

Safety Bulletin

June 03

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 Intranet: [SWAN/management/safety/safety bulletin](#)

Editorial

My thanks to all of you who gave their feedback and comments to improve the Safety Bulletin.

To improve a product or a service too parties are needed. One that detects a deficiency or a malfunctioning and then takes his responsibility to address this finding to the right person. And on the other hand the addressee – management or staff - who accepts the input and does his best to improve the situation. In our business this striving for improvement is one part of the so called “Safety Culture”. That is what all of us - management and staff - have to strive for day by day

The articles in the rubric “In Focus” are dedicated to some examples of Safety Improvement.

And of what kind are the improvements in the second edition of the Safety Bulletin as a result of your feedback

- **Recommendations:** To ensure compliance with our internal manuals and ICAO requirements all recommendations are reviewed and approved by the Operations Safety Group.
- **Technique:** From now on you will find articles from the technical department to state their efforts to improve safety.
- **Readers’ page:** One page is reserved for your feedback and input.
- **Distribution:** The distribution will still be via Intranet. In addition the members of the Operations Safety Group will print some examples for their own unit. The OSG member of our regional airports will cover the distribution to those regional airports, which do not have access to our Intranet.
- **Layout:** Together with our Corporate Identity we defined a layout that should satisfy the wishes of the readers.

I hope that you enjoy reading this Safety Bulletin. The Safety Bulletin team would appreciate receiving your feedback and as well your input for further articles (s.b@skyguide.ch).

Martin Probst, DMS

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Try to call on 121.5, and try and try...

In our last Safety Bulletin we concluded one article in the “Lesson learned” rubric with the recommendation: “... try to call on 121.5 to establish contact with the flight...”

After the Safety Bulletin had been published Natalie Rüegg from TWR Zurich told me that it is not always possible to reach Swiss pilots on 121.5. This message was immediately forwarded to the Swiss safety manager and a few days later Swiss sent the following e-mail to their staff, that is affected by this problem:

Dear Colleagues

Some reflections on the use of the emergency frequency 121.5 MHz:

There is no doubt, staying in contact with ATC during a flight is a safety issue - both from a pilot's perspective as well as from ATC's point of view.

We do have indications from ATC that they could not reach Swiss flights on 121.5 MHz, especially on shorthaul or maybe more precisely in Europe. This matches with our own observation.

Now of course if you have only 2 sets, you will need one for the CUT or the ATIS in the airport area - but this is true for a limited time only. And aircraft equipped with ACARS/ SAT are even in a better position as the company can reach them via those channels.

Longhaul flights usually have 121.5 MHz set during cruise away from Europe. There they have tuned 123.45 MHz or 126.90 MHz as well according to the situation, which gives them another back - up. But it is for longhaul flights equally important to have 121.5 MHz open in Europe or in similar areas.

Many thanks and regards.

With this example I would like to motivate everybody to take her/his responsibility to improve safety by reporting deficiencies in the system.

SIR: Status

After five months we have received almost fifty Safety Improvement Reports. After a short assessment most of them were classified as safety-relevant and a recommendation was forwarded to line management. Until now none of these recommendations was refused and it can be noted that big efforts are undertaken to solve the problems detected by Safety Improvement Reports. In the first Safety Panel Meeting, which took place 16th of April 2003, the first thirty-five reports together with the implemented measures were discussed. A detailed status of these SIR was distributed to the Members of the Safety Panel for broader dissemination. The status as it was after the first safety panel meeting (Status April 2003) is available on our Intranet under: [management/safety/sir](#). Until now the SIR was almost exclusively used by controllers of TWR/APP/ACC Geneva and Zurich. We received hardly any SIR from the regional Airports and from the technical department.

You will find further information (SIR form, Process Description, Members of Safety Panel) about the Safety Improvement Reporting on our Intranet under [management/safety/sir](#).

TELLiT

TELLiT! Tell what? Whom? While skyguide has developed the Safety Improvement Reporting (SIR) process our Military Airforce has developed TELLiT. Both systems were developed independently but a first contact with the responsible person showed that the idea behind is the same – to improve safety. TELLiT is as well a reporting system for safety-relevant issues others than occurrences. People can report safety concerns or deficiencies in a confidential way to an independent person.

