OUTPUT

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EUROCONTROL GUILD EGATS

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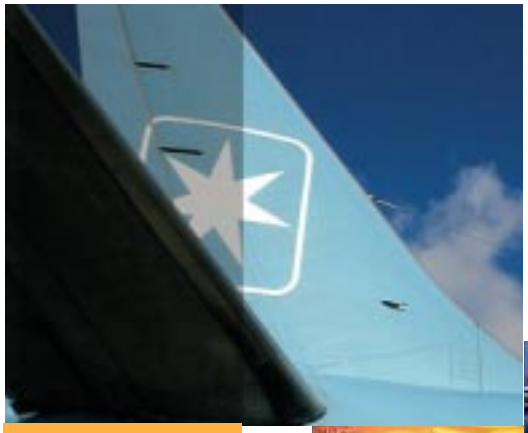

Ergonomics
Sit straight and keep the distance

Motivation
How to achieve and keep it up

IFATCA 2002
The ABC reports of the Cancun Conference

The Executive Board
Teamwork

Non-punitive reporting system
Does punishment prevent further mistakes?

Short stories
Good Fun

ACAS Seminar
Improving confidence

We are very happy about the decision of the "Eurocontrol Guild of Air Traffic Services" to donate a part of their membership fees to the LAR - Luxembourg Air Rescue.

Mr. Hans-Werner Becker of EGATS-Luxembourg handed over a cheque amounting to 20.000,- LUF to the President of the LAR Mr. René CLOSTER.

EGATS - the Eurocontrol Guild of Air Traffic Services is an association of Air Traffic Control personnel with the aim to provide a safe and efficient flow of air traffic, exchanging professional thoughts with other associations, improving procedures and equipment and communicate the world of air traffic control to the public.

EGATS has been founded by the personnel of the Maastricht Upper Air Traffic Control Center in Beek/The Netherlands and has currently ca. 500 members.

October 2001 - published in the April 2002 LAR Report Luxembourg

Did you register already?

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The small print...

EGATS OUTPUT© 2002 EGATS - Volume 7/Issue 1

Editor: Patrik Peters

Contributions by: Members of the Executive Board of EGATS

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EGATS WORKS...

Dear Members,
sometimes when I enter the OPS room and see yet another face that I cannot relate to, I wonder whether they/you have the same problem. Not only with the many people around, but more in particular: Does everybody really know who we, the EGATS Executive Board, are and what we do within EGATS?
On this note, we would like to introduce ourselves. Especially to our Non-OPS room members at the Maastricht UAC and to our ouside branches in Bretigny, Luxembourg and Brussels and not forgetting - the many retired supporters/members of EGATS.
On the following pages you will find nine dedicated air traffic controllers who work in their spare time promoting and improving our profession. As well as these nine - there are others working for EGATS, as appointed officials for the Flight Department or in various committees that your association is currently running.
Furthermore you'll find an article about ergonomics. How to sit and place your monitor correctly on a computer -workplace. Important information that you can, since we all spend more and more time behind a PC, also apply at home.
TCAS and other airborne collision avoidance systems and their impact on work - for the controller and the pilot. The need to continue training and improve current systems.
Read about it in Inges and Claudias report on the ACAS seminar in Sofia.
Is there something that you, as a team-member and OJTI, could do to improve teamwork? Have a look at Luc's motivation-article.
Does punishment prevent making the same mistake again?
No-blame culture, one of the key items, the professional committee is working on, is subject of another story.
And of course - the yearly IFATCA Annual Conference report - all this and some fun-stuff should entertain you for a while.
Enjoy!

Patrik Peters
President

And here they are -
Members of the Executive Board 2002/2003:

Patrik Peters
Controller & Training Officer in team B2

Having the privilege to start - here is my introduction:
My career within Eurocontrol began in 1990 as member of ab-initio 13. In 1995, I was approached to work in the Executive Board for EGATS. We are now 7 years furtheron and I'm still there! And I still enjoy the work - allthough I have to admit that there is never sufficient time to do all the things that need to be done. My task within the Eurocontrol Guild is to keep the team together and to assist the flow of information between the members of that team and the outside - be it via the OUTPUT or to and from other sources like management or the TUEM for instance. I also participate - time permitting - in the Professional Committee and assisting other board members with their work in their domains by providing advice and information.
Being actively involved in EGATS is very rewarding, be it because of the acquired know-how or the numerous personal contacts.
I am 34 years young, married, have two boys and live north of Aachen in Germany.

Luc Staudt
Controller in team B1

I started my ATC career in 1987 in Brussels, where I worked consecutively as an assistant, tower controller, approach radar controller and area radar controller. In 1991 I joined the Belgian Guild and have been secretary and liaison officer to IFATCA for some years. In 1994 I started representing IFATCA in the selection, training and licensing domain.
In 1998 I had the opportunity to join Eurocontrol as a conversion controller for the Brussels sectors. I also work part time in support of our Current Operations Section. At the AGM 2000 I was elected an EGATS EB member and took up the function of **Executive Secretary**.

Claudia D'Amico
Controller in team H6

Hi there, my name is Claudia d'Amico and I am Italian (from Milan). I joined Eurocontrol in 1994 and started working for EGATS in 1998 as Membership Secretary. In 2001 and 2002 I organised the EGATS- Forums, dealing with the topics of Privatisation of ATC and the relationship between Capacity and Safety in ATC.
At the moment I am mainly involved with the **Professional Committee** within the guild and in particular I represent EGATS in the Punitive Free Reporting Environment Working Group. I have also been a member of the Hannover Sector Working Group for 4 years. What else can I say... I like my job and I like the sun, so if you don't see me at work, I've probably gone to some exotic place! Ciao!

Jos Haine
Supervisor of team B2

Having joined Eurocontrol some time in the early seventies I worked for many years in team B6, then as a training officer in B4 and since last summer as supervisor in B2. I joined the Executive Board of EGATS also last year after I had the chance to attend the IFATCA Conference in 1999 in Santiago de Chile. This conference woke up my interest in the professional association work. As **Membership Secretary** I'm responsible for all membership matters and the running of the EGATS office, where in the future I will be assisted by Ralf Zech. So - should you have any questions with regards to your membership - don't hesitate to contact me.

Paul Hooper
Senior Flight Data Specialist in team F6

I joined Eurocontrol in 1970 as a Flight Data Specialist having spent the previous five years in the same function at Heathrow Airport, London. I was one of the founder members of EGATS in 1971, then known as EGATC. In the early eighties I also founded the EGATS Flight Data Technical Committee and continued to serve the Flight Data staff when that committee was later absorbed by the main Technical Committee. I spent ten years on the production team of the EGATS magazine INPUT and have served as an Executive Board member since 1996 (Currently EGATS-**Treasurer**).

Ralf Zech
DFS/Lippe Controller

As successor of Andree Leermann, I have taken over the function of DFS liaison in the EB and will assist Jos in the **Office Management**.
I joined the German Air Force in 1987 and was initially employed in the field of Communication Intelligence before I decided to change to Air Traffic Control Service. I had worked some years as Tower Controller at Hopsten Airfield before I finally came to Maastricht in 1998.
I am 34 years old and living in the Netherlands.

