

1

Summer '05



OUTPUT by EGATS

The Eurocontrol Guild's publication of Air Traffic Control

In this issue you read about ...

- ... the 2005 IFATCA Annual Conference in Melbourne,
- ... UAVs - Unmanned Aerial Vehicles,
- ... the new AIRBUS 380,
- ... the Golden Flight Level 2005,
- ... the EGATS Photo Competition 2005,
- ... and many other interesting subjects.



Publishing Statement

EGATS OUTPUT ©

2005 EGATS

Volume 10/Issue 1

June 2005

Editor - editor@egats.org:

Patrik Peters - President of EGATS - president@egats.org

 [peters desktop publishing](http://petersdesktoppublishing.com)

Contributions by:

Members of the Executive Board of EGATS, Philippe Domogala, Jeanette Arthur, Gabriel Bangiu, Mark Green (GATCO) , Scott Stephens and others.

Many thanks for your help!

Printing:

The EUROCONTROL printing office -

Thank You!

EGATS OUTPUT is published twice per year during summer and winter. 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.

The EGATS name and logo are our trademarks and are not to be used without permission.



Dear members,
you are holding another issue of the Guild's OUTPUT magazine in hands, - a product of many hours of work from a variety of people, members of EGATS, the Executive Board and colleagues of other associations.

We all hope that you enjoy reading this magazine as much as we enjoyed preparing it for you. Given the fact that it takes a lot of time to write and obtain articles, coordinate the publishing, printing and distribution of the magazine, the Executive Board decided to reduce the number of issues from currently three to two per year. This will allow us to use more time to assemble and edit an interesting magazine. The overall number of pages will - like in 2004 - be similar or even bigger than with the previous three yearly publications.

In addition to our EGATS magazine we had the idea to provide you in a bigger number than before with "The Controller" magazine - the IFATCA publication. Recently we asked for your feedback on this by launching a small survey.

500 copies of the last magazine were distributed to each individual active member. Counting the feedback forms received, we decided to order a total of 80 magazines per issue and distribute them according to the no. of members in all Eurocontrol stations. Those members wishing a personal copy can address any member of the Executive Board to receive one. We keep a close eye on the development and will adjust the subscriptions accordingly.

Furthermore we would like to use the E-link more frequently to update our membership on more internal and professional matters. In case you didn't register yet for the E-link - contact Ivo van Weddingen via board@egats.org.

What else is going on?

The year began with the Tsunami catastrophe in Asia and Africa. We all have been shocked by this disaster and the devastation it brought to the people. EGATS contributed to the worldwide support by providing funds to a private organisation

working in a small village on the Indian coast and through a substantial donation of our EGATS Brussels branch to "actionaid" - a UK based international organisation "fighting poverty together".

The space management project delivered first results. You all meanwhile had the chance to enjoy the increased comfort of our rest rooms. You find refurbished rest-rooms with new entertainment equipment, refitted dormitories and an upgraded gym with new exercising machines. Next on our list is the Internet Café on the third floor and, once the new building is ready for use, the complete re-design of the first floor with a library, sound insulated piano room and dormitories with windows (!).

We attended the IFATCA Annual Conference in Melbourne and brought back knowledge and interesting policies - like the one about "single man operations" - something we might face in the future under certain precautions at specific times of the day/night. Read more about the conference on the following pages.

The EWC - Enhanced Working Conditions working group is making progress. After having gathered information from ATC facilities all over Europe, the TUEM in cooperation with EGATS and local management is trying to find a solution for lowered working-hours, increased flexibility, a more social shift roster and staff shortage. It is a difficult undertaking to bring opposing parties to a consensus, but we are looking forward to "enjoy" some improvement whilst fighting the tremendously increasing traffic this summer is bringing to us.

New tools like the "occupancy" tables allow us to predict traffic numbers in real-time, but tell us nothing about complexity. Despite the recent note of congratulations received from our management, I urge you all to be vigilant. Don't be too euphoric about our achievements - be careful!

Enjoy the summer!

Professionally yours

Patrik Peters
EGATS President

How do you like the logo in the upper right corner?
Robert Klos is looking into a more modern logo for EGATS.
If you also have a nice idea - let me have it.

3



IFATCA International Conference Melbourne/Australia 17th - 22nd April 2005



A conference in „DOWN UNDER“ – Wow! – you might think. What a fantastic place to have a conference.

Well, it is a nice place - no doubt, but please don't forget, it took us an average of 26 hrs. to get there - followed by a massive jet-lag. To be able to attend this conference in a state being able to follow the proceedings and do proper work, one needs to add a couple of days before, which are not reimbursed - neither in time nor money. Sure – we see friends again and have a good time as well, but these events are far away from being holidays. Some members of the association might think that we are going on a paid vacation trip, but talk to us, read the reports - and you will hear/see that it takes a lot of effort, energy, time & money to work for EGATS, for the Federation, - for the profession – YOUR PROFESSION!

In this sense, I would like to thank the EGATS delegates to this years Annual Conference:

Cornelia KLEE (Committee C – Professional)

Raffaele VIGORITA (Committee B – Technical)

Philippe Domogala (Committee A – Administration) and

Jeanette ARTHUR (“Newcomer”).

I myself served mainly in Committee A, but participated also in different other meetings like the European Support Group and the SES team-meetings.

I would like to take this opportunity to also thank EUROCONTROL and in person Mr.

Victor Aguado and Mr. Karl-Heinz Kloos for their support. Once again we were granted missions for our participation. We shared expenses between EUROCONTROL and EGATS and could therefore guarantee active participation with a comfortable number of delegates.

Melbourne was the destination – greeting us with comfortable 22 degrees and sunshine. And the weather remained to be nice for the whole duration of the conference. This is remarkable as there is a saying that “In Melbourne you experience all four seasons in one day!”

Well organised, nicely situated in the Promenade Hotel on the Southbanks of the Yarra river and just a few minutes walk away from downtown – a perfect place for an international conference! Many thanks to the organising committee and Civil Air - the Australian association!



Opening Ceremony



Opening Plenary

Following a native Australian performance by a group of dancers, **Mr. Hisham El Ansary** (CEO Airservices Australia) opens the 44th Annual Conference of IFATCA.

In his speech he puts emphasis on the facts that we have to maintain flexibility but at the same time allow for change.

Conferences like the IFATCA one are the stage to share knowledge, which then again will





improve safety. We should face the future by openly looking to our customer requirements. In the past years their businesses had to suffer from huge losses – especially due to the economical downturn and the effects of the 9-11 catastrophe. High fuel prices and consumer demands for cheap airfares led to small profits. In this relation ATC costs are an important factor.

In the strive for progressive liberalization we have to ensure that the services offered meet the demands. “Profitable businesses are safe businesses” Mr. El Ansary quotes, asking for commercial discipline. In this respect Airservices Australia is proud to reveal that the service costs to the airlines today are not higher than they were 10 years ago.

In an outlook to the future he envisages that autonomous flight will become reality as well as the question of self-separation hasn’t been answered yet. He expects ATC to more and more take over the role of an information dissemination service.

Michael Haines, President of Civil Air, the Australian Membership Association within IFATCA, sees Air Traffic Control as a worldwide team and carefully monitors his ANSPs move towards privatization.



He especially puts emphasis on subjects such as single man operation, adequate staffing, overtime and extra duties.

Marc Baumgartner, PCX of IFATCA, reflects in his opening speech on the 1975 IFATCA conference in Melbourne and the changes the profession has gone through in these 30 years.

He then draws the circle closer to elaborate on the changes and events since last years conference in Hong Kong. He highlights the actions taken against ATCOs and the attacks on the profession. He states the will of ICAO and IATA to establish a global roadmap for ATM, which appears more like a rough global vision for the future. ATM as being the backbone of civil aviation and especially our profession need to remain healthy.

He asks what IFATCAs role and vision for

this future could be. Do we have the right ideas in view of the changes which are definite to come and probably even quicker than thought? IFATCA is facing an information overkill. Many big programs such as the SES initiative in Europe (political) or RVSM in a global context (operational) need to be monitored and our concerns have to be voiced. These kind of global programs and the necessary communication make us move closer together. Competition will increase and have an effect on our work and profession. IFATCA needs to be proactive in shaping our profession for the future. This will only be possible if the membership associations recognize their responsibilities to contribute to the federation, make available resources, like manpower and funds, to move forward in a common way.

The complexity of the different initiatives will induce the federation to make mistakes. We need to be aware of this. Marc finishes by once again stating that global programs request involvement of all.

At the end of the opening ceremony, GATCO – the UK Guild of Air Traffic Control Officers – presents the “Honorary Life Award” to **Albert Taylor**, Executive Vice President of the African Region for his outstanding work and continuous support to the region.



Patrik Peters
Director of Delegation



Committee A (Administration)

by Patrik Peters

This years committee A sessions did work out to be very efficient and smooth. The proceedings were chaired by **Paul Robinson** from New Zealand.



