among the most complex computer systems in the world. The market is so small (1 customer per country) that industry is not investing sufficiently for Research and Development. Further the concept of Flexible Use of Airspace between the civil and military users requires further adaptation to match the real requirement of both users. This is a crucial point that there has to be an agreement with the various airforces with regard to their need for airspace. The inclusion of the airlines in the planning process is still very weak – the main reason being the competition among the airlines. In order to be competitive the airlines daily misuse the standards and commonly agreed principles of the Central Flow Management Unit. This leads during high season, a loss of the overall daily capacity of 20%.

Further, the financial mechanism currently applied does not enhance the increase of capacity either.

ATCO Marketing and Communication

'One cause for concern is the effect on recruitment of ill-informed criticism or public denigration of air traffic control and controllers. If any potential recruits are discouraged by their perception of the public image of air traffic control, this is particularly important because the image is false. Air traffic control is a very satisfying job and many enjoy it so much they wish no other job. There is therefore a gulf between the public image of air traffic control as a profession and the controllers' perception of it, their pride in it, and their identification with it', said Mr. David Hopkin, an internationally respected Human Factors specialist in our domain. His words are some ten years old but still valid today. Why is this so, what is wrong with our profession?

According to EUROCONTROL the ECAC region still has a 12% shortage of qualified ATCOs in Europe. It takes approximately 350,000 Euros to train an ATCO with an attrition rate of 90% from application to full operational qualification. Recognising the increased efforts of some Service Providers, IFATCA promotes – even with the actual budget constraints – to prioritise the selection and training of ATCOs.

In the past few years administrations have seen a significant drop in the return of application forms following National Advertisements campaigns. The rate of requests for an information pack remains high but the return rate of the applicants' forms has dropped steadily.

The question that faces us is: why has this occurred? It is likely that there is no one simple answer. The probable causes are:

- Lack of awareness of the role of an ATCO;
- Poor publicity in the recent press about ATC.
- The academic standards required focuses on a highly motivated group who are attracted to many other professions, especially in 'new technology' and computer systems.
- The salary is no longer attractive
- The uncertainty in the future of the industry

Lack of awareness and poor publicity! The answer to this is Marketing and Communication! Controllers are accustomed to being unseen and unappreciated but unaccustomed to unfair criticism, mainly initiated by airlines. It is time our profession gets the attention it deserves!

Air traffic control as a profession needs to press harder for adequate media time to respond to criticism of it, using professional representatives who have received media training in how to present their case to the best effect. Every opportunity to educate and inform the general public about air traffic control should be taken. Practical methods include more high quality introductory texts and articles on air traffic control, well-presented and informative talks and lectures, more publicity in schools and colleges, more incisive and better trained professional lobbyists, and more sponsorship of films, videos and television programmes as publicity and educational material. Air traffic control can be intrinsically interesting to many people who know little or nothing about it.

The objective is not to over-exalt air traffic control, but to restore its good name and match its image and its reality.

SINGLE EUROPEAN SKIES
INSTITUTIONAL ISSUES

Europe is a melting pot of peoples, cultures, social priorities and political philosophies, and this diversity is reflected in many areas of the Continent's activities, including air traffic control. Europe therefore does not lack for organisations with an interest in air traffic control.

Those organisations may have one interest or many interests amongst those listed below.

- Political priorities
- Trading issues
- Defence concerns
- Transport requirements
- Airspace management,
- Safety standards, oversight and regulation.
- Economic regulation
- Legal issues
- State run, corporatised, part-privatised or fully privatised ATC.

There are usually at least two opinions on every issue, often many more, which invariably conflict. Within this complex environment, pity the poor controller struggling at the personal level to maintain a service to flights.

Sitting at the top is the **International Civil Aviation Authority (ICAO)** a division of the United Nations with 188 states as members, including most European states. ICAO sets all international standards for civil aviation and exercises a global safety oversight.

The European Civil Aviation Conference (ECAC) currently consists of 41 member States whose aim is to promote the continued development of a safe, efficient and sustainable European air transport system. In so doing, ECAC seeks to harmonise civil aviation policies and practices amongst its Member States and promote understanding on policy matters between its Member States and other parts of the world.

ECAC issues resolutions, recommendations and policy statements that are brought into effect by its Member States. ECAC offers a forum for discussion and decision to European Ministers of Transport.

Eurocontrol, the European Organisation for the Safety of Air Navigation is an association of 31 member States that has as its primary objective the development of a seamless, pan-European Air Traffic Management (ATM) system. Eurocontrol services span the entire range of air navigation service operations.

The European Union

To most Europeans the best known of all the organisations will perhaps be the Europe Union (EU) with its 15 states. Any logical person would expect that all the 15 states of the European Union would be amongst the 31 member states of Eurocontrol, that those 31 states would all be members of ECAC, and that all of those 41 States would be members of ICAO. Alas it is not so.

To complicate matters even more the European Union is not a state so it is dependent on the flexibility of the rules of other agencies as to whether it can join any of the other groups. If it were to join as an equal in say ICAO alongside the other states within the European Union it may find some or all of its constituent states do not accept the EU's belief that it speaks for the 15 states of the EU within ICAO. Similar complications may arise now the European Union is a member of Eurocontrol.

Both the European Commission and the European Parliament of the EU are involved in air traffic control issues. The European Commission is promoting the Single European Skies (SES) programme that seeks to amalgamate initially all the upper regions of national airspace within the EU into a single unified European airspace. Europe's lower airspace above 8000 feet (5kms) could be absorbed at a later date. The work of defining and designing the SES programme is being carried out by the Commission's Directorate General for Energy and Transport (DG TREN) and a Single Skies Committee.

To assist the Single Skies Committee there is an Aviation Working Group, a committee of experts from the EU's member states.

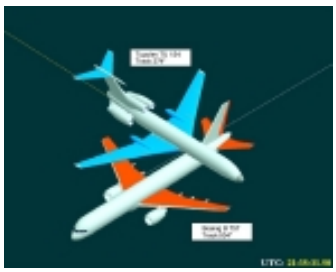
To oversee this airspace a new regulator, the European Aviation Safety Agency (EASA) is being formed. From the summer of 2003 EASA will regulate the aviation engineering and airline industries, a responsibility it will inherit from its predecessor the Joint Airworthiness Authorities. The Joint Airworthiness Authorities also regulate many aspects of civil aviation operations and personnel.