...FOR YOU!

Martin Norris
Controller in team B6

I am new to the Executive Board having been elected at this year's AGM. I since have been asked to take on the role of **EGATS Vice-President**, a position which at present has no designated tasks besides assisting other board members. This will allow me time to grow into the business. I will also be helping Patrik with the compilation/editing of the Output. As a native English speaker I'll be doing the proof reading of the Output - so if there are any mistakes you know who to blame!
On a more personal note. I came to MUAC in March 1998 as a Conversion Controller. Previously I worked as an Area Controller in Terminal Controller at LATCC, where I started as an Ab-Initio in the UK at the beginning of 1992 and worked at LATCC from mid 1993 until joining Eurocontrol in 1998.
I'm 34 and living in the Netherlands.

Inge Vander Eyken
Controller & Training Officer in team B6

Within EGATS, I´ve been an Executive Board member from 1996 till 1999 and again since 2001.
I'm also **EGATS Professional Committee Chairman** since 1996.
On behalf of EGATS I am currently closely involved in setting up a CISM program in Maastricht and I'm an active member of the Safety Monitoring Advisory Group, which monitors the implementation of the ASMT.
Since last year I'm an IFATCA representative in the Eurocontrol SISG (Safety Improvement Sub-Group), which is a sub-group of the EATMP Safety Group.
SISG participants are mainly safety managers/incident investigators from different ANSP's. They identify and attempt to prioritize safety concerns and initiate follow-up through organizing awareness seminars (ACAS, level busts), setting up task forces (Runway Safety Survey TF, Safety Assessment of ATC Procedures TF…), distributing safety letters containing recommendations, etc.
Although the EGATS work tends to consume a considerable part of my spare time, I can't resist sticking my nose in everything and at least try to do my utmost to safeguard the interests of our members and our profession. I've learned a lot through my involvement in EGATS during the past years and I would like to encourage everyone to participate actively in our committees.
Remember … EGATS works!

Max Bezzina
Controller in team B5

I am Max Bezzina, 25 years old, married and living in Machelen - close to Brussels.
Professional and technical issues relating to ATC interest me a lot. I stood for candidature a year ago to become part of the Executive Board with the aim of being more involved in th issues which concern me and my colleagues in the ATS environment. Having been already involved in the ODS project, I try my best to keep you as the **EGATS Technical Committee Chairman** informed about the evolution of this project, and within the OTG I put forward the ATCO´s needs and concerns.Besides this, I am the editor of the ELINK - our newsletter for subsscribed members , which we introduced at the beginning of this year to provide you with up-to-date information about EGATS and its activities. It is only a year and a few months since I became actively involved within EGATS, but it has given me a lot of satisfaction promoting and working for our profession!

Visual Ergonomics in a Computer-Related Working Position

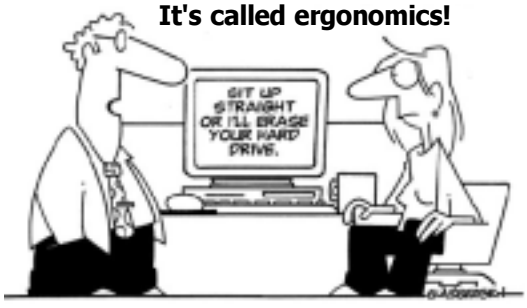
How can we improve our working environment and reduce the risk of working-position-related injuries??

New studies suggest that the monitors should be placed below the horizontal eye level (refer to figure 1). This minimizes neck and eye strain. Also having a light screen background and dark symbols/letters helps reducing screen reflections (a white screen reflects less than a dark one). Lighting also influences the amount of reflection on the screens.

This is an article that I found on the Internet, which I thought would be of interest to you. If you are interested, you can always access it on http://www.office-ergo.com/setting.htm. The author, Mr D. R. Ankrum basis his article on scientific research and also gives practical examples to illustrate what he means.

It is important to note that many of the suggestions stated below lie in contradiction with our present and near-future OPS room situation, but it is also important to note that the N-ODS workstations were designed at a time before these studies took place. At that time it was also virtually impossible to place a 20-inch bulky Sony screen tilted, below the horizontal eye level. Moreover, before these studies were carried out (late nineties) it was thought, as mentioned in this article, that the screen **should** be placed at eye level – read further down. Also white backgrounds on large screens are still hard to achieve without compromising heavily on the picture quality. Nevertheless, many of the suggestions below still apply; example: the sitting position, distance between the screen and the eyes. Finally many of us spend some considerable amount of time in front of their private computers/consoles in their spare time. (Like I am doing while writing this introduction and editing the article! BA) Taking some of the suggestions below might help fighting against the deterioration of our general fitness.

Max Bezzina



EYE-TO-SCREEN DISTANCE

Locate the monitor at least 60 cm from the eyes, preferably more.

Hold your finger at arm's length. Bring it slowly towards your nose, following it with your eyes. Notice that the closer your finger comes, the more eyestrain you feel.

One of the main reasons for computer-related eyestrain is the closeness of the monitor. It seems easy to understand that, if having the monitor too close contributes to the problem, one of the solutions is to place it farther away. When viewing close objects the eyes must both accommodate and converge. Accommodation is when the eyes change focus to look at something close. Convergence is when the eyes turn inward towards the nose to prevent double vision. The farther away the object of view, the less strain there is on both accommodation and convergence (Fisher 1977; Collins 1975). Reducing those stresses will reduce the likelihood of eyestrain.

HOW CLOSE IS TOO CLOSE?

So how close is too close? It is difficult to set an exact limit for a minimum viewing distance. Continued viewing closer than the resting point of vergence contributes to eyestrain (Owens and Wolf Kelly 1987). The resting point of vergence (RPV) is the distance at which the eyes converge when there is nothing to look at, such as in total darkness. It varies among individuals, but averages about 115cm when looking straight ahead and 90cm with a 30° downward gaze angle. Viewing objects farther than the RPV has not been found to cause any problems.

What is important to understand is that farther is better (at least up to the RPV). If you can read the monitor, it is not too far away. **If you can't read the characters, it's usually better to make them larger than to bring the monitor closer**.

PERFORMANCE

Jaschinski-Kruza (1988) compared work performance with subjects working at viewing distances of 50cm and 1m. The task was to find mistakes in a database and he found better performance at the 1m distance.
The character heights were doubled as the viewing distance doubled. In another part of the study he increased viewing distance without making the characters larger and performance suffered. To take advantage of the productivity increases with farther viewing distance, you must ensure that the user can easily read the screen

VERTICAL MONITOR LOCATION

Locate the entire viewing area of the monitor between 15° and 50° below horizontal eye level.

To see the effect of gaze angle on accommodation, hold a business card at arm's length and at eye level. Slowly bring it towards you until the letters start to blur. Without moving your head, slowly lower the card in an arc, keeping it the same distance from your eyes. You will see the letters come into focus. Your eyes have improved their ability to accommodate simply by lowering their gaze angle. Presbyopes (persons over 40 who are losing their ability to view close objects) often make use of this phenomenon when they misplace their reading glasses. They hold reading material at arm's length and then tip their head back to improve their ability to accommodate.