Shazzard Mohammed, our colleague from Trinidad and Tobago, who chaired this committee for many years, died last autumn following sudden illness. A minute of silence was held in memory of his work for the Federation.



As usual we started with the applications for membership for IFATCA. We welcome 8 new membership associations, namely Algeria (Algeria was a members before, but the former association did not participate in IFATCA conferences any longer after 1995. The IFATCA EB was not able to contact this association (AACCA) anymore. The newly and democratically elected association SNPCA will therefore replace the former one.), Armenia, India, Iran, Fiji (Similar case to the Algerian one here. The former inactive, suspended and not responding FATCOA will be replaced by ATMAF.), The Philippines, Roberts FIR (Roberts FIR is an international organization controlling the upper airspace above Guinea, Liberia and Sierra Leone.) and Spain. The case of Spain brought up some discussion as different organizations from Spain had a membership status in IFATCA in the past (but not anymore).

An investigation by the EB revealed that the association being a member of IFATCA in the past was a group of controllers associated with USCA. USCA itself never was a member of IFATCA before and is thus eligible to join. This year there were no suspensions of affiliation to IFATCA and only the two above mentioned memberships (AACCA/Algeria & FATCOA/Fiji) were automatically terminated by the acceptance of their new associations in their respective areas of representation.

From the reports presented by the EVPs and elected chairmen I want to highlight the one from Nicolas Lyrakides, Executive Vice President Europe. He states that the region is a highly complex one with many varying needs, which makes it difficult to dedicate sufficient time to each MA in need of assistance. Subjects like SES, FAB's and CEATS also require a great deal of attention. Cost considerations are having an impact on safety issues and we therefore have to ensure that safe operations are not endangered by an inappropriate level of funding and staffing. The increasing amount of projects and programs stands in direct contradiction to staffing figures. This common problem in the European region might influence the progress of re-organization as intended by the European Commission (SES). Nicolas finishes his report by saying that the workload in the region has increased tremendously. He urges all MAs to actively participate in the European region.

Marc Baumgartner in his report states that the Federation now has the challenging task to consolidate its position as the recognized worldwide professional voice of the air traffic controller. Issues such as structuring the daily work of the Executive Board, enhancing the federation's corporate image, improving the financial position, increasing the transparency of activities to all MAs and preparing the Federation for future challenges that face civil aviation worldwide have become an integral part of our daily work. While IFATCA has continued to participate in international aviation meetings, we have not been able to accept all invitations because of limited financial resources and, at times, the lack of suitable representatives.



He with deep regret notices that penal proceedings have continued to be a critical issue for many MAs. We therefore must strive for recognition that a non-punitive legal system is implemented as a major step forward for aviation safety.

Albert Taylor, EVP Africa/Middle East reports that the increasing incidence of criminal prosecution of ATCOs necessitates IFATCAs attention. The Federation needs to find effective ways of addressing these threats to ATCO security and the future of our profession. In this context Albert was pleased to report that the President of Uganda, cleared the three ATCOs, who were dismissed in 1998 following an incident with the presidential aircraft. The legal process has now begun to bring these colleagues back to work. IFATCAs intervention proved to be very helpful. Albert furthermore asked the MAs to support him in raising funds to have these three ATCOs retrained in order to have them take up their positions again. Amongst other membership associations – also EGATS offered their help by taking over some of the retraining costs.

The Controller magazine, IFATCAs publication, will undergo a major re-structuring in the coming year. Philippe Domogala is taking over the post of editor from Chris Stock. Philippe presented his ideas to modernize the magazine to the committee. He intends to streamline subscription procedures (through the use of credit cards) and rates, revert to more regional articles, increase advertising and reduce the number of free copies provided to the MAs.

Philippe Domogala has been appointed by the EB of IFATCA as the Editor of “the Controller” magazine.

Several amendments to the constitution and bye-laws of the Federation were discussed and formulated following the advice and working papers of the Constitution & Administration Committee, formerly known as SC6 (Standing Committee).

One of theses amendments deals with the issues to be considered when the scheduled annual conference cannot be held and is replaced by an “emergency” conference or is even abandoned. Another one states that conference reports will be distributed by CD-ROM. Only those MAs requiring a printed copy

can obtain these through mail from the Montreal office.

Brazil, Canada and Portugal were elected to the Constitution & Administration Committee for the year 2005/2006.

A highlight in the yearly proceedings of Committee A is always the confirmation of conference venue for the coming year as well as the presentations of MAs wishing to host future conferences. As we last year decided to have the 2006 Annual Conference in Kaohsiung/Taiwan, we at this years conference were given more details about the venue. The 45th Annual Conference will be held from the 27th – 31st March 2006 in the Splendour Hotel Kaohsiung.

More information is available on the ROCATCA Taiwan website: www.ifatca2006.com.tw

For the 2007 conference we had two offers to host the event – namely Istanbul/Turkey and Abuja/Nigeria. Two very interesting presentations were given and many questions answered before election: Turkey is accepted by the directors to host the 2007 Annual Conference.

A total of four offers to host the 2008 conference were counted: Jordan, Dominican Republic, Senegal and Tanzania.

Elections of the Executive Board:

Ms. Gabriela LOGATTO (Argentina) is elected Deputy President

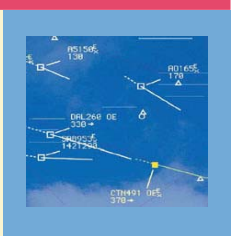
Mr. Andrew BEADLE (Australia) is elected Executive Vice-President Technical

Mr. Albert TAYLOR (Ghana) is elected Executive Vice-President Africa/Middle East

Mr. David K.W. CHEUNG (Hong Kong) is elected Executive Vice-President Asia Pacific



Yes - we saw Koala's!



by Raffaele Vigorita

Following the Überlingen disaster and a near mid-air collision over Japan, ICAO has tightened the procedures for aircrews in case of TCAS RAs. As from late 2003 all TCAS RAs must be followed and reported via the R/T, and ATC shall then refrain from giving further instructions aiming at a change of the vertical flight profile.

Further more, there were presentations about a study for **RA downlinking** methods. Four methods were identified and studied (Mode S RA reporting, RA spontaneous broadcast on 1030MHz, ACAS messages and spontaneous broadcast on 1090MHz extended squitter), but only two were found to be acceptable: Mode S method, where a Mode S ground network is in place and the 1090MHz extended squitter.

An interesting working paper was also presented by Philippe Domogala covering the **IFALPA/ATS committee** report. It was reported that IATA, although being the customers, are more and more involved in ATM business, but neither IFALPA nor IFATCA have been approached on this. As for TCAS RAs, IFALPA and IFATCA views still differ a lot, but their first joint meeting last October was experienced as being very beneficial. Other issues were discussed at that meeting, including the delay of RVSM

EVPT informed the audience that ICAO had requested the industry to formulate a roadmap for ATM in the short and medium term. Neither IFATCA nor IFALPA were directly involved, and this is perhaps indicative for a future trend. IATA in the mean time had released its roadmap and ICAO has accepted it.



«STCA is an automated system that predicts reduction of aircraft spacing to below specified parameters. An STCA function can be used as either a controller tool (STCA-T) or a safety net (STCA-N) depending upon system parameters.»

Also of interest to our situation, IFATCA policy stating that a controller should only transmit on one RTF channel was deleted, as it has become more and more common practice to collapse sectors and therefore couple more channels onto one position. The only disagreement on this was from one



of the MAs, that in their opinion this could be confusing in case of a blocked frequency. But as clearly remarked, if each a/c is transferred to the correct frequency at all times, the controller will know who is affected and who is not, even when using multiple channels at the same time. Also a set of technical requirements were set, in case of multiple channel operation, as a safety net.

One of the most important topics was related to the rapid proliferation of UAVs, Unmanned Aerial Vehicles. After a very interesting discussion on how this type of a/c are equipped and steered, it was decided that ATCOs must not be expected to treat a UAV differently than any other a/c for which the service is provided. See also the separate article on UAVs in this magazine. Furthermore, reports on regional matters were presented by the EVPs. Unfortunately



the situation in Africa is worrying, with major problems being identified in Swaziland, Cameroon, Uganda, Kenya and Zimbabwe. In Central-South America, controllers are also fighting big difficulties. Especially controllers in Guatemala are going through some very rough times.

In Asia, there is the ongoing situation of two Japanese controllers who are on trial for a near miss; one of them even as a trainee and their names being published on the press. A similar situation happened with two colleagues in Georgia.

It is comforting to know that for all these controversial matters, IFATCA stands clearly behind the controllers and their associations and works proactively to solve these matters and prevent future ones.

Obviously there were a number of topics related to non-radar areas, TWR/APP

environments and other situations that little have to share with our situation at MAS UAC, but the generated discussions were interesting and eye-opening. We heard about problems that we normally wouldn't think of.