Separation of ATS provider from regulatory body

The existing proposals are that from 2006 EASA will take over these responsibilities and that by 2008, providing the SES proposals are progressing, EASA will move to regulate airports and air traffic control, a task in which Eurocontrol is expected to have a major role.

The method by which transfer of the non-airworthiness regulatory responsibilities will be achieved has not been defined, neither has the precise nature of the relationship between EASA and Eurocontrol. Until the method of transfer is determined, there remains scope for confusion between the roles of the Single Skies Committee, DG TREN and national regulators as to how the regulation of operations and personnel will be conducted.

Uncertainty also exists as to how the regulation of air traffic control will be performed under EASA. This uncertainty will only be removed when the precise nature of the working relationship between EASA, Eurocontrol and national regulators is understood.

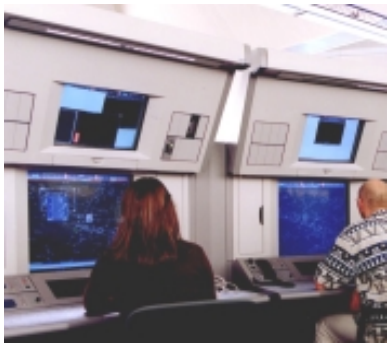


The tragic mid air collision over Lake Constance in the summer of 2002 has led to reviews in the conduct of air traffic control over Europe. It is a matter for conjecture, but the involvement of EASA in air traffic control regulation may now occur sooner and that its intended role could be widened.

The European Parliament reviews proposed legislation on air traffic control and can propose changes to that legislation. Recently the Parliament has proposed revised rostered hours limitations for Pilots, traditionally a task for national regulators that should logically, at a European level, be the role of the JAA and eventually EASA.

Quite separately from the introduction of EASA, the European Commission has implemented a programme of harmonisation of air traffic controllers' qualifications within Europe. The introduction of a single qualification will enable controllers to work across the community and indeed within the whole of ECAC. This will facilitate another proposed feature of the SES, the rationalisation of enroute air traffic control services within fewer air traffic control centres, each of which would control a "functional block" of airspace.

In almost every case each state within Europe has a civil aviation regulator and at least one air traffic service provider.



There are exceptions, for example the Eurocontrol Area Control Centre at Maastricht provides an air traffic control service in the upper airspace of the Netherlands, Belgium, Luxembourg and North Western Germany.

The air traffic control regulator in most European States is part of the civil service or is at least a government agency. The regulators will be responsible for safety regulation, perhaps airspace management and occasionally economic regulation. When the regulator is not part of the civil service then there will also be a department of the national Transport or Aviation Ministry that exercises oversight or even financial control of the regulator.

Increasingly the trend within Europe is to distance any air traffic service provider from the regulator. In some cases this involves no more than establishing a new separate civil service department, but often the opportunity is taken to review the method by which air traffic control services are provided. The most common form of air traffic service provision in Europe is becoming some form of corporatisation, setting up a government owned private company to run air traffic control on commercial lines. In the United Kingdom its principle air traffic service provider is now partly privatised, and a significant shareholding in the company belongs to a consortium of airlines. This consortium exercises operational control of the air traffic service provider. Also in the United Kingdom there is a long established tradition of entirely private companies providing air traffic control training and contract air traffic control services at some airfields.

A very recent development has been the involvement of both Boeing and Airbus in proposing future air traffic control concepts. They have listened closely to their customers and are promoting concepts that match the aspirations of the airlines. Although the concepts of the two manufacturers vary they are still very compatible, particularly as Boeing has chosen to focus its proposals on European ideas as well as those of the USA.

The two manufacturers have considerable influence as they can fit the required aircraft systems to support their air traffic control concepts as standard equipment. If an airline doesn't want it they would have to pay to have it taken out.

It would be remiss to exclude military issues from this description of institutional issues. Whilst national defence and security interests can never be ignored, in Europe we have the further complication of NATO, a transatlantic alliance with its own major regional interest in European airspace management.

We controllers are not spectators in all this. In many countries the national controllers' association is busy working with air traffic service providers, airlines, pilots, regulators, members of both their national parliament and the European parliament, civil servants and industry to ensure that the needs of controllers are not ignored or overlooked, and that safety remains at the top of every organisation's objectives.

Leading and co-ordinating this work is the European Region of the International Federation of Air Traffic Controllers' Associations (IFATCA). IFATCA acts as a clearing-house for information and takes the lead in co-ordinating the policy statements of national associations to ensure that controllers across Europe speak with a clear and consistent voice. Not only does IFATCA have accredited liaison officers to ICAO in Montreal but it also works closely with the ICAO regional office in Paris as well as the European Commission and Eurocontrol in Brussels.

Within the Maastricht treaty, the requirement for the European Commission to consult with the people of Europe is clearly stated as is the mechanism of sector and social dialogues by which this must be achieved. IFATCA anticipates being able to accept an invitation to participate in the social dialogue on air traffic control which at the moment is principally concerned with the SES project. Many individual European controllers already act as IFATCA's "Ambassadors" or technical representatives on European committees and working groups to ensure that the needs and priorities of controllers, particularly on safety issues, are not overlooked whilst the future of European air traffic control is being determined.

Civil – Military Co-operation in the SES project

Functional Blocks of Airspace (FBAs)

With the introduction of so-called "control areas" irrespective of national borders (also called Functional Blocks of Airspace/FBA) the EC proposal aims at creating an airspace set-up that enhances the economic operating conditions for airspace users by

a) improving the operating efficiency of ANSPs through synergy effects and increased transparency,
b) reducing the number of ATM systems and interfaces, and
c) adapting airspace boundaries to the perceived optimum route structure for the users, thereby improving the operating efficiency of the latter.