To see the effect of gaze angle on your ability to converge, try this next demonstration. With your head erect, hold a pen at arm's length and at belt level. Gradually bring it towards your nose, following it with your eyes until you can no longer converge accurately and you see two pens. Without moving your head, try the same test at eye level. Again, notice the distance at which you can no longer converge. Now bring the pen in from an upward gaze angle. As you can see and feel, your eyes converge more easily with a downward gaze angle.

The old guidelines that recommended that the monitor be placed at eye level were based in part on the belief that the resting position of the eyes (considered to be the most comfortable gaze angle) is 15° below the horizontal (Morgan, Cook, Chapanis, and Lund 1963).
New evidence (and some that has been around for a while) shows that, while the eyes might be most comfortable with a 15° gaze angle when looking at distant objects, for close objects they prefer a much more downward gaze angle (Kroemer 1997). Figure 1 shows the optimum position for the most important visual display, 20 - 50° below the horizontal line of sight, according to the International Standards Organization (ISO 1998).

As we saw from the above demonstrations, a downward gaze angle improves our ability to accommodate and converge. Ripple (1952) found that subjects over age 42 increased their ability to accommodate by an average of 25.5% by directing their eyes downward... in the "usual reading position." Krimsky (1948) observed, "when looking upwards, the eyes tend to diverge...and when they look down, the effort to converge is much easier." Tyrell and Leibowitz (1990) found that a low gaze angle resulted in reduced headaches and eyestrain.

Many computer users experience dry eyes. Tsubota and Nakamori (1993) found that lower monitor placement exposes less of the eyeball to the atmosphere and reduces the rate of tear evaporation. This keeps the eyes more moist and reduces the risk of Dry Eye Syndrome.

Guidelines for monitor placement and lighting

- **Eye-to-screen distance:** at least 60cm, preferably more.
- **Vertical location:** viewing area of the monitor between 15° and 50° below horizontal eye level.
- **Monitor tilt:** top of the monitor slightly farther from the eyes than the bottom of the monitor.
- **Lighting:** ceiling suspended, indirect lighting. Use blinds and shades to control outside light.
- **Screen colors:** dark letters on a light background.

NECK POSTURE

Lower monitor placement can increase the acceptable options that users have for neck movement (Ankrum and Nemeth 1995). Eye-level monitors allow the head and neck to assume only one posture that is both visually and posturally comfortable.

It is uncomfortable to maintain the same posture for an extended period of time. When users tire of the head-erect posture, the acceptable alternative postures with an eye-level monitor are limited. Flexing the neck is one alternative, but that results in the user looking out of the top of their eyes.

While bending the neck downward may be physically comfortable (as long as you are not forced to hold it in a fixed position), looking out of the top of your eyes at close objects is extremely uncomfortable. People will just not do it for any length of time.
Neck extension and forward head posture, while acceptable for the visual system, have been associated with both discomfort and disease (Kumar 1994; McKinnon 1994). With a low monitor position you can hold your head erect and look downward. When that posture becomes tiring, as eventually it will, a low monitor will allow you to alternate among a wide range of flexed neck postures that allow good visual performance and will not increase postural discomfort (as long as you don't hold any particular posture for a long time).

POSTURE

Many "ergonomic" guidelines include drawings that show a computer user with arms, torso, thighs and legs at 90° angles and the head perfectly erect. And, of course, the feet are "flat on the floor." This is the "correct posture." Generally users try it for a few minutes and reject it because it's too uncomfortable. One theory has it that the reason you see drawings, and not models, depicting this "ideal" posture is that they can't pay models enough to sit that long in such an awkward posture!
Voluntary postural changes should be encouraged. Even alternative postures that look awkward may be ok if they are used for short-term relief from the discomfort caused by sustained, fixed postures. Stretching exercises require awkward postures and are often recommended by the same guidebooks that mandate the "correct" posture while working.

As Paul (1997) points out, "The best posture is the next posture." Whatever posture we are in, we will be most likely be better off in the one we assume next.

Computer work is near work. Many authors have noted that computer work differs from other near work in that most near work is done with a downward gaze angle, and computer work is done at a horizontal gaze angle. Instead of locating the monitor at a viewing angle similar to that of other near work, they often recommend special "computer" glasses. This represents the view that ergonomics means adapting the worker to the work environment. It is actually the other way around, the task of ergonomics is to adapt the work environment to the worker!

MONITOR TILT

- Tilt the monitor back so that the top is slightly farther away from the eyes than the bottom.

Notice how you hold a magazine. Most likely you tilt it away from you at the top. While you are reading, rotate the magazine so that the top comes closer to you than the bottom. Keep rotating. The more you rotate the top towards you, the more uncomfortable it becomes to read.
When we look at the world, objects in the upper part of our peripheral vision are generally farther away than the point we are looking at, and objects in the lower part of our peripheral vision are usually closer. As a result, our visual system has developed to perform best when the visual plane tilts away from us at the top.
Tilting a monitor down, as is sometimes done to avoid glare, is opposite of the demonstrated capabilities of the visual system. In a comparison of monitor tilts, Ankrum and Nemeth (1996) found that tilting the monitor downward led to increased visual and postural discomfort when compared to a monitor tilted back. The most striking difference was in neck discomfort. The condition with the monitor low and tipped back led to the least increase in neck discomfort. Locating the monitor low and with the top tipped forward was the worst condition.

LIGHTING

- Ceiling suspended, indirect lighting. Control outside light with blinds and shades. Keep ambient light levels low and supplement with task lighting.

In an office of any size, the best solution for glare and reflections on the screen, as well as for overall visual performance, is ceiling suspended, indirect lighting. This is sometimes referred to as "uplighting." The underside of the lamps should be the same color as the ceiling. Wall mounted sconces may also be appropriate in certain instances. Because some tasks and workers require more light than others, it is best to keep the overall light level low and allow workers to supplement it with individually controlled task lights.
Understanding a little bit about the principles of lighting can help you improve just about any office environment. First we have to understand what we are trying to accomplish. When evaluating a monitor, high contrast is desirable. You want the letters to stand out from the background.
When evaluating what is reflected from the screen, it is the opposite: contrast is the enemy. Contrast reflected from the screen competes for the user's attention with the contrast on the screen. In some cases this can be an irritation, but in others it can make sections of the screen impossible to read.

Aside from absolute brightness, a big problem with direct ceiling lights is that they provide a high contrast with the rest of the ceiling. That contrast can reflect onto the screen. Many guidelines mistakenly specify only a luminance (brightness) value for ceilings and walls. While absolute intensity is important (a bright light reflecting off the screen will always cause problems), reducing the contrast is much more critical. Interrupting the ceiling with patches of bright light almost guarantees competing reflections on the screen. With small office areas, it may be possible to reposition desks, or remove or reposition individual glare sources. However, this can become unwieldy for large areas. Repositioning a lamp may just transfer the problem to another workstation.
Reorienting the screen can help in some instances. But, as we discussed earlier, it should not be tipped down. Hoods can be effective, as can removing bulbs. Task lights can supplement lower levels of ambient lighting. Anti-glare screens have been effective in certain instances, but should be evaluated before purchase. Some anti-glare screens reduce glare by 99%, but even that may not be enough for a very bright source.