Although at times there were lengthy discussions that could have been prevented



with a little more structuring, overall I would consider my first participation to Committee B a very deep and constructive experience, with the possibility to follow and understand the developing of ideas and concepts which we will soon see implemented in our own working environments. There is much more going on outside our OPS room than we imagine. A constant effort is offered by our colleagues from around the world to keep our job as safe as it needs to be, with respect and security for the controllers who daily have to deal with the implementation of new technology and a continuous growth in traffic.

The Panels

by Philippe Domogala



At this years conference we had a long technical panel and for the first time an internal panel where the future of the federation was debated . The technical panel was chaired by

Andrew Beadle , EVP Technical.

Speakers were Alexander Skonieczki of Eurocontrol, Jason Harfield from Airservices Australia, John Swift, Director Aviation Strategy for SERCO and Walter Dollmann who presented the airlines view.

EXTERNAL PANEL

Alexander Skonieczki of Eurocontrol talked about the current performance of the European ATM system, highlighting the current problem areas, and amongst future solutions, expanded on the Functional Blocks of Airspace (FABs).

He said that FABs will affect individual controllers as they will have to adapt rapidly to changes in their working environments. It will also bring new demands on mobility, changed employment and working conditions, human factors and cultural aspects.

On the technical side, the future will be more based on trajectory prediction, moving away from current radar techniques.

Jason Harfield of Airservices Australia reviewed the problems a commercialized company faces with regard to airspace (re)design. He said that ACAS must no be used for airspace design, but advocated the use of flexible routings and more user-preferred routes where this is possible. He though agreed that airports will be the bottle necks in the future.

John Swift of SERCO also advocated the use of Functional Airspace Blocks. It is mostly a sovereignty issue and also implies social challenges, but most of the job losses

will be in the operational support area and not on the ATCO side. Currently in Europe for every 1 Euro spent on an ATCO, 1,19 Euro are spent on support. In the USA, it is 67 cents or with other words 47% less. It is an area of big saving prospects and this will be pursued. He believes that geographically remote provision of ATS services will be used very soon.

He countered the idea that less safe operators will be able to sign those FAB contracts. He said: "You cannot be successful as an ANSP if you compromise on Safety". He used a comparison with a UK rail company that saw its shares plunge after some safety incidents leaked to the press. The company almost went bankrupt as a consequence.

Walter Dollmann talked about the transfer of separation from ground to the aircraft. He mentioned the term «Electronic VFR». He dreamed of allocation of 4D trajectories, fully de-conflicted tracks prior departure, guaranteed arrival times and unrestricted flight paths. But he acknowledged that resources management will be the future of ATM and people will talk about «affordable safety», as commercial business is becoming the prime driver of everything.

In the following debate, Dalibor from Slovenia said that corporatisation will not magically solve all problems.

SES is more political than operational. He said: «If I can, for many years now, drive my car across European borders without showing my papers - not even stopping- why are there still FIR boundaries today?»

INTERNAL PANEL

The internal panel commenced with a presentation by Doug Churchill, EVP Professional. The following debates were moderated by Marc Baumgartner, PCX of IFATCA .

Doug made a presentation on how the Federation should be going, not anymore as a fire brigade, but having a plan towards global issues. IFATCA is seen by some as a nice way to meet, to exchange information, and for asking the executive board to write letters to ministers when something goes wrong in their country.



Marc said that IATA employs 3 to 400 people worldwide to do the same job as IFATCA does today with 10 EB members and 30 volunteers. IFATCA must change. But also its Member Associations (MAs). He asked: »Why are some MAs declaring only 1% of their membership? If we want to expand, we need more people and more money.«

The board asked MAs to give them guidance on how to work the plan in the next 3-5 years.

Debates

Klaus Berthold, President GDF-Germany said that most of our employers are seeing us as liability while in fact we are an asset. Controllers produce revenue, but are often seen as being a cost factor (liability).

A controller from the Czech Republic said: «To counter staff shortage and to keep costs down, issues like single man operations are a way backwards. Our employer is saying that IFATCA has recommendations against it but those are only recommendations and no obligations.»

More delegates asked that IFATCA should be a channel to get heard, way to get to influential people (ministers, etc.).

India spoke and indicated they had already very high expectations on IFATCA.

But someone from Mexico said that we need to be involved in more global issues and not mainly in European ones as this is the case at the moment (SES).

Iran, who just joined IFATCA asked if IFATCA could help in lifting the US embargo on ATC technology imposed on a country?

Belgium advocated that to improve communications we should use more the possibilities internet can provide.

But a controller from Kenya replied: «We need paper (hardcopies) as well as not all controllers in Africa for instance have access to computers.»

An old representative from Egypt wanted IFATCA to challenge the authorities in the not so developed countries in order to promote social affairs.

A plea from a representative from Sudan: «How can IFATCA help us in the Region? Most of Africa is suffering from disastrous political situations. Politicians have little knowledge of ATC in Africa. The average remuneration in Africa for a controller is less than 250USD per month.»

CONCLUSION

The IFATCA Executive Board will use the suggestions heard in the debate and will try to implement some, but also stated that they cannot perform miracles. Member associations have the duty to inform the board of what is important to them as IFATCA is a tool and can be very powerful.





Committee C - Professional

by Cornelia Klee

The Committee was chaired this year by Neil Vidler and had a quite packed agenda. Many reports presented dealt with the monitoring of projects and developments e.g. in the ICAO PRICE SG or human factor aspects in the FAA, which have already been followed by IFATCA for some years.

Of main relevance to us were the reports about NOSS (Normal Operations Safety Survey), the 4-EP (Four-eyes-Principle) and the "Professional and Legal Aspects of downlinking TCAS RAs"

NOSS is a safety management tool based on the monitoring of everyday routine operations to detect potential safety threats. NOSS is not yet operational but first trials will be completed during 2005 by NAVCanada, Airservices Australia and Airways New Zealand.

A policy was drafted and inserted in the IFATCA manual stating conditions under which such a safety tool should be conducted:

- 7.2. *NORMAL OPERATIONS SURVEY*
- 7.2.1. *Monitoring Safety in Normal Operations must be seen as an integral element of a Safety Management System.*
- 7.2.2. *A safety tool such as NOSS shall meet the following conditions:*
 - *Joint management/controller sponsorship;*
 - *Voluntary participation;*
 - *Trained observers;*
 - *Set targets of safety enhancement;*
 - *De-identified, confidential and non-disciplinary data collection and*
 - *Adequate feedback of the results to the controllers.*



While the NOSS report and policy was carried rather quickly, we had quite some discussion on the 4EP.

The main discussion arose on the question whether the 4EP was already partly handled in the policy of SPO (Single man operations), seeing it only as a subpoint or whether the 4EP qualified for a new definition and a policy.

For us in Maastricht working (so far (!)) always with a radar and planning controller side by side, it is not always easy to understand especially after the Ueberlingen incident that in other centres controllers are still – for cost efficiency- rostered in SPO though lacking the safety net of the 4EP.

In the end the member associations agreed to a definition of the 4EP to be inserted following the definition and policy regarding the SPO.

1.7. Four eyes Principle (4EP) can be defined as the situation where an active controller is accompanied by another appropriately qualified controller whose function include that of a safety net by monitoring the same working area as the active controller does.

1.7.1. Implementation of the 4EP shall be strongly encouraged by the MAs, both through ANSPs and regulators.

1.7.2. Individual ATCOs shall not be held liable for incidents or accidents resulting solely or in part from a lack of the implementation of the 4EP safety net by the ANSP.

Moving on to the next topic, the Professional and Legal Aspects of Downlinking TCAS RAs. IFATCA takes a clear stand against it.

However, seeing the developments in the field of datalink etc., IFATCA has already drafted a policy and conditions, which should be met, in case the downlinking of ACAS RAs becomes mandatory (clear and unambiguous legal responsibilities, downlinking without delay etc.).

These amendments were already done after last years conference in Hongkong and as major changes did not occur in the last year, IFATCA is still very carefully observing the developments on this subject being prepared to update the policy as required and taking



additional steps. For example: urging industry and national administrations to develop, maintain and administer a comprehensive ACAS training programme for ATCOs, consisting of courses in phraseologies, controller reactions and legal responsibilities, technical description and cockpit displays, pilots reaction to TAs and RAs etc..

To summarise the week, it was great to take part in the conference again not only meeting friends from last year but also discussing with newcomers on IFATCA policies. If ever you get the opportunity to join in on one of these conferences - Go for it! It is a great experience and will widen your view of the "air traffic controller's world."



IFATCA European Meeting Rodos/Greece 14th-16th October 2005



Once again, the EGATS Executive Board wishes to invite a member from our active Maastricht UAC membership to join our delegation for this regional meeting.

Should you be interested, please send an email to ifatca@egats.org to participate in our draw.

Deadline: 01.08.2005
The usual restrictions apply.

EGATS will re-imburse all costs related to airfare, hotel and registration.

Private expenses and leave arrangements will have to be taken care of by the volunteer.