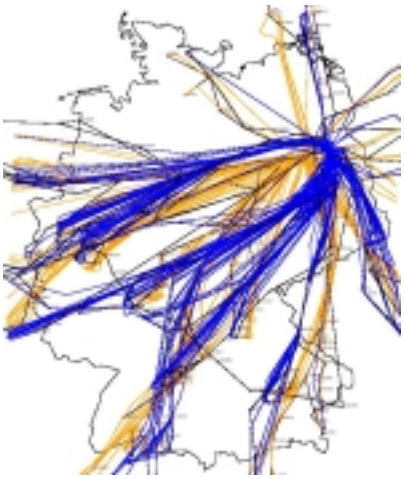
These FBAs will form one European Upper Flight Information Region (UIR).

This concept is based on the assumptions that

a) by reducing the number of UIRs and hence the number of "control areas", with a target of 6 to 10 FBAs, the number of distinct ATM systems, interfaces, control sectors, and eventually ANSPs will be reduced accordingly, and
b) by creating larger blocks of airspace without respect to national borders the route structure will be optimised and the increased use of direct routeings at optimum cruising levels will be promoted.

Undoubtedly the management of larger FBAs by a consortium of ANSPs or even bigger, consolidated ANSPs should result in certain synergy effects and increased transparency.
On the other hand we could see a situation where those synergy effects through the common management of one FBA by a consortium of ANSPs are counteracted by the fact that these same ANSPs are involved in the management of other FBAs at the same time (e.g. DFS and LVNL share responsibility for the hypothetical Northern Germany and Benelux FBA while DFS and Austrocontrol share responsibility for the Southern German and Alpine FBA), necessitating the duplication of departments for each FBA they are involved in.

The increased transparency – achieved by the more stringent application and inforcement of tougher accountancy rules rather than by the implementation of FBAs – will not necessarily result in a more uniform cost structure as the different forms of organisation (government authority, part or wholly corporatised resp. privatised entities) will still be in place.



For the same reasons as mentioned above the number of ATM systems and interfaces will not necessarily be reduced. It is more likely that more than one (national) ANSP will share management of one FBA, using more than one ATM system, including the need for the same type and number of interfaces as currently. It is not even totally uncommon that one bigger ANSP (like in France or Germany) is using more than one identical ATM system at the same time, also needing some interface between the distinct systems within one ANSP.

The harmonisation of systems (including a reduction in the number of individual systems) that is intended with the EC proposal is as unlikely then as it is under the current organisation of European ATM.

Moreover the anticipated cost savings and leaps in terms of operating efficiencies have to be put into relation with the cost associated with the investment in new ATM systems. As experience shows there is an added risk in the extraordinarily long lead times for the introduction of such systems.

Most importantly the creation of large FBAs does not necessarily result in a reduced number of control sectors, hence a reduction of co-ordination and hand-over procedures involved.
These are strongly influenced by the peculiarities of ATM and largely independent from the number of UIRs or "Control Areas".

The size and shape of a control sector was, is, and will have to remain determined by the complexity of the airspace/airway structure, the number of airports served underneath, the composition of the traffic handled, the number of crossing, i.e. conflict points and the available system support; all of these together determine the number of aircraft that can be controlled safely at any given time.

Where system support is concerned it has to be taken into consideration that systems can and do fail – including their back-ups –, which explains the need for a safe, "conventional" fall-back mode even at maximum operating capacity. Otherwise any system failure would be catastrophic.
Similarly the planned introduction of a Free Route Airspace (possibly as a major mile stone for Single European Sky) calls for a strongly advanced system support in terms of conflict detection: the number of conflict areas is being multiplied with the abolition of a conventional, fixed route structure and its associated set of predefined crossing points; where before there were, maybe, some six or eight crossing points, there will now be an unlimited number of them.

This factor will also greatly restrict the size of a control sector: the focal (i.e. crossing) points cannot be foreseen any longer which necessitates constant scanning of the complete sector and a constant cross-check on possible conflicts between each potentially conflicting pair of aircraft.

The size and shape of the FBAs, finally, cannot be static and needs constant reviewing as it shall initially be based according to the EC proposal) on the EATMP ARN Version 4. This route network is, in turn, based partly on the ideal operating profiles of the users and partly on the existing airspace and FIR/UIR structure (including national borders).
Therefore it is likely to be reviewed in the short to medium term in order to fulfil the goal of the Single Sky initiative, hence necessitating in all likelihood the review of the FBAs.

IFATCA does not see how the introduction of FBAs in itself increases the overall efficiency of the European ATM system.
Apart from the necessary harmonisation of ATM systems (equipment) and interfaces, and the harmonisation of ATM procedures and airspace categories on a Europe-wide (and eventually world wide) basis, IFATCA sees several alternative possibilities to increase ATM operating efficiency while maintaining or increasing the level of safety.

In order to overcome capacity shortages which are generally limited to certain areas and times, one could envisage the temporary re-assignment of certain portions of airspace (including the associated airways or Air Navigation Routes where still applicable) from one Area/Upper Area Control Centre (ACC/UAC) to another.

This could alleviate congestion or over-load (which, in turn, normally lead to ATFM delay) in situations where a neighbouring ACC/UAC has capacity reserves, be it in terms of the neighbouring sector itself or in terms of the personnel available to staff additional sectors.

This principle is routinely applied within individual Centres and could be agreed upon between neighbouring units, with the respective regulatory framework and the appropriate training of ATCOs given. This would not need a high level decision like the proposed creation of FBAs, and would offer much greater flexibility when revisions become necessary. Also it is in accordance with the already widely used system of (static) cross-border delegation of airspace.

Further capacity gains, or rather improved use of existing capacity could be realised by a wider application of the assignment of flight routes and/or profiles in orientation with declared capacity.

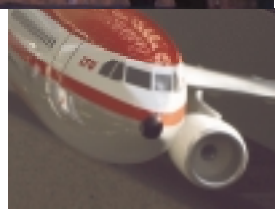
Rather than re-routeing flights on a tactical or pre-tactical basis when capacity constraints necessitate it, the available data on declared sector capacity and recurring flight plans should be used to assign standard routes for specific airport pairs during certain times of day and days of the week, in relation to the available capacity and aiming at achieving the minimum average delay for each flight involved.

In addition there could be some sort of economic regulation, allowing the more direct routeing (i.e. through the capacity restrained portion of airspace) for those operators willing to pay higher charges. The proceeds from these sur-charges (which logically would be higher than the penalty in operating costs for the alternative route, as there is an added benefit in greater on-time performance) should then exclusively be used to create additional capacity at the concerned bottle-neck.