The responsible persons of skyguide and Military Airforce agreed that any report that could improve safety of the other partner would be forwarded; with full confidentiality of course.

Therefore I would like to motivate our controllers, especially the ones from the regional airports, to report safety-relevant problems or unsatisfactory states outside the responsibility of skyguide also via the SIR form. It will contribute to improve the whole system's safety.

Martin Probst, DMS

Squawk standby in controlled airspace

Description of the occurrence

A PC12, VFR flight enters the CTR without previous clearance of the TWR controller. At its first call (inside the CTR already) the TWR controller issues a standard VFR arrival clearance. The pilot reads this clearance back correctly and, as he is flying between two layers of clouds, asks for joining IFR clearance. In the meantime a departing A320 gets in potential conflict with the PC12. The ATCO assumes that the climb performance of departing A/C will allow sufficient vertical separation with the PC12. Nevertheless, he asks the VFR flight to descend (even though the pilot had informed him about the cloud layers) and to squawk standby. This latest measure was applied to avoid a possible TCAS alarm on the departing A320, which might have led to a very critical situation in this phase of flight. Then the ATCO urges the VFR pilot again to descend but he does not comply, probably due to the poor weather conditions (SVFR in CTR). The separation minima were finally slightly infringed. During SVFR conditions, 1000 feet or 3 NM separation in CTR is mandatory (IFR separation).

The narrow airspace of a CTR is particularly subject to non useful RAs. Note that TCAS makes no difference between a conflict of two IFR flights operating at FL330 and mixed IFR/VFR traffic operating in low altitudes. The TCAS is issuing RAs also for perfectly safe and controlled situations.

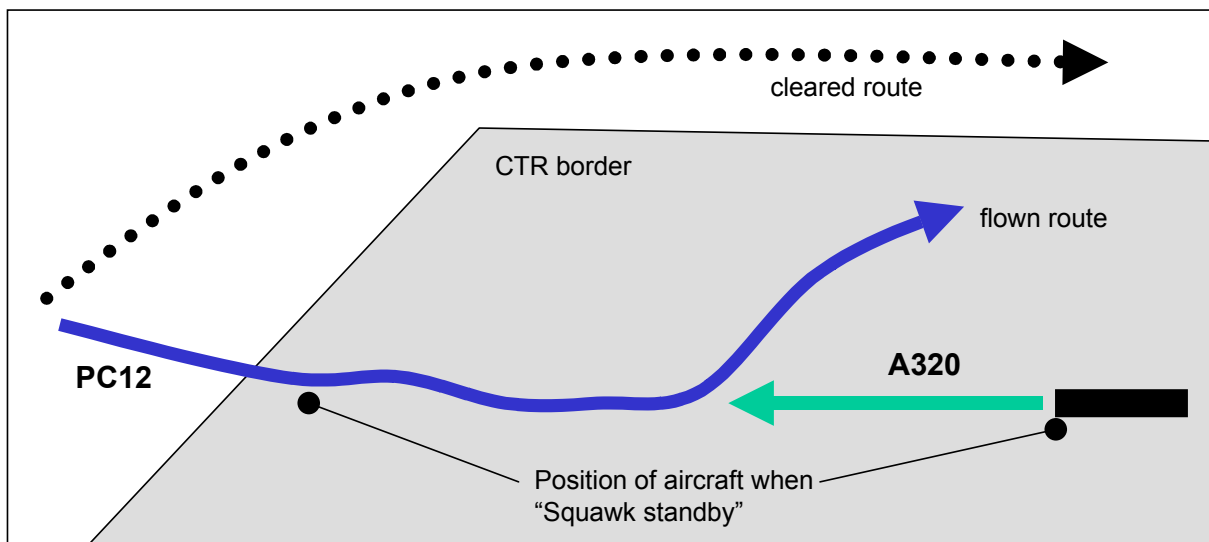
Keep in mind

When you ask a VFR pilot to 'squawk standby', please remember that you are **deliberately switching off the available safety nets (STCA / TCAS)**, which could save the situation if really everything went to turn wrong. Consider the aggravating factors like poor weather conditions, VFR pilots not familiar with the installations, etc before asking a pilot to squawk standby.