Melbourne was the place and I was the girl, the lottery girl. As many of you know I was the lucky winner of this years EGAT's lottery, a chance for a place to attend and experience IFATCA in action.

Now I must admit I did not know much about IFATCA before attending this annual conference so for all of those reading this article in the same position I



used to be in let me enlighten you. IFATCA is the International Federation of Air Traffic Controllers Associations, it is our federation, run and organized by controllers for controllers. All members work on a voluntary basis, finance coming from the associate members. It is organisations whose goals are many but include assisting and advising in the development of safe and orderly systems of air traffic control new procedures and facilities, to closely cooperate with international and national aviation authorities and institutions concerned with air navigation and to promote and uphold a high standard of knowledge.

At the start of my trip I was a little puzzled by the proceedings, why exactly were we here, what were we hoping to achieve, how we could measure the success of the event. I wondered if the amount of effort and money required to host and attend the conference was disproportionate to the amount of work being processed or accomplished, however during an enlightening conversation with the approachable and competent president and **CEO Marc Baumgartner**. I was informed of the importance of the social and



networking aspects of the conference, the growing solidarity, support of and for controllers worldwide and the information sharing of technical systems and working methods. It is the culmination of a year of hard work by many people and it was obvious to me that months of toil had gone into preparing the working papers that were presented in the committees.

Although IFATCA has no regulatory power it has an immense amount of power to influence. Bodies such as ICAO listen closely to IFATCA valuing and utilizing the expertise and professionalism of the federation when deciding policy or procedure. We need IFATCA in a mine sweeping capacity to ensure all regulations conform to safety and standards as only a controller doing the separating would know.

One area in which IFATCA educated me was the immense number of controllers worldwide who are currently being prosecuted under their countries law or have been unfairly dismissed from their posts because they are at the sharp end of an unworkable system created by people whose main interest lie with profit and capacity and not safety. IFATCA is not only supporting these people in principle but also actively. Lobbying those with influence in governments, to persuade and have some bearing on an unfair situation. To bring these situations to light in the public domain is all IFATCA work. From Georgia to Japan if they did not support our friends and colleagues in these nightmarish situations who would?

As you can imagine it was not work, work, work, after all we are controllers and we know how to have a good time. There were several organized social events from karaoke singing to BBQ's some of which were better organized than others. My advice is; at big BBQ's don't stand in line for the sausages and burgers but go talk to the chefs and get yourself some decent red snapper or emu as I did because if you don't there won't be any of the good stuff left by the time you get to the front of the queue!!

As for the karaoke I decided to join forces with my Irish colleagues Carol & Nicola to brazen out the performance that was



obviously expected of me. We chose the song "It's raining men" by Gerry Haliwell due to the overwhelming amount of good looking and amenable male controllers in our midst. I wish I could say we did the song some justice but I can not lie, we murdered it!! However a good time was had by the entire vocal group and I was later informed even the audience and so the evening was deemed a success. The fact that some of the Nordic delegates lost part of their clothes whilst singing during the evening having no bearing at all on the fun factor!



There are some areas where I would like to see changes in IFATCA. I would like to see more funding and therefore more resources to help the dedicated volunteers perform their roles in a more favourable environment. I find it amazing that the executive board, that is 10 individuals, of which 9 are working as full time ATCO's, spent at least 600 days on the road at meetings last year. Generally flying economy/standby to all of these meetings and staying in accommodation costing less than 100USD per night, - as you can imagine definitely not 5 star. If anyone is motivated to join IFATCA for the perceived jollies, - think again, it is not much fun when you have waited at the airport all day and have failed to get on 3 flights because they were full. You have done several full days work and just want to get home!

More effective presentations would have also been appreciated. As much as I can applaud anyone who stands up to present in their second or third language the reality of the situation is that the passing of information could be so ineffective as to be detrimental to the attention span of the audience for any subsequent presentations. The chairing or facilitating of some of the meetings was also less than ideal, causing no end of time wasting and frustrations. Discussions did not move forward but went around in circles causing a

loss of interest and therefore constructive input by delegates. These are all skills which can be learned if sufficient funding is in place unfortunately there is no such funding and so we creak on in a less than efficient way, still doing sterling work but certainly not the best we are capable of.

I enjoyed the conference immensely for many reasons, because of the insight I gained into the work of other controllers, from en route controllers in Africa to tower controllers in Vienna, because of the amusing and dedicated people I met there who despite their location or working conditions are basically just like me and have the same problems I have whether it is childcare problems because of shift work or a management with targets and goals they want to achieve under any circumstances. I am sure I have made life long friends in many countries.



I encourage any of you reading this who are not on the EB of EGATS and who have not yet won "the lottery" to put your names in the hat and let fate take its course, I can assure you it is an experience you do not want to miss.

I would like to take this opportunity to ask EGATS for a special discount on my membership fees from this day forth, I smiled and laughed so much during this conference I must have gained several hundred more laughter lines and in the future will need to spend copious amounts of money on moisturizer in an effort to rectify the situation.

Thank you EGATS!

Jeanette Arthur

The 2005/2006 EGATS Executive Board

Patrik Peters	President, Editor, IFATCA Liaison	president@egats.org
Martin Norris	Executive Secretary	execsec@egats.org
Paul Hooper	Treasurer	treasurer@egats.org
Cornelia Klee	Membership Secretary, Prof./Tech. C.	membership@egats.org
Raffaele Vigorita	Chairman Professional/Technical Comm.	professional@egats.org
Vincent Poty	TUEM Liaison, Prof./Tech. Committee	board@egats.org
Ive van Weddingen	E-Link, Prof./Tech. Committee	board@egats.org
Ralf Zech	DFS Liaison, Office Manager	board@egats.org

newly appointed officials:

Steven Pelsmaekers	Chairman Flight Department	flight.dept@egats.org
Jeanette Arthur	SMART Liaison	board@egats.org

EGATS general E-mail address: board@egats.org

Postal address: EGATS - Eurocontrol Guild
Horsterweg 11
6199 AC Maastricht-Airport
The Netherlands

Phone: +31 43 3661 120
mobile: +49 179 599 0006 (P. Peters)
Fax: +31 43 3661 541



Hi,

I'm sure a lot of you know me already, but since I'm new on the EGATS Executive Board I would like to introduce myself a bit more. My name is **Ive Van Weddingen**. I'm 29 years old, probably 30 by the time you read this. I'm a controller in the Brussels sectors (Team3 or E for the older people). I'm of Belgian nationality and married to a Dutch girl (I consider this developmental aid). We don't have any children. When I'm not at work, I spend most time managing my collection of 1/400 scale aircraft models. Last year I was the lucky winner of the EGATS lottery to take one guest to the IFATCA conference in Hong Kong. That way I got to see a different side of EGATS, apart from the flight department we all know. It got me interested to immerse myself more in the organisation. I hope I can be a valuable contribution to the board.

Golden Flight Level 2005

After La Plagne in 1985 and Val D'Isère in 1993, the GFL was organised for the third time in France, in the ski area of Chamonix from the 15th till the 22nd of January.

The Golden Flight Level is a European event dedicated to ski, snowboard and cross-country competitions open to everybody who works for either Civil Aviation or the Met Services.

Since the GFL was founded in 1976, it has taken place in many countries from Austria to Canada, Switzerland, Spain, Slovenia, Finland and nobody will forget the edition of 1998 organised by Maastricht UAC in Maria Alm, Austria.



The GFL is not just a competition but mainly an opportunity to meet colleagues from other centres in Europe and North America. And of course to have fun!!!

Chamonix and winter sports is linked for many years, it is one of the first places in the world where skiing was practiced as leisure rather than as sport. Indeed the first winter Olympic Games were organised in Chamonix in 1924. Since then, the popularity of the place didn't decrease and it became one of the hotspot for extreme skiers.

This year, some 20 members of Maastricht UAC participated at the GFL. As usual, the trip was well organised by the captain of the Maastricht team, the one and only Carlito Karl Haegens.

After an early arrival on the first day, the bravest of those members went for some action in the closest skiing area from the centre of town, the Brevent. Unfortunately, snow conditions were not ideal. Snow-



falls had been very rare during the previous weeks but this gave us a good training for the slalom trying to avoid the stones. We finally got our reward when reaching the highest point of the area ... a stunning view on the French Alps.

The sun was going down, it was time for us to leave that breathtaking view and to get down to the hotel for the welcome ceremony.

After a well deserved shower and a good meal, heading for the party room, you could here some "Hey, look who is there!!!" or "Nice to see you again!!!" And the party could start just as if you had left your friend from Finland the day before.

Suddenly there is no trainee, no controller, no assistant and no supervisor. Only a bunch of friends meeting again to have a good time.

Even if everybody had the honest intention, after a long travel day to go to bed early in order to be fit for skiing the day after, nobody could resist. It is human nature: So many stories to tell in a year, so many memories from the last GFL and such a nice ambiance ... I will rest tomorrow ... tomorrow I will go to bed early ...