The utilisation of Direct or Free Routes is largely dependent on the appropriate system support and/or staffing. It requires significantly better and more reliable tools for conflict detection than widely available, along with improved staffing levels, as it foreseeably increases the incidence of conflict resolution measures and the levels of alertness required; hence it necessitates extended and more frequent relief times for the ATCOs involved.

To allow for the additional investment necessary there could be a similar economic regulation to that described above.

The increased application of Direct or Free Routes is, however, independent from the creation of FBAs, as all the existing ACCs/UACs are managing individual portions of airspace larger than any single sector that is safely manageable in the foreseeable future.



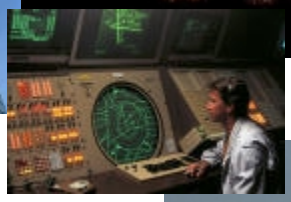
Summary

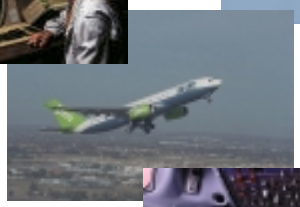
In short, the outlined suggestions would, if introduced, produce wider-ranging improvements in capacity and operating efficiency than the EC proposal of creating FBAs, with significantly less disruption and re-organisation necessary.

Therefore they should be much easier to pass on a political level, let alone to be introduced in reality.

Technical Issues - How does ATC work?

Look behind the apparently huge variety of technical solutions proposed to provide more airspace capacity and it is clear that only one solution is on offer. That solution is to manage the trajectories of aircraft and to absorb capacity delays on the ground, so that once an aircraft is airborne only minimum intervention by air traffic control is necessary. There are however many ways proposed to achieve this solution, and each poses as many questions as it answers. There is for example a great debate about the future roles of both pilots and controllers in this new organisation and about the use of automation in the cockpit and the controller's work station.





Lets start by clarifying briefly how ATC in Europe works now, and then try to identify what changes are to come and what issues they raise.

Air Traffic Control in Europe is currently divided up into six specialist areas:

- **Aerodrome control**,
  the bit the public sees, where controllers in the visual control room of a control tower separate aircraft on and in the vicinity of an airfield from each other, vehicles and obstructions.

- **Approach control**,
  which separates arriving, departing and overflying aircraft at an airfield.

- **Terminal control**,
  which separates aircraft operating into and out of multiple airfield groupings

- **Area control**, also known as En-route control,
  which controls aircraft flying between airports or airport groups.

- **Oceanic control**,
  a self explanatory but highly specialised control task which increasingly uses satellite technology to enable aircraft to make automated position reports and to provide a communications link between pilot and controller. The satellites are used to relay those instructions and reports from over the horizon, enabling controllers to separate aircraft over many thousands of kilometres.

- **Military control**,
  another specialist area, which controls military traffic between military airfields and between military airfields and training areas.

Each control unit also provides a flight information service to pilots and an alerting service in the event that an aircraft suffers an emergency. Each type of air traffic control service is usually provided within some kind of dedicated or "controlled" airspace into or within which flight can only take place with the permission of air traffic control. An airfield might have a control zone, which is linked with other airfields close by through a terminal control area. These terminal control areas are in turn linked by airways, aerial autobahns at least 10 nautical miles wide and hundreds of thousands of feet high.

The airspace allocated to terminal control or area control can be very large. This airspace may be divided up between one or more air traffic control units, and within each unit the airspace is further divided into sectors. Each sector will be controlled by at least one controller, but it is more usual that a team of at least two controllers will be responsible for a sector.
People outside aviation often misunderstand the term "separation" as applied between two aircraft.
Separation is not just collision avoidance!

Collision Avoidance, Holding and a look into the future

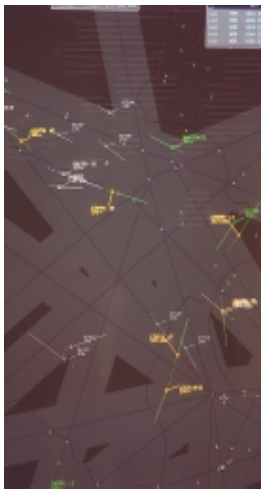
Collision avoidance is achieved by the use of an extreme manoeuvre by one or both aircraft. Separation is achieving by applying internationally agreed flight times or physical distances between aircraft. Aircraft are usually separated vertically by a distance of 1000 feet. If a controller is using radar to separate two aircraft, the lateral distance required between the two aircraft is usually five nautical miles. Manoeuvres that aircraft fly to ensure that separation is achieved are quite gentle. A passenger may never even notice the change in attitude, heading or height.

Holding is another often misunderstood procedure. Aircraft do not arrive at an airport in a regular controlled sequence, and the rate of arrival may exceed the landing rate. If an airfield can land 30 planes per hour and the airlines and the airport schedule 40 per hour, the surplus of 10 flights must be held in the air.
The aircraft usually fly in a regular pattern overhead a radio beacon until such time as they can be accepted by the airfield.
Holding is a technique that allows controllers to accept aircraft in large numbers and then regulate the flow of arriving traffic to match the runway's capacity.

In some areas of Europe's airspace, unrestricted air traffic flows would overload airspace, routes and controllers and would risk losses of separation between aircraft. To prevent this a process called air traffic flow management is applied, centred on **Eurocontrol's Central Flow Management Unit in Brussels**. This unit issues "slots" in the form of permission for an aircraft to use European airspace providing its takeoff within, or entry into, Europe's airspace takes place at a certain time.

And how will it look in the year 2025?
In current air traffic control systems, enabling an aircraft to climb and reach its requested flight level and follow its required route is achieved through the culmination of a series of actions by several controllers at one or more units.

This technique has evolved to control aircraft when, for planning purposes, controllers have a precise estimate of the aircraft's future position only at certain pre-determined points, but not at every point on its trajectory.
Effectively they have only a three dimensional knowledge of an aircraft's position at each of a number of significant points along its cleared route.
Planning separation is therefore limited to identifying and resolving conflicts at these points, with a reliance on radar monitoring and tactical control to resolve other conflicts that may arise between these significant points.