Remember, because the front of the screen is glass, **something** is going to be reflected from it. The goal is to reduce the contrast in those reflections. An indirect-direct combination will not work because it still creates high contrast.
Perhaps the most famous study regarding performance and lighting conditions was done at Western Electric's Hawthorne Plant in Chicago (Mayo 1933). The researchers found that when they increased light level, productivity increased. They also found that when they decreased the light level, productivity still increased. In fact, no matter how they changed the lighting, productivity continued to increase.
The term "The Hawthorne Effect" is now used to refer to the principle that making any change in a workplace can improve short-term performance. The improvement results from just "paying attention" to the workers.
It's apparent that strong reflections in a screen reduce the ability to see the details on the screen. And if you can't see the details, productivity will suffer. Properly installed indirect lighting can eliminate glare as a performance-robbing factor.
Most recommendations for office lighting are full of numbers such as "Illuminance levels between 200-500 lux." Lighting designers often point to a set of measurements to show that the lighting design meets the specifications.
The primary function of light in the office is to support work. The ultimate criteria for a successful office lighting solution is how well it facilitates productivity and user satisfaction. No matter how esthetically pleasing or how well it conforms to a set of quantitative values, if a lighting design does not support the work, it has failed.

SCREEN COLORS

- Screen colors: dark letters on a light background.

With the monitor off, look at your reflection in the screen. Now turn the monion and select a Windows-type background, (black letters on a white background). Notice that you cannot see your reflection as well.
Contrast is simply the difference in brightness between two images. With a white background, we reduce the difference in contrast between the screen and what is reflected off of it.Negative screen contrast (black letters/white background) can reduce reflected images, as we saw with the demonstration. A white background also reduces the luminance (brightness) difference between the screen and the surrounding background of a normally lighted office. That makes it easier on your eyes.

Most early monitor screens had a black background with white, green or amber characters. Although white backgrounds were possible, the low quality of the monitors meant that the screen would flicker noticeably. Although newer technology has reduced the necessity, there are still many software programs with dark backgrounds.

PERFORMANCE

Bauer and Cavonius (1980) found a lower error rate, with dark letters on a white background. Snyder and his colleagues (1990) also compared black and white backgrounds. Eight out of ten subjects increased their performance by using dark letters on a light background. The improvements ranged from a low of 2.0% to a high of 31.6%. The tasks were visual search and proofreading.

SUMMARY

Ergonomics seeks to adapt the work environment to the capabilities and limitations of the worker. The results should be increased productivity, user satisfaction, and reduced risk of injury.
These guidelines are meant as such: guidelines. There are exceptions. The final criteria for judging the effectiveness of a visual environment is not how well it conforms to a set of rules, but rather how well it facilitates the ability of the worker to perform his or her work effectively and without injury.

Airborne Collision Avoidance Systems

Eurocontrol ACAS Seminar
Sofia 26-27 March 2002

(Inge Vander Eyken & Claudia d'Amico)

The last of a series of 4 ACAS (Airborne Collision Avoidance System) seminars organised by Eurocontrol was attended by Inge Vander Eyken and Claudia d'Amico on behalf of EGATS and Louise Cook on behalf of the Ops Division.
The 2-day event took place in Sofia, Bulgaria.

As much as we would like to praise the beauty of the city, we had very little time to explore the town and the continuous snowfall also discouraged us from any further venturing. It must be said that probably for the first time in our lives, we left sunny and warm Benelux to fly southbound and find worse weather at our destination!
The place chosen for the seminar and to provide accommodation for its participants was a Bulgarian Presidential Residence, Bojana: an impressive building with a clear Eastern Block imprint, offering all the necessary facilities with some extra safety, like military guards at the entrance gates and "decorative" metal bars all along the back balconies. Who needs a safe in the room when the whole place is a fortress?!

The objective of the seminar was two fold: to enhance confidence within ATM Services Providers (yes, that includes us controllers!), Aircraft Operators and Pilots about ACAS/TCAS operations and to identify initiatives to improve operational acceptability taking into account the changing ATM environment.

We will list some of the main issues that were discussed and attracted our attention. Be aware though that this report is not intended as an ACAS course. It merely touches upon impressions and findings derived from participating in the seminar.

✈ What is the difference between ACAS and TCAS? ACAS is a general name for a new technology and TCAS is a brand name for such a system, developed by American companies according to the ACAS requirements (defined by ICAO).

✈ The latest TCAS version is Version 7 which is more compatible than version 6.04A, because it takes into account RVSM.

✈ On 01.01.2005 TCAS V.7 will be compulsory for all aircraft having a take-off weight of 5700 Kg or greater or a number of passengers greater than 19. Until then, the old rule applies and this could cause nuisance alerts (as V.6.04A is not RVSM compatible).

✈ ACAS II offers a safety net, which significantly reduces the risks of collision, provided … the pilots properly follow the RA! Deficient response to RA's (over-reacting or ignoring) seriously degrades the ACAS safety benefit.

✈ Data collected and analysed in France for the year 2001 showed that most of the TCAS RA's were due to level offs (32%) and that seems to be the trend all over Europe. This has lead to one of the recommendations of the seminars, which is going to be presented to ICAO for further study and possible implementation: "That FMS logic in level acquisition be made compatible with the TCAS logic". In other words, that the FMS automatically reduces the vertical speed (rate) when approaching the assigned level. This lead to much discussion, when we –3 of the 4 air traffic controllers present in the room - mentioned that rates of climb and descend were often used as separation tools in the busy, complex core areas of Europe, where a lot of vertical movements take place. We expressed concerns about such a vague recommendation, but we realised that that was the way the engineers were going to go.

✈ Another suggestion was made that ATC procedures should perhaps be adapted to avoid possible nuisance level-off RA's, by instructing aircraft to turn when such an RA could be anticipated… Needless to say that we heavily protested! The increased workload of having to separate ACAS from each other as well as providing air traffic control would have a detrimental effect on capacity.

✈ Areas that still need improvement are: Training (for both pilots and controllers), technical enhancements, monitoring and analysis of occurrences to better identify shortcomings.
Due to the lack of training and understanding, unnecessary problems are created:

PILOT SIDE: Pilots will follow RA's according to company policy. Major problems can be caused by pilots being indecisive about compliance, therefore delaying reaction or by overreacting to RA's, causing unacceptable deviation from their assigned level. Some pilots also believe that the bearing indication of other traffic is correct. This is a misconception: the relative positioning of aircraft on the TCAS display could or COULD NOT be accurate!
How often have you been asked: "Maastricht, can you tell me what is the traffic at our 10 o'clock position…" and you've looked at the radar and replied: "there is no traffic at your 10 o'clock, but there is one at your 3 o'clock, range 7 NM, 2000 feet below…". And what if, based on that information, the pilot decides to turn straight into the conflicting traffic? No, it is not science-fiction, it has happened before!
Guidelines for pilots: react to RA only (TCAS gives more accurate information than even the eye can see); inform ATC by using adequate phraseology; manoeuvre vertically only and control the vertical deviation; the TCAS azimuth/distance/route display is not accurate enough therefore it might not correspond to reality.