And here we are a few hours late. I hate the alarm clock ... I want a long sleep ... Can I swap for an afternoon? No way! The alarm keeps on ringing and I start to regret to have registered for an activity at 9 o'clock.

Together with the registration some activities were proposed by the organising committee with the "Compagnie des Guides de Chamony". We could choose

from off-piste skiing, ski tour, ice climbing, snowshoeing or the **"Vallée Blanche"**. The "Vallée Blanche" is an amazing descent from the "Aiguille du Midi" all the way down the glacier leading to the station. Unfortunately due to the snow condition, the "Vallée Blanche" was not accessible and we had to restrict our choice to the remaining four options. If one day you pass by Chamonix, don't hesitate and go for one of them, you won't regret it.



The next days were usual GFL days some free skiing, some activities, some hot-spots. This deserves a bit more explanation. A hot-spot is the place to be during the day on the slopes. A meeting point where everybody meets and is provided with drinks of all kinds. Yes, alcoholic drinks as well! The alcohol check didn't reach the GFL yet and the unions have been mandated to make sure that it will never happen. After some typical GFL days there comes the first day of competition, the cross-country race. **If you have never seen a GFL race, there is how it looks:**



Who said that ATC was for serious and responsible persons?
And the winner is: The bride!!!
Maybe not but what a fun!!!



In the afternoon the snowboard race took place on a slope parallel to the World Cup descent, La Verte des Houches. The descent is described in most of the hotels with the following words: A first straight line leading to the 80 meters jump then ... no use to read further we will go on the parallel track. At the location, we had the chance to observe, in his natural environment, a typical kind of the French Alps, a **Stagus Thorstenus** which is very difficult to meet



especially in that period of the year. Even though I believe having met a similar kind in the area of Maastricht - but in a domesticated version.

The weather was not up to expectations but we were all present to support our team mates participating in the event. Luckily the organising committee had been thinking about the poor fans providing them with free food and hot wine to fight the cold. We had to take care of our health to be fit for the evening party. Party, one of the magic word in a GFL. What would be a GFL without parties? It would just not be a GFL. It is as simple as that.



That evening a beach party was proposed. As you can see some of us took it very seriously.



Don't ask me what kind of animal they are, - impossible to identify.

After another short night: Next week I will go to bed early ... next week I will rest ... there comes the giant slalom race ...

The race was organised in the same way as the snowboard race, two parallel tracks on one slope. The times from each track were multiplied by very complex coefficients. Nobody really understood the method but at the end everybody got a time.



Once again food and hot wine was provided. The food was a typical meal from the French Alps: "La Tartiflette".

It's a mix of cheese, potatoes and bacon. Slightly heavy but it keeps you warm.

The day after, free skiing and finally in the evening, the results ... I will come back on them, my male pride did not recover yet!!!

The Awards ceremony and official dinner took place at the hotel "Le Majestic", a beautiful palace from the 1920's.

After some official speeches the results were made known. Not a single male representative of Maastricht received a prize, - nothing! We only won ... the respect of the other participants, that's all!

Four of our girls got rewarded, they saved the honour of the Maastricht TEAM and collected together five awards.



Our SUPERWOMEN



Before the final party, we had to go for a **room party**. That's another GFL rule.

There is no GFL without a room party.

And it's time to say good bye to your friends. But for sure everyone will be back next year for another GFL experience.

If you like winter sport and like to have fun, don't hesitate, join us for a unique experience. You won't regret it!!!

If you want to know more about next year GFL, don't hesitate to contact our captain, Karl Haegens or visit the site www.GFL2006.it.

See you at the next GFL.

Vince Poty

The Maastricht UAC Team at the "Majestic"



BIRD STRIKE ... the fun corner

Women pilots

As the airliner pushed back from the gate, the flight attendant gave the passengers the usual information regarding seat belts, etc. Finally, she said, „Now sit back and enjoy your trip while your captain, Judith Campbell, and crew take you safely to your destination.“

Joe, sitting in the eighth row, thought to himself, „Did I hear her right?

Is the captain a woman?“ When the attendants came by with the drinks cart, he said, „Did I understand you right? Is the captain a woman?“

„Yes,“ said the attendant, „In fact, this entire crew is female.“

„My God,“ said Joe, „I'd better have two scotch and sodas. I don't know what

to think of all those women up there in the cockpit.“

„That's another thing sir,“ said the attendant, „We no longer call it the cockpit. Now it's the box office.“

On an Athi River highway (the main road to Mombasa):

„TAKE NOTICE: WHEN THIS SIGN IS UNDER WATER, THIS ROAD IS IMPASSABLE.“

On a poster at Kencom:

„ARE YOU AN ADULT THAT CANNOT READ? IF SO, WE CAN HELP.“

In a City restaurant:

„OPEN SEVEN DAYS A WEEK AND WEEKENDS.“

A sign seen on an automatic restroom hand dryer:

„DO NOT ACTIVATE WITH WET HANDS.“

In a cemetery:

„PERSONS ARE PROHIBITED FROM PICKING FLOWERS FROM ANY BUT THEIR OWN GRAVES.“

English signs in foreign countries:

For those who care about languages and words meanings: enjoy it!

In a Bangkok temple:

„IT IS FORBIDDEN TO ENTER A WOMAN, EVEN A FOREIGNER, IF DRESSED AS A MAN.“

Cocktail lounge, Norway:

„LADIES ARE REQUESTED NOT TO HAVE CHILDREN IN THE BAR.“

Doctors office, Rome:

„SPECIALIST IN WOMEN AND OTHER DISEASES.“

Dry cleaners, Bangkok:

DROP YOUR TROUSERS HERE FOR THE BEST RESULTS.

In a Nairobi restaurant:

„CUSTOMERS WHO FIND OUR WAITRESSES RUDE OUGHT TO SEE THE MANAGER.“

Tokyo hotel's rules and regulations:

„GUESTS ARE REQUESTED NOT TO SMOKE OR DO OTHER DISGUSTING BEHAVIOURS IN BED.“

On the menu of a Swiss restaurant:

„OUR WINES LEAVE YOU NOTHING TO HOPE FOR.“

In a Tokyo bar:

„SPECIAL COCKTAILS FOR THE LADIES WITH NUTS.“

Hotel, Yugoslavia:

„THE FLATTENING OF UNDERWEAR WITH PLEASURE IS THE JOB OF THE CHAMBERMAID.“

Hotel, Japan:

„YOU ARE INVITED TO TAKE ADVANTAGE OF THE CHAMBERMAID.“

In the lobby of a Moscow hotel across from a Russian Orthodox monastery:

„YOU ARE WELCOME TO VISIT THE CEMETERY WHERE FAMOUS RUSSIAN AND SOVIET COMPOSERS, ARTISTS AND WRITERS ARE BURIED DAILY EXCEPT THURSDAY.“

A sign posted in Germany's Black Forest:

„IT IS STRICTLY FORBIDDEN ON OUR BLACK FOREST CAMPING SITE THAT PEOPLE OF DIFFERENT SEX, FOR INSTANCE, MEN AND WOMEN, LIVE TOGETHER IN ONE TENT UNLESS THEY ARE MARRIED WITH EACH OTHER FOR THIS PURPOSE.“

Hotel, Zurich:

„BECAUSE OF THE IMPROPRIETY OF ENTERTAINING GUESTS OF THE OPPOSITE SEX IN THE BEDROOM, IT IS SUGGESTED THAT THE LOBBY BE USED FOR THIS PURPOSE.“

Advertisement for donkey rides, Thailand:

„WOULD YOU LIKE TO RIDE ON YOUR OWN ASS?“

The box of a clockwork toy made in Hong Kong:

„GUARANTEED TO WORK THROUGHOUT ITS USEFUL LIFE.“

In a Swiss mountain inn:

„SPECIAL TODAY - NO ICE-CREAM.“

Airline ticket office, Copenhagen:

„WE TAKE YOUR BAGS AND SEND THEM IN ALL DIRECTIONS.“

A laundry in Rome:

„LADIES, LEAVE YOUR CLOTHES HERE AND SPEND THE AFTERNOON HAVING A GOOD TIME.“

A guy sitting at Bar at Brussels Airport noticed a very beautiful woman sitting next to him.

He thought to himself, „Wow, she's so gorgeous she must be a flight attendant. But which airline does she work for?

Hoping to pick her up, he leaned towards her and uttered the Delta slogan: „Love to fly and it shows?“

She gave him a blank, confused stare and he immediately thought to himself, „Oh sh!t, she doesn't work for Delta“.

A moment later, another slogan popped into his head. He leaned towards her again, „Something special in the air?“

She gave him the same confused look. He mentally kicked himself, and scratched Singapore Airlines off the list.

Next he tried the Thai Airways slogan: „Smooth as Silk.“

This time the woman turned on him „What the F**K do you want?“

The man smiled, then slumped back in his chair, and said, „Ahhhhh, Ryanair!“

These meetings can be very tiring!