Future technical concepts for Air Traffic Management in Europe are intended to give controllers knowledge of an aircraft's intentions along all of its route, not just at a limited number of points along that route.This allows the controller to approve or design conflict free trajectories based on the user-preferred trajectory of the aircraft. In order for such a system to work, alternative conflict detection and conflict presentation systems are required and these are described as decision support or advanced tools.

An example
To give an example of how an advanced tool might be deployed, take as an example an aircraft departing to the south from Glasgow airport in Scotland. The aircraft is requesting a cruising level of 37,000 feet or Flight Level (FL) 370. Currently the aircraft's trajectory is achieved only after several height constraints are imposed. These might be at seven thousand feet by Glasgow airport, FL 250 by the Galloway sector, and then a number of options during which further climb may be permitted by a higher Scottish sector and/or one or two London sectors before the final flight level is achieved. In addition certain potential conflicts may be detected and so additional level constraints and lateral deviations may be issued.

In the future, by using computer assistance and automation, the Galloway controller would know before the aircraft even called what, if any, conflicts there were along the next 500 km or more of the aircraft's route. If there were none, there is no reason why the Galloway controller could not climb the aircraft without any constraints imposed. Currently such a climb requires approval in advance between sectors, a process known as co-ordination. In the future, other sectors along the aircraft's trajectory would inherent the Galloway controller's solution. As all sectors and centres would work from the same networked data then all other aircraft in the sectors along the route that interacted with the Glasgow departure would be known in one form or another to the Galloway controller.

The air traffic controller's role in the future...

When sufficient aircraft are fitted with the appropriate equipment, the modelling of aircraft trajectories can be improved by obtaining actual trajectory data from the aircraft via an automated air/ground datalink. The overall aim of these changes is to provide controllers with increasing degrees of separation assurance between aircraft trajectories and also to provide both medium term conflict alerting and safety nets to detect evolving or sudden changes in the traffic scenario.

The most comprehensive demonstration of how Europe's Air Traffic Control could evolve over a quarter of a century was conducted under **Eurocontrol's PHARE programme** that sought to bring together ideas for the control of aircraft in all phases of flight. PHARE demonstrated an air traffic control system in which early conflict detection, and the early presentation of those conflicts to controllers, was automated. The controller's responsibility was to resolve the conflicts by manipulating the trajectories of conflicting aircraft. As four dimensional trajectories can be difficult for a controller to interpret manually, computer assistance is required to help the controller interpret any conflicts and then to design solutions that require minimum intervention with the aircraft's preferred trajectory. The use of air ground datalinks is an essential component in requesting trajectories from aircraft, offering pilots conflict free trajectories and allowing some negotiation between pilot and controller.
In order to eliminate holding under normal circumstances, delay would be absorbed on the ground before departure. Networked traffic management systems would determine the takeoff time and arrival time, and would calculate any speed or route changes required enabling the aircraft to arrive at its destination without having to hold.

So what are the technical issues to be resolved between now and 2025 in order for air traffic control to meet the required capacity?
Ensure that controllers in Europe receive all the necessary information on every flight that will enter their airspace. That information needs to be presented to controllers at a time and in a way that allows the controller to detect and resolve conflicts through the application of standard separations, even if the method by which they are applied relies on automation.
Ensure that controllers in Europe receive all the necessary information on what airspace and routes are available to them in order to provide aircraft with conflict free routings that match as closely as possible to the aircraft's preferred trajectories.

Even a relatively conventional new air traffic control system can take up to eight years to introduce. Many of the more ambitious projects world wide have taken typically between twelve and fifteen years. Over the next 10 years, European air traffic control will need to commission several generations of digital networked systems all arguably more complex than those in operation today.

Many of the planned improvements in air traffic control will require equivalent equipment changes in aircraft too. Many of those aircraft that will be flying in public transport service in 2025 are already on order, under construction, or even already in service. The airlines, or the aircraft lessors, who are buying these new aircraft, have not always specified those essential systems and so they will need to be retro-fitted at additional cost.

Controllers will rely more on automated systems.
If controllers are to control double the number of aircraft that they do now, then they will become reliant on automation in the form of decision support tools designed to augment the personal ability of controller. These tools will enable controllers to discard existing and highly valued skills and require them to adopt new and perhaps less challenging tasks.
One skill that controllers may lose through lack of usage is their existing monitoring ability, through which they maintain their "picture" the dynamic mental model that controllers use to interpret all the items of information that influence the way each flight is controlled. This raises two major issues.

How, if at all, can a system failure under peak traffic load be managed using manual fallback procedures? Will a controller possess or retain the ability to check safety critical information provided by automated systems? It seem unlikely that the controller will be able to do so and so responsibilities that controllers currently hold for detecting conflicts or (if solutions are found using computer assistance) for resolving conflicts cannot be honoured. The controller will have become dependent on software, whose algorithms they cannot validate, to detect and interpret conflicts and to design conflict free trajectories.

Finally, much has been said about the need for parallel investment in airports to prevent a capacity crisis. If that investment is not forthcoming then it may be necessary to question the need for the anticipated high investment in air traffic control, as capacity will become capped by runway and terminal availability.

A crucial enabler for increasing aviation safety: just culture and a non-punitive reporting system

After the mid-air collision over southern Germany on the 1st of July 2002 and the tragic runway incursion in Milan Linate, many of the decision makers, and the general public have become aware of the potential destructive power a failure of the ATC system can have. It is ironic that it takes media coverage to concentrate minds on the safety related issues in ATM which IFATCA has consistently raised, for many years. It is essential to become aware of the importance of safety. This awareness starts at the individual ATCO level and ascends to the association and the management. Only by adopting a zero tolerance attitude towards the issues which become safety critical can the aviation industry survive in the long term. Experience has shown that before an accident occurs, a number of incidents and numerous other deficiencies have existed or occurred resulting in safety hazards. The improvement of the safety of civil aviation requires a better knowledge of these occurrences to facilitate analysis and trend monitoring in order to initiate corrective actions at the earliest occurrence. The sensitive nature of safety information is such that the only way to ensure the gathering of such information is by ensuring its confidentiality, the protection of its source and the confidence into reporting systems of the personnel working in civil aviation. Therefore the mandatory reporting systems as requested by Eurocontrol and the European Union foresees that it is supplemented by confidential reporting schemes to collect mainly human factor related incidents. IFATCA has requested for many years that the European and world regulatory bodies like ICAO, EU and Eurocontrol overview safety. However as the voice of the controllers we are very concerned with the current trend (contained in the EU directives on mandatory occurrence reporting) and condemn the fact that Member States have amended the European Commission's proposal on Occurrence Reporting in Civil Aviation (COM 2000 847 final).