CONTROLLER SIDE: We all recognize that TCAS might save our day some time in the future, but most of us also know how annoying and disruptive a nuisance RA can be in a busy traffic scenario.
There are a few facts we have to take into account: TCAS sees better than we do, having a 1 second cycle update as opposed to our 4.8 (and we are still lucky compared to other radar systems!). This means that by the time we detect a level deviation or bust, it might be too late.
But we should have a couple of things clear in our mind: if a pilot declares a TCAS climb/descend we should not interfere with vertical movement and pass traffic information as we would do in any other unusual emergency situation (it could even be argued that traffic information should only be given with reference to the horizontal plane since the vertical information we see on the radar screen is not the most up-to-date). In any case, our responsibility ceases the moment the aircraft deviates from our clearance and resumes again when the pilot returns to the previously assigned altitude (grey area).
Also remember that during normal operations, when you pass traffic information in anticipation of a possible TCAS alert, you might still be faced with a RA. And, when pilots say to you "Roger, we have it on TCAS", it should be clear it means nothing (on the horizontal plane)!

MONITORING AND ANALYSIS: The only way to improve the further development of ACAS logic and operations is to learn from actual circumstances. Especially situations in which more than two aircraft are involved need further study and analysis, because as much as preventing collisions, TCAS could actually generate some…
The tool might be perfectly reliable, but it still depends on the correct use by the human element involved.
There seems to be very little study of human factors in relation to ACAS. Very often the increased levels of safety on account of ACAS are based on simulations of how situations would have developed in case of correct and "immediate" compliance with RA's. Fact is however that in many cases there is a surprise effect, an over-reaction or even panic-reaction on the pilot side, resulting in non-compliance with the RA. These are normal human reactions and perhaps the focus of attention should be on how to overcome these difficulties and reduce chances for non-compliance instead of merely investigating how TCAS – the machine – reacts.

Let us take this opportunity to remind you all of the importance of continued reporting of all TCAS events.
Regular refresher training on ACAS should also be a must for every controller.
Excellent training tools exist to show both pilot and controller how to act and react in TCAS events and demonstrate what can go wrong (or has gone wrong as these examples are based on real events) in case of non-compliance.
Some controllers have been given the opportunity to attend an ACAS course in Maastricht recently.
May this be a reminder for our management that every controller should be given this training. The importance of adequate ACAS training cannot be over-emphasized.

✈

An organisation has many means that lead to improved motivation!

Motivation

In today's innovative and competitive economy the emphasis is put again on the human capital. Human competence, motivation and behaviour define productivity and quality programmes. In fact it is a logical evolution. For decades the attention was put on machines and 'hard ware' in general. The key element for higher productivity today is to take full advantage of the human capital. In other words: motivate the individual to the optimum extent and your quality programme is promised to be a success.

In a complex and highly technologically developed environment like an ATM organisation, the motivation of the individual is getting more and more difficult. One's profession as such is no longer in the first place a reason for existence. Creativity, personal development, independence, recognition and responsibilities have become important arguments in the total job satisfaction. The organisation should make use of this evolution when improving the individual's motivation. They have to create the right platform where the needs and wishes of the individuals are balanced with the organisation's objectives.

Appreciate the work done.

An organisation has many means that lead to improved motivation: e.g. appreciation of the work done, communication of clear goals and objectives, information, internal audit, teambuilding, etc. All these activities improve the employee's interest, dedication and joy in his/her work. They must however harmonise with the involvement of the employees in the organisation's interests. The objective is that every employee identifies himself with his job and feels responsible for the results of his work and certainly the quality of it.

The theory on motivation by Herzberg is – I believe – the most applicable to our type of organisations. Herzberg concludes his research on contentment and discontent of employees on the classification of motivational factors in two big groups: environmental factors and motivating factors.

Environmental factors lead to greater discontent if they are not satisfied. They include organisational and human resources management, secondary-working conditions, the relationship between employees and management, remuneration, status and safety.

Environmental factors do not lead to better performance but form a basic condition for the positive attitude in relation to the job.
The motivating factors on the hand have a positive influence on contentment, the attitude towards the job to be done and the result of it. These factors include success, recognition, challenge, responsibilities, promotion and the possibility for personal development.

Motivating factors can lead employees to high performance levels. This is only valid however if the environmental factors are fully considered.

Internal research on employee's motivation can only be profitable if there is the intent for reform. It has been said before in a different context: there is no need for expensive audit if it is anticipated to fail when it comes to implementation.
But there is a need to continuously monitor, update and renew motivational programmes with the intent to make full use of the human capital of the organisation.

A business Corner.

ATM might not be a business like any other, but it is a business! It is a service provision business in a non-profit environment. It is as sensitive to organisational behaviour items as any other business!

Luc Staudt

"I'm looking for a motivation consultant who advocates screaming, blackmail, and violence"

No-Blame Culture

Should disciplinary action be taken against those who make multiple or even catastrophic errors?

Non-punitive reporting systems and dealing with employees who make multiple errors are topics that concern both ATCO's and their managers. The need for leadership understanding and a solid commitment to a non-punitive approach to errors cannot be over-emphasized.

Employees are blamed or disciplined for errors when administrative leadership is unaware of the significant influence of the system on individual performance.

Management support is vital

A non-punitive approach is not possible unless there is support from a management, who truly understand that errors are just symptoms of a "diseased" system, and that error prevention efforts must be directed at the weaknesses in the system rather than at individuals.

Several techniques can be suggested for creating a non-punitive environment that supports increased error reporting. A confidential reporting system where everyone understands that errors will not be linked to performance appraisals, is critical.

Fostering an environment that encourages employees to freely report their errors is the real challenge!

Blaming is easy

A non-punitive environment is really tested when an organization is confronted with an employee who makes multiple errors or is involved in a potentially catastrophic error. We often find it easier and in our nature to blame individuals and resort to familiar solutions: disciplinary action, re-enforcing rules or developing new rules.

There is little or no remedial value in doing so and the easy way out often leads back to problems that persist or worsen and can actually be dangerous to an organization. The root causes of problems are not identified and the system is weakened even further.

There is no advantage in punishment

Organizations face considerable pressure from the public and the legal system to discipline individuals for mistakes. Nevertheless, even with employees involved in multiple errors, there is little advantage to punishing or blaming them. Rather, it is more important to determine why errors are happening and take action to effectively prevent these errors or minimize their consequences. The goal of aviation safety is best served with a non-punitive environment that places more value on reporting problems, so they can be remedied, than pursuing the largely unprofitable path of disciplining or blaming employees for errors.

- ✕ **Make it easy to report errors**, reward error reporting by providing timely feedback and show what is being done to address problems.
- ✕ **Apply a non-punitive approach to errors consistently!** If only one person is disciplined for an error, mistakes will be hidden.
- ✕ **Find alternate ways to evaluate employee**s, not based on errors or lack of making mistakes, but on positive measures that evaluate an employee's overall contribution to the organization.
- ✕ **Do not apportion blame when there is no proof of negligence.** Besides having a detrimental effect on the reporting culture, it ignores the fact that unintentional errors and misjudgments do happen when there is a human element in the loop.