Seen in the Koala wildlife preservation station on Phillip Island.

The Giant of the Skies



It's 73 m long, 80 m wide, it will have a weight of 560 tons and it will be able to transport a minimum of 555 passengers over distances of up to 8000 nautical miles, at a maximum operating speed of Mach 0.89. Could it be a dream? Not really...

It has a name, Airbus A380, and, on the 27th of April 2005, it opened a new era in civil aviation.

As from that day, the A380 had taken over the title of „Queen of the Sky“, previously held by the Boeing 747, for almost four decades.

In the next lines, we invite you to a short journey through the development program of this „peaceful monster“ which has rewritten the rules of aviation engineering.

Let's go back in time, at the beginning of the 90's, when the demand for bigger passenger aircraft was continuously raising. The companies were pushing the aircraft manufacturers to build also faster and more comfortable aircraft, asking, in the same time, for lower operating costs.

Foreseeing the huge potential of this market segment and benefiting also from the fact that the only contender, at that time, the Boeing 747, was beginning to show its age, on the 1st of July 1994, Airbus had revealed its new vision for an ultra high capacity aircraft, which was to be called the A3XX during its development. The new aircraft had two decks and, since the shape of the 747, with its famous hump, was considered obsolete, Airbus had gone for a twin deck design along the whole fuselage. This had also improved the aerodynamics, while offering much more space inside.



The A3XX was able to accommodate up to 840 passengers in an all-economy layout and up to 570 passengers in a three class layout. It would have been up to 40 per cent larger than the Boeing 747-400, with at least 15 per cent better direct operating costs per seat, being powered by four engines, with a take-off weight of around 470 tonnes.

With the air traffic expected to almost triple in the next 20 years, large aircraft like the A3XX were seen as the only way to carry more passengers without building more airports. At the next Le Bourget Air Show, on the 1st of June 1995, the visitors could grasp a first look at the A3XX, helped by a three-dimensional computer-generated virtual tour of the aircraft. It has to be mentioned that Airbus was the first manufacturer to introduce computer-generated pictures of cabin interiors back in 1986.

The feedback from the companies was favourable and would play a vital role in shaping the size, range and overall design of the A3XX.

On the 2nd of April 1996, Airbus created a Large Aircraft Division, in order to accelerate development and design work for the A3XX. This division brought together experts from Airbus and its partner companies, including design and costing engineers and specialists in marketing, finance, production and international cooperation. In the same time, Airbus had maintained a permanent dialogue with airports and regulatory authorities to solve the issue of airport compatibility. An airport database, initially with 35 key airports had been set up to simulate A3XX movements and identify operational limitations, critical airport areas and aircraft design parameters.





AIRBUS

That enabled airports to prepare for the arrival of the A3XX. The outcome of this dialogue led to the requirement that the A3XX should be designed to fit within the future standard 80 by 80 metre „box“, as few airports can accept aircraft of more than 80 metres in span or in length. Again, it is interesting to notice that the first airport which gained certification for A380 operations was Munich Airport.

On the 5th of November 1996 another milestone in A3XX program was achieved. Airbus organised its first meeting of the A3XX freighter and combi working group, created to allow potential airline customers to help design the freighter version of the A3XX. The latter was unveiled on the 1st of December



1997, with the aim to be the solution to the huge increase in air cargo traffic, which is expected to triple within 20 years from now. With the development costs set at 8USD billion, Airbus was ready to launch the A3XX program into production. There was one more thing necessary for the „go-ahead“ and that was the list of the customers interested in acquiring the giant airplane.

The breakthrough came in April 2000, with Emirates becoming the first airline to commit officially to the A3XX, following a thorough study of its performance and economics. But that was still not enough...

The example of Emirates was followed shortly by other airlines and with the commitment of Singapore Airlines, followed by Air France, Qantas, Lufthansa and ILFC (International Lease Finance Corporation), the A3XX received the „authorisation to offer“ on the 23rd of June 2000 and, on the 19th of December 2000, the Airbus shareholders (EADS and BAE SYSTEMS) officially approved the launch of the A380, formerly known as A3XX.

At the time when this article is written there are 15 customers for the A380, the other airlines being (in random order) Korean Air, Qatar Airways, Virgin Atlantic, Malaysia

Airlines, Thai Airlines, Etihad Airways, China Southern, FedEx and UPS. In total, there are 154 orders and commitments for the A380.

It has been decided that the launch customer for the A380 will be Singapore Airlines which is supposed to receive its first super-jumbo in the last quarter of 2006.

So, with a lot of work ahead, the program was to become reality...

The first problem was the place where the new A380 was to be assembled.

Therefore, on the 16th of July 2002, the final assembly facility for the A380 was inaugurated in Toulouse/France. The roof of the final assembly hall was put on the 17th of February 2003 and, in terms of size and weight, it's a huge piece of construction, measuring 115 by 250 metres and weighing some 7500 tonnes, at a final height of 46 metres.

With all the logistic issues sorted out, the A380 was ready to go ahead with the assembly and, eventually, entering the service in 2006.



Airbus had already made a choice, previously, for the engines and that was the Rolls-Royce Trent 900, especially developed for the A380, for which a Memorandum of Understanding was signed on the 4th of November 1996, between Airbus and Rolls-Royce. This was to be the first engine for the A380, although a second choice was made on the 28th of May 1998, when Airbus signed a MoU with the Engine Alliance, for developing its GP7200 engines series. The Trent 900 had completed its first run on the 19th of March 2003 and was subsequently tested in airborne conditions on an Airbus 340-300 testbed (registration F-WWAI), the engine gaining airworthiness certification for thrust levels on the 21st of May 2003.



AIRBUS

The delivery of the first Trent 900 took place on the 23rd of February 2004 and environmental testing had shown the Trent 900 to be the world's cleanest turbofan engine measured by emissions per pound of thrust. In parallel, simulated altitude testing was conducted at Arnold Engineering Development Centre in Tullahoma, Tennessee/USA. Interesting to notice that although the engine will require a rating of „only“ 70000lb thrust at entry in service, it will be cleared for 81000lb at certification, since it was already running successfully at 88000lb thrust during the test, therefore allowing important operating margin.



The development of the frame started a bit later, on the 1st of May 1998, when the first trials to measure the wake vortex behind such a large aircraft have been conducted using advanced ground-based laser technology.

On the 14th of March 2002 the production of the A380 started at the Airbus site in Bremen, following the traditional „first metal cut“ in France. Then, on the 23rd of August 2002, the first „cutting of metal“ for the A380 wing marked the launch of UK manufacturing at the Airbus factory in Filton. The Filton site is responsible for manufacturing 40 ribs for each aircraft, the largest being 3.1 m by 2 m. Completed rib sets will be delivered to its sister factory in Broughton, North Wales, for final assembly into the wings and then delivered to the final assembly line at the Airbus facility in Toulouse.

Another milestone successfully passed on the 2nd of February 2005, when wing bending tests were conducted. The wing bending test was performed successfully up to limit load on the A380 static test aircraft (the limit load is the maximum load that an aircraft is expected to encounter, during its service life).

The official presentation of the A380 took place on the 18th of January 2005, in a ceremony at Toulouse, attended by several heads of state. The A380 was seen as a symbol of cooperation and partnership between the 85 different nationalities working at Airbus and this sense of diversity is the meaning of the new Airbus logo, on the tail



of the plane, which could be seen for the first time at that date.

Finally, on the 27th of April 2005, the A380, wearing the registration F-WWOW, took off for the first time at Blagnac Airport in Toulouse at 10:29 local time and, after successfully completing a first flight that lasted 3hrs. and 54minutes, it landed at 14:23 local time. The prototype was powered by Rolls Royce Trent 900 engines and the crew confirmed that the new aircraft and engines had handled as anticipated. For its first flight, the A380 took off at a weight of 421 tonnes, the highest ever of any civil airliner to date. During the flight, the crew explored the aircraft envelope as expected and they tested the A380's handling with the landing gear up and down and with all flaps' and slats' settings during the part of the flight at cruise altitude.

This maiden flight marks the beginning of a very tough test flight campaign involving 5 A380s, including one for the certification of the Engine Alliance GP7200 engine and some 2500 flight hours. This will end with aircraft's certification followed by its entry into airline service towards the end of 2006 with its first operator Singapore Airlines.

So, it's not much time left until we will see this marvelous piece of engineering taking off into the sky and carrying hundreds of passengers on long distances and in an enhanced comfort.

And, since we have a new „Queen of the Skies“, the only thing we can say it's : „Long Life to the newly crowned Queen!“

Gabriel Bangiu

The impact on ATC from the operation of

Unmanned Aerial Vehicles

Background

Across the globe there is a proliferation of Unmanned Aerial Vehicles (UAVs). The development and manufacture of UAVs is currently the largest growth area in the aviation industry. Several international and European organisations, including ICAO, JAA, Eurocontrol and EASA, are formulating regulatory policy regarding UAV operations. The International Federation of Air Traffic Controllers' Associations (IFATCA) is currently developing policy as to how Controllers should react to the use of UAVs. Mark Green, our Director Future Policy, is drafting the IFATCA working paper describing this policy. This article is derived from Mark's draft of the IFATCA working paper.