The result of the amendment is that the directive becomes contrary to the Standards and Recommended Practices contained in ICAO Annex 13. IFATCA and ETF, representing Air Traffic Management staff in the European Union, welcomed the initial proposal from the Commission as we recognise that it would significantly enhance the Safety of the travelling public. However the removal of the provisions contained in former Articles 8 and 9 seriously hampers the objective of the directive. 80 % of the incidents and accidents occurring in aviation are human factor related.

However witnesses of occurrences will not be encouraged to report if they run the risk of being punished for possible involvement in such events.

Through the experience of our membership, the source of information, which is essential to improve aviation safety, will not be readily available , unless a non-punitive system is in place. It is necessary, therefore, to agree on protecting the source of information. IFATCA is not seeking immunity against judicial action for ATM staff, but such action should only occur in case of deliberate gross negligence.

A strategic Actionplan for One Safe Sky for Europe

IFATCA welcomes the adoption of the Eurocontrol Strategic Safety Action Plan for Enhanced ATM Safety developed by the High-Level European Action Group for ATM Safety (AGAS) by the Provisional Council of Eurocontrol on the 10th of April 2003.

The detailed recommendation of this Strategic Safety Action Plan will assist the European Aviation community and in particular the ATM community to enhance safely the capacity required for the coming decades. However there is the need that all the Director Generals of the ECAC member states and the European Commission insure that the recommendation contained in the Strategic Safety Action Plan are followed on a timely basis.

As the global professional body representing Air Traffic Controllers, IFATCA has during the last 20 years, consistently requested for more investment into ATM safety. The adoption of this Strategic Safety Action Plan is an urgent and needed step to avoid tragedies like the runway incursion in Milan Linate and the mid-air collision over Ueberlingen.

No complacency in the implementation of the recommendations of AGAS will be acceptable by IFATCA. IFATCA is willing to assist all the relevant bodies of ECAC, Eurocontrol and the European Commission in order to ensure that the recommendations to improve aviation safety are put in place in a timely manner.

The 2003 Toulouse -

Between Sept. 28 and Oct. 12, **Damian Glennon** (DECO Team 4) and **Brendan Bruton** (B737 captain) will take part in the 2003 Toulouse- Saint Louis de Senegal air rally.
This 5000nm challenge retraces the Aeropostal route flown during the 1920s & '30s and made famous through the writings of Antoine de Saint Exupery. I
n addition to the aerial challenge, both pilots are using the trip as an opportunity to raise funds for charity. In Damian's case this will be Medicins sans Frontiers (MSF).

If you wish to pledge money to the charity, please fill in the form attached, and deposit it in Damian's locker (104). Monnies pledged will be collected in the latter half of October, following successful completion of the trip, and transferred to MSF in early November.

From those who make a donation, two names will be drawn entitling the winners to a flight in the aircraft used on the rally.
Many thanks in advance for your support!

I, ……,

pledge the amount of …… Euro

to the Toulouse - Saint Louis/Senegal-

Medicins sans Frontiers (MSF) appeal.

Locker No.: ……

……
Signature

The 2003 European

ECC REIMS 2003

This year's European Controller's Cup was held in Reims from the 19th to the 23rd of May. The week kicked off with the usual meeting of players and supporters, outside of MUAC, so that we could travel together to Reims in a minibus hired and driven by Chris Geleen. Fortunately Jimmy Telfer and Wanda Bruce had been thoughtful enough to bring along a little liquid refreshment for the three and a half hour journey. So there was plenty of fun on the trip, which included one or two not so short (please ask Dave Heemskerk) breaks along the way. We also met up with those that were travelling to Reims in their own vehicles, to form a little convoy.

On arriving in Reims we checked into our lovely, newly painted Hotel, which was to be home for the week. Some members of the Organising Committee were present to welcome us to the tournament and to give us all the necessary administrative information.

The week truly got under way that evening with the Welcome party, which was held in a vaulted cellar at the Jacquart Champagne factory.

The champagne was free and also very free flowing so by as early as nine o'clock there were some who were struggling!!
I'd like to be able to describe the rest of the evening but unfortunately my memory is a bit of a blur!

The serious side of things, the football, started on Tuesday morning and although a few of us were nursing hangovers and we had only a small squad of fourteen players, we managed to kick off with a win over Dusseldorf ACC (oh happy days!!). Over the course of the week things on the football pitch went quite well, we certainly couldn't have done any worse than last year!

With the help of Eric Ong, who adopted the role of team coach, and despite one or two injuries we managed to finish a creditable 26th out of a total of 48 teams. Our best result coming against Brest ACC, a 6-5 win played out on a large inflatable version of table football!

During the rest of the week we managed to fill our evenings with eating, drinking, and some dancing in some of Reims's finest "nightspots"!!

The highlight of the week, being the farewell party on the Friday evening. This was held at a large conference centre in Reims and consisted of dinner (damn more free champagne), a cabaret (quite bizarre), and a dance (can you believe it...with a free bar!). At this point, I would just like to take a moment to say a small thank you to Henrik Spets for providing the entertainment for the Maastricht team during the farewell party. What was he doing in a hall containing hundreds of people in only his underwear?

Everything has to come to an end and Saturday morning found a sorry looking bunch of hung over people congregating in our hotel lobby preparing for their journey home. Yes, this sorry looking lot was what was left of the Maastricht team! So the week was over and another ECC had been and gone. It had been a good week, with reasonable weather, lots of laughs and just enough champagne to keep a permanent smile on your face. So just for a change "Nice one Reims".

See you all in Leuven next year.