Inge Vander Eyken
Chairman Professional Committee

The famous short stories!

Uups - Just in time....

During taxi, the crew of a US Air departure flight to Ft. Lauderdale made a wrong turn and came nose to nose with a United 727.

The irate ground controller (a female) lashed out at the US Air crew screaming "US Air 2771, where are you going? I told you to turn right on Charlie taxi way; you turned right on Delta. Stop right there. I know it's difficult to tell the difference between C's and D's but get it right".

Continuing her tongue lashing to the embarrassed crew, she was now shouting hysterically, "God, you've screwed everything up; it'll take forever to sort this out. You stay right there and don't move until I tell you to. You can expect progressive taxi instructions in about a half hour and I want you to go exactly where I tell you, when I tell you, and how I tell you. You got that, USAir 2771??"

The humbled crew responded: "Yes Ma'am".

Naturally, the ground control frequency went terribly silent after the verbal bashing of US Air Flight 2771. No one wanted to engage the irate ground controller in her current state. Tension in every cockpit at LGA was running high. Shortly after the controller finished her admonishment of the U.S. Air crew, an unknown male pilot broke the silence and asked: "Wasn't I married to you once?"

A DC-10 had an exceedingly long roll out after landing with his approach speed just a little too high.San Jose Tower: "American 751 heavy, turn right at the end, if able. If not able, take the Guadeloupe exit off of Highway 101 and make a right at the light to return to the airport."

Tower: "Eastern 702, cleared for takeoff, contact Departure on 124.7." Eastern 702: "Tower, Eastern 702 switching to Departure ... by the way, after we lifted off, we saw some kind of dead animal on the far end of the runway."

Tower: "Continental 635, cleared for takeoff, contact Departure on 124.7; did you copy the report from Eastern?"

Continental 635: "Continental 635, cleared for takeoff roger; and yes, we copied Eastern and we've already notified our caterers."

In his book SLED DRIVER, SR-71/Blackbird pilot Brian Shul writes:
I'll always remember a certain radio exchange that occurred one day as Walt and I were screaming across southern California 13 miles high. We were monitoring various radio transmissions from other aircraft as we enter Los Angeles Center's airspace. Though they didn't really control us, they did monitor our movement across their scope.
I heard a Cessna ask for a readout of its groundspeed. "90 knots", Center replied.
Moments later a Twin Beech required the same. "120 knots", Center answered.
We weren't the only one proud of our speed that day as almost instantly an F-18 smugly transmitted,
"Ah, Center, Dusty 52 requests groundspeed readout". There was a slight pause.
"525 knots on the ground, Dusty". Another silent pause.
As I was thinking to myself how ripe a situation this was, I heard the familiar click of a radio transmission coming from my back-seater. It was that precise moment I realized Walt and I had become a real crew, for we were both thinking in unison. "Center, Aspen 20, you got a groundspeed readout for us?". There was a longer than normal pause.
"Aspen, I show 1742 knots". No further inquiries were heard on that frequency.

Whilst proceeding to Polehill:

"Manchester, Shamrock XXX is with youpassing FL80, cleared FL100."

"Shamrock XXX, Manchester, climb FL180, report your radar heading!"

"Shamrock XXX climbing FL180; I'm afraid I've forgotten the assigned heading, but it'll be the one we're currently flying."

Imagine, you'll be sitting in the cockpit of a helicopter and maintaining speed and height. To your right is a steep downgrade, to your left drives a fire rescue vehicle at the exact same speed than you!
In front of you there is a pig galopping which is equally big than your chopper. And you'll be chased by a rocket - also with same speed and altitude.
What do you do?
You'll get off that children caroussel!

O'Hare Approach Control: "United 329 Heavy, your traffic is a Fokker, one o'clock, 3 miles, eastbound."
United 329: "Approach, I've always wanted to say this...I've got that Fokker in sight."

"Approach - we are a flight of two Harriers recovering low-level, to join visiually - sorry, but we've forgotten our formation callsign!""Roger, no problem, adopt the callsigns ' Stupid One' and ' Stupid Two' - report airfield in sight!"

The aircraft was parked at the American Airlines maintenance facility at Los Angeles International Airport, awaiting scheduled maintenance, when it began rolling, crashed through the airport boundary fence, and rolled onto World Way West, a highway adjacent to the airport. No one was injured, though power service was interrupted in the area as the aircraft impacted power lines

41st Annual IFATCA Conference
15-19 April 2002
Cancun (Mexico)

Participants:
Patrik Peters - Director of Delegation and Committee A
Philippe Domogala - Committee B
Inge Vander Eyken - Committee C
Luc Staudt - Committee C
Claudia D'Amico - Committee A/C
Irene Koster - Newcomer/Com. C

In 1990 the Mexican Air Traffic Controller Association hosted the IFATCA annual conference in Acapulco. The conference was such a big success that they decided to do it again - this time in Cancun.
Cancun is a major holiday resort situated on the north-east coast of the Yucatan peninsula. It is mainly visited by Americans - the flight from Miami takes only 2 1/2 hours.
But despite the fact that it looks a bit like Fort Lauderdale/Florida - it gives you the possibility to visit very interesting ancient ruins, temples and impressive jungles. It is also well known for its breathtaking diving resorts on islands like Cozumel.
We convened at the Melia Cancun, one of the nicest hotels in Cancun, offering well equipped conference facilities.

In order to have two delegates attending each of the three committees, we decided to go with six persons, although this meant that every delegate had to pay a considerable amount her/himself. Expensive air-travel and accommodation made it difficult to otherwise remain within budget.
In this context I like to thank EUROCONTROL and Mr. Vandenbroucke in particular for supporting us with an extra 1000,- Euro.

Before you'll read the reports of the three committees, I also like to thank the members for their support.
It is your decision to have us particpate on this very interesting and highly motivating conference. This is the platform to discuss, evaluate and report the concerns we face in our daily professional life. Here we can obtain the necessary information that we need to provide you at home with new input for the various projects we are involved in.
Lastly I thank the members of the 2002 delegation for their absolutely great work and dedication.

Patrik Peters

Future Conferences:

2003	Buenos Aires/Argentina (confirmed)
2004	Hong Kong/China
2005	Melbourne/Australia
2006	Kaoshiung/Taiwan

Committee A - Administration

(by Patrik Peters)

Chaired by Shazzard Mohammed from Trinidad & Tobago for the 6th time, committee A dealt with the issues of administration, the Constitution and Bye-Laws, including all applications for professional and honorary associate membership, termination of membership, budgets, the election of IFATCA officers, approval of future Conference venues, public relations and other related subjects.

Ten new member associations

This year we counted 10 new member associations, namely: Belarus; Congo Brazzaville; Gabon: Georgia; Haiti; United Arab Emirates; Yugoslavia; Zambia; Cameroon and Mauritania.
Suspended MAs: Algeria; Cabo Verde; Thailand and Ukraine.
Terminated MA: Channel Island.
It has to be noted here that depts of some other member associations, who were facing termination, were taken up by more priviledged associations.