Unmanned Aerial Vehicles

The term UAV, as the name Unmanned Aerial Vehicle suggests, refers to pilotless aerial vehicles. Indeed, the definition of an UAV is "An aircraft which is designed to operate with no human pilot onboard".

The shape and size of UAVs is very varied. UAVs range from hand launched micro aerial vehicles, weighing a few kilos, to aircraft similar in size to a Boeing 737, such as the Global Hawk. UAVs are not just fixed wing either, and there are numerous rotorcraft UAVs either in use, or being developed, as well as some lighter-than-air UAV concepts.

More than 30 nations are developing or manufacturing more than 250 models of UAVs. More than 40 countries already operate more than 80 types of UAVs that have a wide range of system performance concerning speed, altitude, mission duration, and payload capability. The entire spectrum

of aviation companies and research institutes, both small and large, are developing and operating UAVs, as well as forwarding their related technologies.

In 2000 the world market for UAV systems exceeded one billion US \$ in terms of annual revenues, with a continued compound annual growth rate forecast of approximately 7 percent for forthcoming years.

Civil UAV applications have been relatively slow to take advantage of potential applications, especially when compared to the rate of proliferation of military applications. This has been due, at least in part, to the lack of a regulatory framework. Many potential civil missions, such as global monitoring of the environment and security applications, can only be achieved if UAVs are able to fly seamlessly amongst other air traffic within national or international airspace. However, there are many scenarios where existing regulations cannot currently accommodate civil UAVs. It is these areas that the proponents of UAVs are focusing upon to develop the regulatory framework to enable civil UAV operations on a widespread basis. The technologies and procedures that are essential to enable civil UAV operations are being developed and demonstrations are underway to show how UAV civil applications can be introduced in a safe manner. Where regulatory arrangements are already in place for civil UAV applications it is expected that operators will rapidly identify and exploit UAV technologies, particularly if UAVs can demonstrate a cost benefit compared to manned aircraft.

UAVs are being proposed for a variety of civil applications. The major drivers for the use of civil UAVs are unique flight performance, such as High Altitude, Long Endurance (HALE), and their suitability of use for "dull, dirty and dangerous missions". Potential uses include endurance missions for surveillance, such as customs enforcement of coastlines, border patrols and fisheries protection. However, surveillance missions aren't limited to remote areas and there is consideration being given to the use of UAVs for

surveillance of urban areas. For instance, UAVs that loiter over potential hotspots could monitor rush hour traffic. UAV operations are even being considered to replace the use of helicopters in monitoring the perimeter of international airports.

Other civil applications include the use of UAVs for environmental work, such as gathering scientific data from the atmosphere; communications, for instance the relaying of live data; and even agricultural, crop spraying for example.

Within the 2004-2007 timeframe, the applications are border and coastal patrol, environmental research, such as gathering scientific data from the atmosphere, communications, such as relaying live data, agricultural, crop spraying for instance, digital mapping and planning, fire fighting and energy infrastructure/monitoring.

From 2008-2012, civil applications are expected to include law enforcement, search and rescue, maritime traffic control, hazardous materials monitoring and crisis management.

From 2013 onwards, applications may include surrogate satellites, communication and broadcast services, transportation and urban law enforcement.

One of the main catalysts for commercialisation of UAVs is the US homeland security market. The task of patrolling America's borders is immense and the use of UAVs is being promoted as a means of achieving this requirement. However, such missions will require a level of routine access to civil airspace. Such roles for UAVs extend beyond the US. For example, Australia is seeking to use the General Atomics Mariner UAV for civil maritime surveillance.

There is a considerable effort being undertaken by potential civil UAV operators to resolve the issues associated with operating in civil airspace. For instance, the formation of the UNITE group has been successful in obtaining a budget of US\$101 million for work, known as Access 5, to be carried out over the next few years. The aim is to have a 'file and fly' capability for aircraft whose main operation is above 18,000 feet. The focus is on High Altitude Long Endurance (HALE) aircraft.

Whilst the growth of civil UAVs and their potential operations is impressive, the civil UAV market is dwarfed by the vast military demand for UAVs. There is a huge range of potential military uses for UAVs. UAV operations range from Reconnaissance, Close Air Support, Battle Damage Assessment to strike missions flown by Uninhabited Combat Aerial Vehicles (UCAVs) and Unmanned Combat Armed Rotorcraft (UCARs). The scale of proposed military operations range from individual lightweight micro UAVs, hand-launched by a single infantry soldier, to formation flights of UCAVs being controlled from a "mother ship".

UAVs are now routinely used in military operations. The on-going operations in Iraq have been a proving ground for many types of UAV and mission. It is already public knowledge that UAVs have been used in a strike capability. The growth in the military use of UAVs is likely to continue unabated for years to come.

The aggregated military UAV expenditure for 2003-2012 (for US and Europe) is expected to be 25 billion Euros. Around 84% of this spending will be directed towards HALE, MALE and UCAV applications. Out of this total, US \$11 billion is forecast to be spent on procuring reconnaissance and surveillance UAVs. This sum will purchase approximately 6,000 UAVs.

Research & Development on UAVs is forecast to be US \$2.5 billion in 2005, rising to US \$4.5 billion by 2015. Combined expenditure on R&D in the US and Europe will probably exceed 25 billion Euros over the next 10 years.



UAV operations

Whilst many civil controllers view the onset of UAVs with, at best, apprehension it is worth remembering that controlling UAVs will be a legitimate and increasing task for our military members.

In essence there are 2 types of UAV operations. Those that take place in segregated airspace and those that take place in unsegregated airspace. At present, most operations in the civil domain take place in segregated airspace. It is typical for a cylinder of airspace to be established around the airfield or launch site of the UAV. The UAV will get airborne and will climb within this cylinder of segregated airspace to reach a further piece of segregated airspace in which it will operate. Once the mission is complete, the UAV would return to the cylinder and fly a spiral descent and recover into the airfield or landing site.

Operations within segregated airspace are becoming common place. Such flights, due to the fact that they are operating in airspace that is specifically reserved for such operations, are not normally subject to Air Traffic Control.

It is the proposed onset of operations in unsegregated airspace that is the area that needs to be examined in detail. The proponents of civil UAVs wish for full access to all airspace by UAVs. However, it is realized that a phased approach to this desired end goal is required. For example, the Access 5 programme has identified 4 steps to enabling UAV operations in unsegregated airspace. Step One proposes routine operations above 40,000 ft in Class A airspace, with ATC being able to command altitude, speed, heading and route changes. Access to this high level Class A airspace would be achieved through the use of restricted airspace. Step Two would lower the base of operations to 18,000 ft enabling UAV operations alongside commercial traffic. Access is still provided through restricted airspace. Step Three still envisages operations above 18,000 ft, although access would be achieved through Class C, D and E civil airspace. Step Four proposes the use of UAVs in civil airspace at all levels, with UAV operations integrated with conventional commercial traffic.



Levels of UAV autonomy may considerably vary. At one extreme, the UAV pilot may have direct control of the UAV. The UAV in this case can be referred to as a Remotely Piloted Vehicle, similar to existing model aircraft. At the other end of the scale is the fully autonomous UAVs, where the UAV operates autonomously using Sense and Avoid principles. Many UAVs have the capability of autonomous flight control and navigation or capability of controlled flight out of the direct vision range of a human operator. For autonomous operations, there is no permanent control link and the UAV commander only intervenes in the management of the flight in special cases. Most types, with the possible exception of light UAVs, are expected to have some limited autonomy capability. The UAV pilot is still given the possibility to monitor and intervene, for example, to perform corrective actions in case of failure.

The class of airspace that the UAV is being operated in will determine the interaction that Air Traffic Control will require with the UAV. In uncontrolled airspace, such as Class G, autonomous UAV operations using the Sense and Avoid principles would probably enable UAVs to mix with other air traffic operating in this environment. UAVs operating in this unsegregated, but uncontrolled environment, would need to be capable of adhering to the ICAO rules on collision avoidance.

These ICAO rules stipulate how to avoid collisions between aircraft in terms of "right of way" and evasive manoeuvring. An aircraft that is obliged by the rules to keep

out of the way of another shall avoid passing over, under or in front of the other, unless it passes well clear and takes into account the effect of aircraft wake turbulence. The aircraft that has the right-of-way shall maintain its heading and speed, but the pilot-in-command of an aircraft shall always take such action as will best avert collision.

There are specific ICAO requirements that would need to be adhered to by UAVs, such as those specified in ICAO Annex 2 requiring that all aircraft in flight shall display anti-collision lights and navigation lights, from sunset to sunrise. If there is clear evidence that displaying these lights also during daytime enhances an aircraft's visibility significantly, then it may be considered a requirement for UAVs to display such lights 24 hours a day.