Recommendation

In a similar or comparable situation (special VFR):

- Avoid the use of 'squawk standby'



Operations Safety Group

CB-situation

Facts

Flight 1 (N262) was flying from NOVEMBER via TANGO to HOTEL at FL180.

After take-off, **flight 2** (MD80) climbed to FL130. When passing ECHO, the pilot reported: "*We'll have to turn right äh... thirty degrees within five miles from now*" (due to CBs). This was accepted by the controller and he re-cleared flight 2 to FL240.

2 Minutes later (ca. 8NM flight), the controller asked to report when able to turn left. The pilot: "We are coming clear now." Controller: "Okay fly heading 060° due to traffic." Read-back: "Heading 060°, Flight 2."

25 seconds later, the controller asked: "Flight 2 your heading?" "095° turning left" "Yes immediately left heading 040° we have traffic!"

Flight 1 and 2 passed each other with less than the required minimum separation.

What went wrong?

The controller cleared the deviating traffic higher than the opposite.

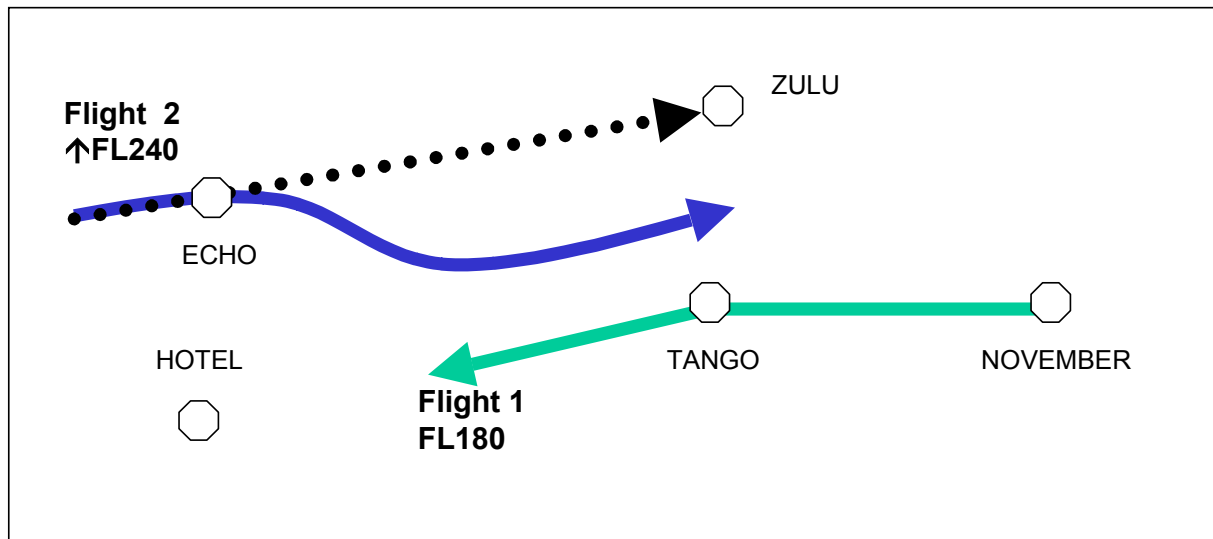
Judgement of ATIR-Ausschuss

Inadequate clearance of the controller and slow pilot's reaction.

Recommendation:

In a similar or comparable situation:

- Be aware, in CB-situations pilots reactions are not always as reported and expected.
- Vertical separation must be maintained in case of weather / CB problems.



Level Bust

Once every half-hour, somewhere in the world, an aircraft busts its cleared level. Once each day, the loss of separation results in aircraft passing within a mile of each other.