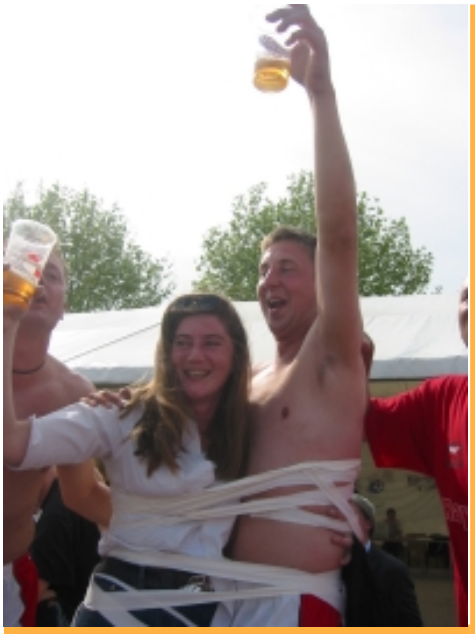
Martin Norris

Supporters welcome!

Join the ECC football tournament in Leuven at the 24th - 29th May 2004.

Contact:

Chris Geelen (chrisg@solcon.nl, locker 230) or Marco Kuelgen



Training for 2004

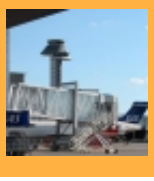
In order to prepare for the ECC tournament, which is being held next year in Leuven **www.ecc2004.org/index.php**, the SCOPS football team has made an arrangement with a local football club in Ulestraten (2km from MUAC).

Every Wednesday, from the middle of August onwards, we will meet to play and to train and to socialise as well. So far we have 16 people interested but would like to invite anyone else (controllers or ab-initio students) to join us.

As we have made an arrangement with the football club, there is a small fee involved. This is 65 euros for the season (August to May, 40 evenings).

If you are interested, please give your name, address, tel.no. (home & mobile), e-mail address, AND date of birth to Eric Ong (Team D3), **ong@planet.nl** or in **locker no.094**. Eric will give you further information and provide the necessary details about the payment of the **65 Euros**.

We look forward to seeing you there.

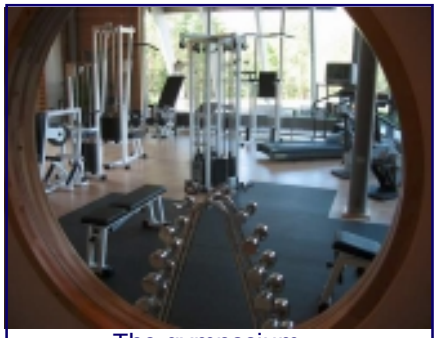


A visit to Stockholm-Arlanda ACC & TWR

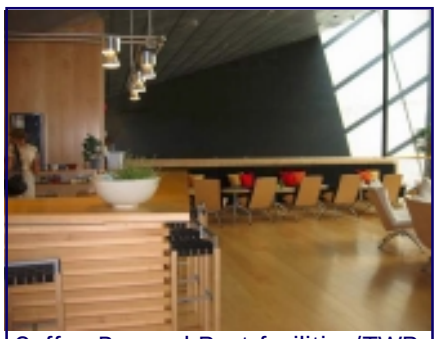
Last July I had the chance to visit the new Stockholm ACC next to the airport in Arlanda some 40 km north of Sweden's capital.
Nicely imbedded in the forest - a bit remote from the airport - I was overwhelmed by the nice Swedish design. Birch wood, steel and glass are the dominating materials. Combined with bright colours one immediately wants to work there. In summer off course only - because in winter you're happy to catch a few hours of daylight. Sun rises never really then - it is still dark when leaving your house at 10:00 o' clock in the morning and should you return already at 15:00 hrs. in the afternoon - nothing changed. Still the same dull darkness around you. But let us return to this summer, where the sun is up and shining and everybody enjoys that to the fullest extent possible.
I have to say, I had to compare a bit with our own centre - and I do not want to talk about traffic levels, productivity and stress now. I would like to show you just a few examples on how an air traffic control centre can look like.


Entrance


View from fire-place onto terrace


The gymnasium


Staff kitchen

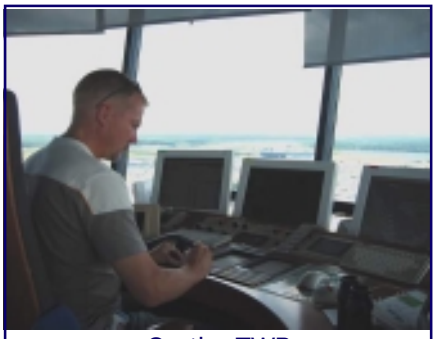

Coffee Bar and Rest facilities/TWR


Relax area with open fire-place

The new centre is expected to go operational in December this year. One complete wall of the operations-room is made of glass facing the forest. All consoles are of a medium height - when standing up, one can see across the complete room.

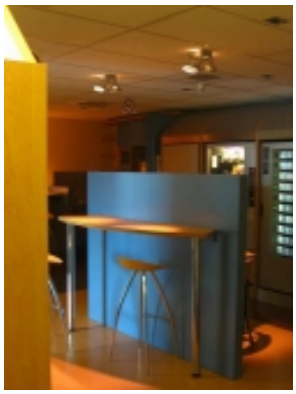
One peculiarity, which nobody could so far explain me is that the background of the BARCO-screens is very bright and labels and RPS are dark. Probably one wanted to have the same set-up as when reading a boo, i.e. reading black letters from a bright background.
After having visited the new ACC, I went up the 80meter high new Tower of Arlanda (using the elevator). And again - nice wood everywhere, good design - though not always very functional as even the nicest materials are not always controller-proof (which was criticised by some colleagues I met).

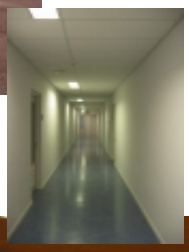
Can you believe it?
This is one of the restrooms for staff. Equipped with privat bath, bed and a window!!!