How can we help?

How can IFATCA assist less priviledged MAs to participate on standing committees.
The increasing costs for attending standing committee meetings and conferences are becoming a problem for allmost everybody. Should IFATCA not be able to overcome this, we could be ending up as an organisation for the well situated countries only. This issue has been complicated further since September 11th. Free air travel for IFTCA officials has since become very rare. For the time being committee A agreed to offer financial help through the EVPs regional funds and requested assistance by more financially stable MAs. This subject will be further discussed in the standing committees and the conference 2003.

The CONTROLLER

The official IFATCA magazine is facing financial problems. If it continues as present - it may be necessary to cease the publication. After lengthy discussion committee A decided to have the magazine modernized and thus seek a wider audience and more advertisers.

Elections:

Marc BAUMGARTNER/Switzerland	President and CEO
Stephanie SIMMONDS/United Kingdom	Vice President Finance
Douglas CHURCHILL/Canada	EVP Professional
Juan Perez MALFA/Panama	EVP Americas
Nycolas LYRAKIDES/Cyprus	EVP Europe

Committee B - Technical

(by Philippe Domogala)

The meeting was chaired as usual by Chris Stock (UK) . The minutes were taken by Catharina de Dekker (Belgium) acting as Meeting Secretary .
Myself, assisted nearly all the time by Irene Koster represented EGATS.
I believe it was for her a very fruitful learning experience.

This year, in contrast to previous years, the Technical committee was heavily attended , and by many new members associations, who for the first time, also participated in the debates, frequently asking pertinent questions.
A refreshing new trend.
Most of the technical reports did not bring any new policies and it was mainly updates on previously studied items.
The ones that are of direct interest for EGATS are as follow:

RVSM

The European and North Atlantic experience are now used widely for blue print for other Regions. For us the problems were minimal because the project was well prepared and executed.
Some other regions (e.g. Caribbean, Asia, etc..) will have more difficulties because States there are far less homogenous.

MODE S

This item , was studied in length by SC1 which discovered potential problems, mainly in the identification of previously correlated tracks.
In a Mode S environment, since all aircraft transmit their ID (i.e. R/T call sign), controllers will not notice who is known to their ATC system (for which a flight plan exist) and who is not. For this a recommendation was passed to say that ; "In a mode S environment, the controller HMI shall clearly distinguish between correlated a/c and a/c only transmitting their ID.

SAFETY NETS (e.g.: TCAS, GPWS. STCA, MSAW, etc.)

A very long discussion took place on how to integrate those safety devices with one another. The result was that safety nets should only be developed in order to alert pilots and controllers as to the imminence of collision of a/c between themselves, or with terrain, as well as penetration of dangerous airspace.

MILITARY PHRASEOLOGY

We defined that when Military a/c operates as GAT, civil ATC should expect these military pilots to use standard ICAO phraseology, and that those controllers be made aware of the differences between ICAO and Military phraseology.

ENVIRONMENT

Following 2 recent crashes where environment was a contributing role the following recommendation was passed: When balancing the need for safety, efficiency and the environment, maintenance of the appropriate level of safety shall always have primacy.

MULTI-LATERATION

A new buzz word defining a new surveillance technology. In fact a triangulation system, with fixed antennas around an airport which can determine with precision the position of aircraft and vehicles if using a mode S transponder .(by measuring the distance to the antennas) these antennas coupled to a simple PC, using a few cheap telephone lines can replace a surface movement Radar for a fraction of the costs. We will certainly hear more of this when Mode S becomes mandatory in few years (2005).

8.33 kHz Freq. Spacing

Problems again with ICAO modifying (again) the R/T procedures on 8,33 on pressure from IFALPA. Unfortunately we are in disagreement with IFALPA on this point and a recommendation was passed asking to keep the word "channel " and "decimal " (IFALPA wants to drop channel and use 'point" instead of decimal).

STANDING COMMITTEE 1 (SC1)

Dave Grace, Chairman SC1 decided after many years to stop as Chairman. There was no volunteer to take up this demanding job. Therefore, Andrew Beedle, IFATCA EVP Technical, took over the job ad interim. There were too many volunteers MA's to join SC1, and as always, a vote had to take place. Italy (a hard working association in the Airports fields d) lost its place to the profit of the USA, joining in .
I, as the IFATCA representative to the IFALPA ATS Committee , am automatically a member of SC1 (on the costs of IFATCA).
The new members of SC1 are for 2002/2003:
Canada, UK, Australia, NL, CH, USA and the 4 IFATCA reps in ICAO/IFALPA.

Committee C - Professional

(by Inge Vander Eyken)

Committee C, which deals with professional and legal issues, is normally the committee taking the longest time to finish its proceedings. This year however the agenda contained mainly reports of IFATCA representatives and working papers resulting in information material, the number of policies to be discussed and voted was quite low. Therefore an old tradition was broken and committee C was first to close their meeting!
(Although some might suggest the beach & pool bar might have influenced the working pace a bit…)

The Committee was chaired by a very experienced Neil Vidler (Australia), who was assisted by the EVPP (Executive Vice President Professional) Doug Churchill (Canada) and secretary Tony Rushton (Canada).
Inge Vander Eyken, Luc Staudt and at times Irene Koster attended the sessions on behalf of EGATS.

Day 1 was kept extremely short. Due to misunderstandings no tables were available in the meeting room. The agenda was adapted to deal with reports only. All went well until it became clear Luc Staudt hadn't arrived in Mexico yet! As IFATCA representative in EATMP HRT (Human Resources Team) & EATMP LWG (licensing WG) he had quite a few presentations to make, which were all postponed to the following day.
So … early finish that day!

On day 2 the tables were set and the work really took off.
Of main relevance were the working papers on ASMT (put on the Standing Committee 4 work program by EGATS since 1999) and on Selection of Assessors.

In 2000 IFATCA has adopted provisional policy covering ASMT (then referred to as Air Traffic Control Separation Monitoring tool). SC4 (Standing Committee 4) recognized that due to developments in the use of ASMT new policy might be required but it had not elaborated on this. Committee C was asked to discuss the topic further.
EGATS pointed out that the abbreviation ASMT already has 3 different meanings in different IFATCA papers and suggested that a common generic policy is required to cover the use of all safety monitoring tools.
As Committee B (technical) also had a very interesting working paper on ASMT with lots of new information, further discussion took place in a joint Committee B/C session. This discussion resulted in a request to re-write the existing policy on ASMT. In a joint effort with the authors of the 2 working papers and the IFATCA Human Factors Specialist (Bert Ruitenberg), EGATS assisted in developing new provisional policy on ASMT, which got unanimously accepted by the Committee.

The new ASMT IFATCA policy:

2.10.	IFATCA considers ASMT to denote a generic ATM Safety Monitoring Tool that extracts ATM data to detect infringements of parameters predefined within the system itself.
2.10.1	ASMT must be part of a safety management system and shall not be used by management as a punitive tool for disciplinary action.
2.10.2	Except for aerodrome control, the introduction of ASMT shall be preceded by the introduction of STCA.
2.10.3	Implementation of ASMT must be preceded by a clear statement in which its goals are defined.
2.10.4	ATCOs shall be involved in the definition of the ASMT role.
2.10.5	The criteria used to set up the ASMT parameters must be carefully planned and monitored. Sufficient consideration must be given to restrict false or nuisance reports.