In addition, equipment that supports the avoidance of collisions, such as: • Altitude Alerting system • Airborne Collision Avoidance System (ACAS) • Ground Proximity Warning System (GPWS) • Terrain Awareness and Warning System (TAWS), might also be required to be installed on UAVs operating in a Sense and Avoid environment.

UAVs, given suitable equipment and procedures, can be operated in full alignment with these regulations. There is one exception, notably separation by direct visual reference to other aircraft, obstacles and the surface, which may be the only means for collision avoidance.

Operations in controlled airspace will require Unmanned Aerial Vehicles to be able to comply with ATC instructions. In these cases, autonomous operations are not appropriate as a human will need to be included in the loop so as to be able to interact with the Air Traffic Controller. In this mode of operation, the UAV becomes a Remotely Piloted Vehicle. ATC will be able to exchange voice communication with the UAV pilot, and the pilot will respond to all ATC instructions in the same way as a piloted aircraft would respond.

IFATCA's initial draft conclusions are

- ATC should not have to apply different rules or work to different criteria in order to handle UAVs.
- Air Traffic Controllers must not be expected to do anything differently with regard to communication, either using Radio Telephony or landlines, than they would for other aircraft under their control.
- UAVs must be able to fully comply with ATC instructions and with equipment requirements applicable to the class of airspace within which they intend to operate.
- The problem of detecting, sensing and avoiding other aircraft during flight is a crucial challenge that must be overcome before civil aviation authorities permit UAVs to fly in unrestricted civil airspace.

If you have any comments to make please send them to Mark Green via dfp@gatco.org.

ACRONYMS

ACAS - Airborne Collision Avoidance System
GPWS - Ground Proximity Warning System
HALE - High Altitude Long Endurance
MALE - Medium Altitude Long Endurance
R&D - Research and Development
RPV - Remotely Piloted Vehicle
TAWS - Terrain Awareness and Warning System
UAV - Unmanned Aerial Vehicle
UCAR - Unmanned Combat Armed Rotorcraft
UCAV - Unmanned Combat Aerial Vehicle

Mark Green
GATCO - The UK Guild



This article has been reproduced by kind permission of the author Mark Green & the TRANSMIT magazine of GATCO - The UK Guild of Air Traffic Control Officers - www.gatco.org



BIRD STRIKE ... the fun corner - part 2 -

Science & Management

A man in a hot air balloon lost his orientation. He descends and sights a woman on the ground.

He descends further to ask her:

"Sorry, could you please help me? I gave my word to meet a friend already an hour ago, but I have no idea where I currently am."

The woman answers:

"You are in a hot air balloon in about 10 meters above ground. You are at 49 degrees, 28 minutes and 11 seconds northern latitude and 8 degrees, 28 minutes and 58 seconds eastern longitude."

"You must be an engineer.", the guy replies.

"Yes, indeed I am!", she says, "But how do you know?"

"Well", he states, "everything you could tell me was factually correct, but still I do not have the slightest idea what to do with your information. And I still don't know where I am! To put things straight: You were of no big help! You only delayed my journey!"

The woman answers: "You must be working in management!"

"Yes, but how do you know?", the balloon pilot says.

"Well, you neither have an idea where you are, nor where you are going. You reached your present position with the help of a lot of hot air. You made promises, you have no idea on how to fulfil them and you now expect that people below you will solve these problems. It's a fact that you are in the exact same position now than before our encounter, but strangely - it is me now who is found guilty!"

Some People Just Never Listen

ATC to Flight 123: "Slow to 300 knots please." After several moments, it was apparent the crew had not complied with the first speed reduction and was overtaking the inbound plane ahead of them.

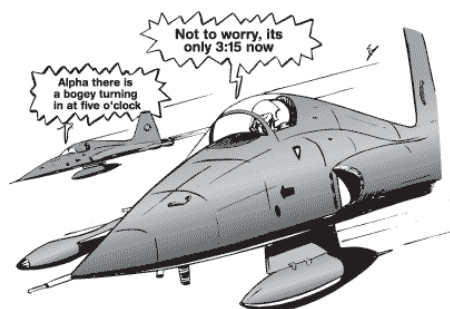
ATC to Flight 123: "Slow to 280 knots." This was soon followed by a request for 250 knots from ATC when the crew still had not slowed the airplane.

Finally, the now-frustrated controller ordered, "Gentlemen, the number is 250. Either slow to it or turn to it!"

Nose gear retraction.

Two airline mechanics were working on a 747 when lunchtime came. Rather than leave what they were doing, they just took their lunch break while sitting in the cockpit. While they were eating lunch, one mechanic bet the other that the landing gear would not retract if he pulled the gear lever up.

He lost the bet.



'Why do we call this a COCKPIT?'

George W. coming to Maastricht

The presidential visit on the 7th/8th May 2005

photos by Scott Stephens

Arrival of AF1



C5 departing



Konvoi of armoured cars



Spotters & AF1



Snipers - look who's watching!



Reach 912A - C17 on touchdown
- arriving from KADW and bringing "Marine 1" - the
Presidents Whitehawk helicopter.



BIRD STRIKE ... the fun corner - part 3 -

Stress Reliever #1

Wife: You always carry my photo in your handbag to the office. Why?

Darling: When there is a problem, no matter how impossible, I look at your picture and the problem disappears.

Wife: You see, how miraculous and powerful I am for you?

Darling: Yes, I see your picture and say to myself, „What other problem can there be greater than this one?

Stress Reliever # 2

Girl: When we get married, I want to share all your worries, troubles and lighten your burden.

Boy: It's very kind of you, darling, but I don't have any worries or troubles.

Girl: Well that is because we aren't married yet.

Stress Reliever #3

Son: Mom, when I was on the bus with Dad this morning, he told me to give up my seat to a lady.

Mom: Well, you have done the right thing.

Son: But mum, I was sitting on daddy's lap.

Stress Reliever #4

A newly married man asked his wife, „Would you have married me if my father hadn't left me a fortune?“

„Honey,“ the woman replied Sweetly,

„I'd have married you NO MATTER WHO LEFT YOU A FORTUNE“

Stress Reliever #5

Father to son after exam: „Let me see your report card.“

Son: „My friend just borrowed it. He wants to scare his parents.“

Stress Reliever #6

A teacher asked her class for sentences using the word „beans“..

MyFather grows beans,“ said one student.

My father cooks beans,“ said another.

Then little Johnny spoke up: „We are all human beans.“

Stress Reliever #7

Interviewer to Millionaire: To whom do you owe your success as a millionaire?“

Millionaire: „I owe everything to my wife.“

Interviewer: „Wow, she must be some woman !

„What were you before you married her?“

Millionaire: „A Billionaire“

Stress Reliever #8

Girl to her boyfriend: One kiss and I'll be yours forever.

The guy replies: Thanks for the warning.

Stress Reliever #9

A wife asked her husband: What do you like most in me - my pretty face or my sexy body?

He looked at her from head to toe and replied:

I like your sense of humor.

Don't try this at home!

This one was really close. Big post flight hose-down. Check out the speed brakes fully deployed on the F-16 on the left!

These guys are better than this, but close calls do happen. Obviously the timing was off in this maneuver. In a crossover, both planes try to cross each other at the same altitude going different directions. The lead plane flies a constant airspeed, and the second plane adjusts his airspeed (relative motion) to stay as close as possible without having a mid-air.

In the photo, the second plane was going too fast and pulled his speed brakes (panels sticking out on tail) and idled his engine (decreased contrail). He also was changing his altitude, based on the aeronautical law that states that two planes



cannot occupy the same airspace at the same time. The altitude change was what saved his butt.

I still can't believe they didn't swap paint.

... This is why people like air shows !!!

Need a new BBQ for the summer? - look at your next supermarket





EGATS 2005 Photo Competition

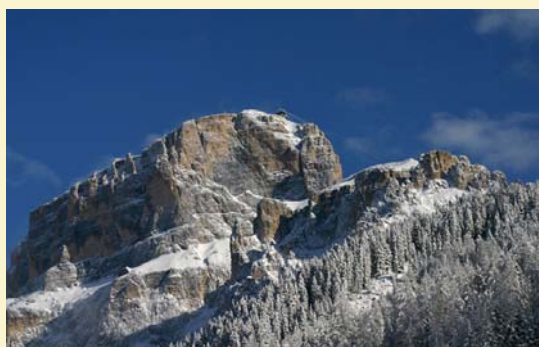
open to all EUROCONTROL employees
at the Maastricht UAC
(and their direct family members)

Subject: PEOPLE

Deadline: 1st October 2005

Prizes: Giftvouchers
(250,-; 125,-; 75,- Euro)

Obtain an entry form and
competition rules from:
treasurer@egats.org



The
Golden Flight Level
2006
Canazei/Italy
14. - 21.01.2006
info: www.GFL2006.it