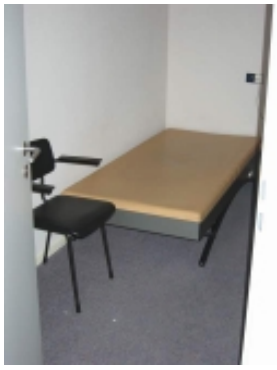


On the TWR

APP sector in the old ACC







Without words!
Facilities at the MASUAC

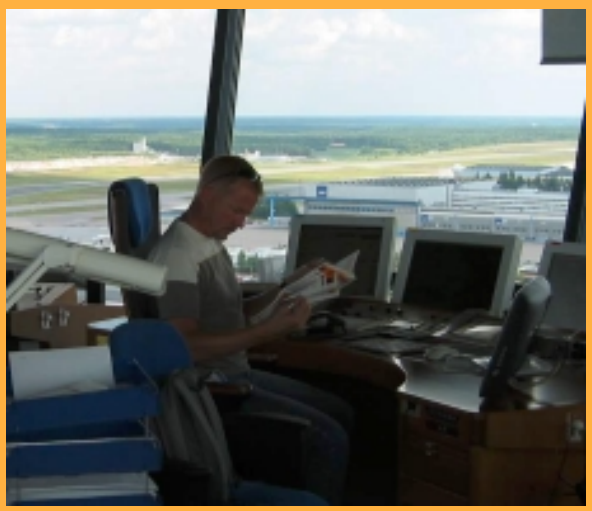
I would like to take this opportunity to thank all colleagues in ESSA who made my visit very enjoyable - and maybe these pictures give our management a hint of what can be done to motivate ATCO's?

LUFTFARTSVERKET

Thank you also to LFV-Sverige.

Patrik Peters

Reading our OUTPUT...



Pilot counts votes on flying home

A pilot asked nearly 300 British passengers to put their hands up if they wished to fly home after he had repaired the aircraft.

The tourists had waited for seven hours at Minorca in Spain while the pilot fixed a faulty warning light on the Boeing 757. Thirteen refused to fly home on the MyTravel flight back to Leeds-Bradford airport on Friday, a MyTravel spokeswoman confirmed.
The light had indicated the plane was airborne when it was still on the ground. After repairing it, the plane's captain stood on a chair in the terminal to explain the situation, the Times reports.
Families were apparently told they would have to make their own way home if they refused to fly.

"He (the pilot) was confident that it was simply an indication error and, once he rectified that, he was happy to take passengers home" said a MY TRAVEL spokesman

Johnathon McMillan, 36, told the paper his wife Fiona, 34, and six-year-old son, Ross, started crying when a passenger said he feared the plane could crash.
Mr McMillan said he paid £350 for his family to fly home with another airline the next day.

He told the Times: "I've never had to make a decision like that in my life before.
"If the truth be known, we thought it was a decision between life and death.
"The prospect of being in a plane which doesn't know whether it's in the air or on the ground is terrifying."

'Normal procedure'
A MyTravel spokeswoman confirmed 13 out of nearly 300 passengers refused to board the plane, which she admitted was "understandable".
"We had a problem with an indicator in the flight deck which meant a light was on when it should not have been on, she said.
"It is normal procedure for the pilot to be involved in correcting a fault, along with engineers.
"The pilot would never be allowed to fly an aircraft with a technical fault of any nature that would cause a potential danger.
"In this case, he was confident that it was simply an indication error and, once he rectified that, he was happy to take passengers home."
The aircraft landed safely at Leeds-Bradford shortly after 0200 BST on Saturday.

(BBC News - 12th August 2003)

A crew in a Baron was taxiing at LAX back in the sixties and encountered one of the (then) new 747's. Both pilot and co- were all eyes as both aircraft approached the same intersection.

Baron: Uh, ATC, verify you want me to taxi in front of the 747.

ATC: Yeah, it's OK. He's not hungry.

ATC: Cessna 1234 What are your intentions?

Cessna: To get my Commercial Pilots License and Instrument Rating.

ATC: Cessna 1234 I meant in the next five minutes not years.

Dangerous Cargo...

What a nice day - let's take the top down!

Tower: "Aircraft on final, go around, there's an aircraft on the runway!"
Pilot Trainee: "Roger" (pilot continues approach)
Tower: "Aircraft, I said GO AROUND!!!"!
Pilot Trainee: "Roger"
The trainee doesn't react, lands the aircraft on the numbers, rolls to a twin standing in the middle of the runway, goes around the twin and continues to the taxiway.

Washington D.C., Clearance Delivery: "GAF269, you are cleared to destination Indian Springs via after take off radar vectors to 4000 feet thereafter present position direct BOM do not pass BOM at 6000 feet or below after passing 15000 feet turn right on heading 280 to intercept J156 direct ZZT thereafter intercept j158 own navigation read back."
GAF 269: "Roger German Air Force 269 is cleared to Destination Indian Springs via after take off radar vectors to 4000 feet thereafter present position direct BOM do not pass BOM at 6000 feet or below after passing 15000 feet turn right on heading 280 to intercept J156 direct ZZT thereafter intercept j158 own navigation and I need another pencil."

Bye bye CONCORDE!

More about the Concorde as of summer next year in the Technik-Museum Sinsheim/Germany

The impact of hail!

Patrik's gadget corner

Last time I introduced here a small foldable SENNHEISER noise reducing headset - As it was a real success, I want to show you again something you **must** have...
SAFEMAN - a small disc shaped cable lock, which locks your bicycle, inlines, snowboard etc. ...

- it even serves as handcuffs!

Technical details:

- High quality stainless materials
- Adjustable two loop system
- Only 7.5 cm in diameter
- 75 cm cable
- Available in different colours

Price: 24,95 Euro

Info:
Patrik Peters or
www.safeman.de

Publishing Statement

EGATS OUTPUT©
2003 EGATS - Volume 8/Issue 2
August 2003

Editor: Patrik Peters - President of EGATS
Contributions by:
Members of the Executive Board of EGATS, Karl Haagens, Marco Kuelgen, various members of IFATCA, Marc Baumgartner, Nicos Lirakydes, etc.
Printing:
The EUROCONTROL printing office - Thank You!

EGATS OUTPUT is published three times per year. It is solely for our members. No part of the information contained in this issue is of any business to the outside world, unless otherwise dedicated by the Executive Board of EGATS. Anybody who forwards this information outside the EGATS membership without the express, written approval of the EGATS Executive Board will be proposed for expulsion at the next AGM for acting against the interests of the EUROCONTROL GUILD OF AIR TRAFFIC SERVICES. The articles, letters, opinions etc. contained in OUTPUT are those of the writers who are solely responsible for their content. They do not necessarily reflect the opinion of the EUROCONTROL Guild.