The discussion of the paper on the Selection of Assessors resulted in the following paragraphs to be added to the existing

Policy on Proficiency Checking:

4.5.8 Where a proficiency checking system has been implemented, a controller who is selected to act in the Check Controller role should undergo a specialist course of training that will prepare him/her for the task, and provide guidance on achieving a fair, objective, and valid assessment. This training course should achieve consistency between check controllers.

4.5.9 Additionally, a controller considered for the Check Controller role should have the following minimum experience:

- 4 years operational experience;
- 1 year experience on the position being assessed;
- 2 years OJTI experience;
- having a high standard of credibility and communication skills in the OJTI/coaching role, and
- currency on the position being assessed.

4.5.10. Check controllers should undergo the same periodic proficiency assessments as other controllers.

4.5.11. This assessor qualification should be the subject of periodic refresher training, at periods not exceeding 3 years, to ensure that skills are maintained and new techniques and procedures are incorporated.

On request of EGATS the item remains on the working program for next year's conference, mainly to further develop the policy regarding the interpersonal communication skills required for the assessor role.

SC4 has also been tasked to continue to monitor a number of issues like:

- Developments and trends in pension/early retirement benefits for ATCO's in a corporatised environment through the Commercialization Database
- The Eurocontrol Performance Review Commission
- Regulation in ATM

Day 3 started with a joint Committee B & C session, which turned out to be extremely useful (as in the case of ASMT) and time saving.

Finally the VDF (German Association) presented a summary of the findings and recommendations of an investigation (Belastung und Beanspruchung in den Flugsicherungsdiensten – Prof. Michael Kastner) commissioned to study the stress and strain in Air Traffic Services. These findings were the basis of collective bargaining in Germany and for defining a new workload (and pay!) classification scale for the different units in the country. Information can be obtained via office@vdf-online.de

Since the Committee closed its meeting at the end of day 3, plenty of time was left for informative talks with colleagues from all over the world. Especially on Competency Checking, Non-punitive Reporting and dormitory situations we managed to collect a lot of useful information for our future in-house EGATS work!

World Body of Air Traffic Controllers denounces Unsafe Kenyan Skies

The International Federation of Air Traffic Controllers' Associations (IFATCA), condemns government actions being taken against air traffic controllers in Kenya. IFATCA expresses outrage over the recent detentions and mistreatment of controllers.

"The safety of air traffic and the flying public has been placed in jeopardy by Kenyan government actions," says Mr. Samuel Lampkin, President and CEO of IFATCA, while attending the Federation's Annual Conference in Cancun, Mexico. "Air Traffic Control is a dynamic exercise within which the Human element is vital. The human must remain the key factor in this complex system at all times. Disruptions to air navigation services have had lingering negative effects in all cases."

"Authorities need to use caution not to endanger the travelling public and the air navigation system in Kenya by mobilizing retired air traffic controllers to assume duties in unfamiliar air traffic control units. These replacement controllers are neither currently certified nor qualified under existing international standards." Mr. Lampkin went on to say," We call on those in positions of authority to release detained air traffic controllers and return them to their rightful positions without further delay. We encourage a resumption of the negotiating process at the earliest opportunity. Air Traffic control systems require full co-operation and interaction of all participants at all times."

IFATCA endorses the current efforts underway to facilitate de-linking of the Department of Civil Aviation from the Civil Service. IFATCA is ready and willing to offer assistance in the negotiation process in this matter in whatever capacity necessary, to ensure a return to normal business as soon as possible.

Press release as discussed in Committee A

Aviation books

In derNacht vom 2.September 1998 stürzte Swissair 111 vor der Küste von Halifax ins Meer. 215 Passagiere sowie 14 Besatzungsmitglieder starben bei der Katastrophe. Die Recherchen der Autoren **Simon Hubacher** und **Tim van Beveren** ergaben, daß dieser Unfall hätte vermieden werden können. Elektrische Feuer in Linienmaschinen sind zu lange von den zuständigen Behörden ignoriert worden. Die Autoren setzen sich kritisch mit den Hintergründen auseinander. Sie berichten über die unheilvolle Allianz zwischen Airlines, Herstellern und Aufsichtsbehörden.

ISBN 3-85842-362-9 (DEUTSCH!)

Air Disasters - a series of books by Macarthur Job, illustrated by Matthew Tesch - examines the way the unforseen hazards of jet age aviation. Detailed stories of how and why it happened.
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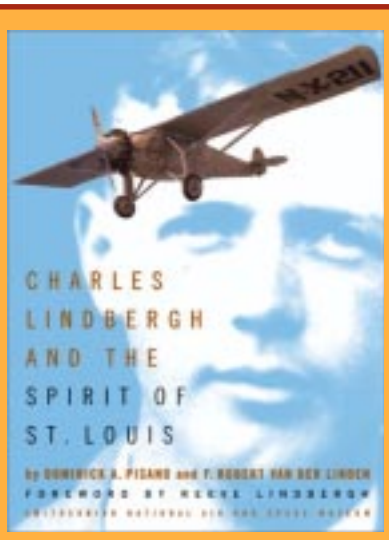
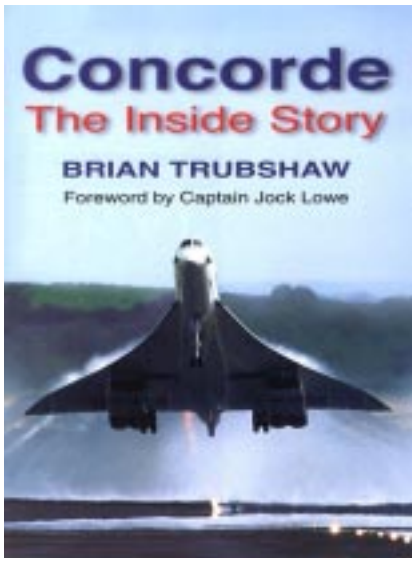


On May 21, 1927, in Paris, Charles Lindbergh alighted from his plane, the Spirit of St.Louis, and entered history as the first person to complete a nonstop solo flight across the Atlantic.
This book emphazises his calculated daring - he did not carry a parachute or heavy radio - quite unusual for a man of his age and the time.It also charts Lindbergh's progress from young flyer to world hero, considering his later career without shying away from its unpleasant aspects.
Now, in celebration of the 75th anniversary of Lindbergh's New-York-Paris flight and the 100th anniversary of his birth, comes a fascinating new look at Lindbergh's life and the feat that made him an instantlegend the world over.

ISBN 0810905523



ISBN 0750923938
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No one can see a Concorde fly without watching the progress of this marvel through the sky. As chief test pilot for the Concorde, Trubshaw gives the inside story from its early days of planning in the 1950s, through its design and preflight testing, maiden flight, and demonstrations, and on to its certification and airline service. A truly magnificent book giving an insight into the backgrouds of a unique piece of technology.