The incidence of Level Bust is probably 2 or 3 times higher than reports suggest. Therefore, Eurocontrol recommends improving awareness of this issue. A methodical categorisation allows to focus on the most important causal factors and then to take corrective actions.

The following main causal factors have been identified:

Flight deck origin

- Non-compliance with correctly read back ATC vertical clearances
- Inadequate planning or knowledge of procedures (SID)
- Altimeter setting errors (including late or not setting 1013.2 mb when passing transition altitude)
- Aircraft mismanagement (manual and automatic flight)
- Incorrect operation of auto-flight system / FMS
- Mistaking heading for level
- Climb / descent without clearance
- Language difficulties
- TCAS misinterpretation

ATC origin

- Pilot read-back errors not detected by ATC
- Issuing incorrect, inappropriate or unclear clearances
- Late re-clearance to a level that aircraft was close to or had already passed

Other origin

- Callsign confusion
- Weather (turbulence, windshear, etc.)
- Simultaneous or blocked transmission
- Technical problems / equipment malfunctions
- TCAS

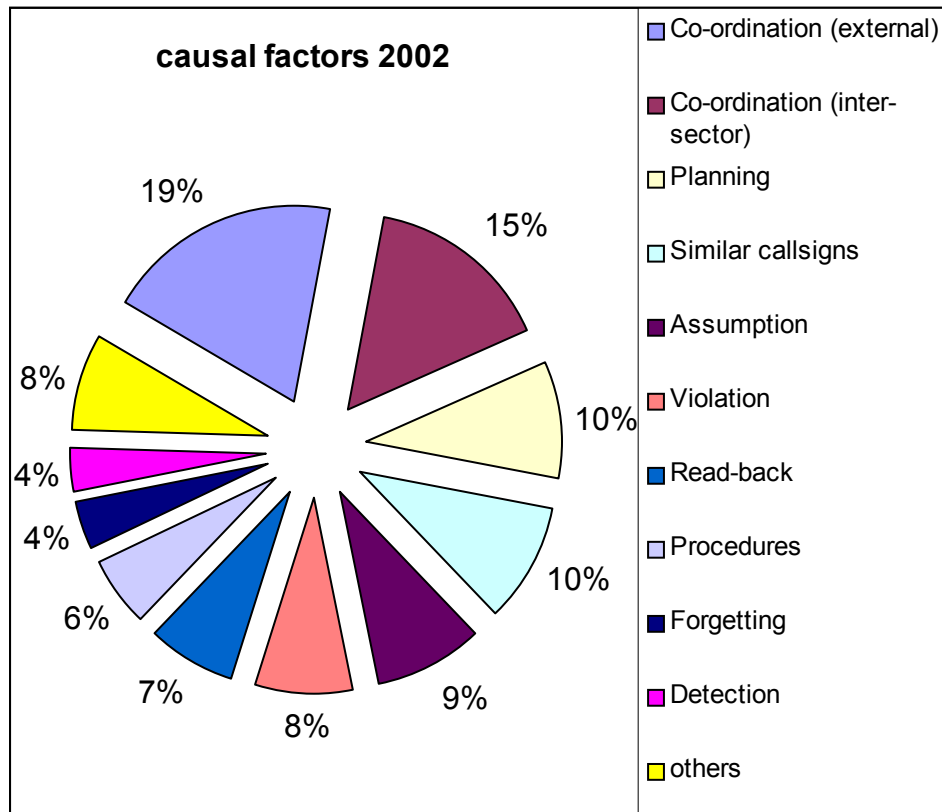
Recommendation

- Avoid multiple instructions where possible
- Avoid reference to level if giving traffic information, use "1000ft above or below"
- Monitor pilot read-backs carefully
- Monitor, as far as practicable, mode C readouts when aircraft are approaching cleared level and a potential conflict exists.

Monica Simonet, OOD

Co-ordination

In 2002 for all occurrence reports the causal factors have been determined. The result of these analyses is shown below.



External co-ordination: Co-ordination between two different units (e.g. ZRH ACC and GVA ACC)

Inter-sector co-ordination: Co-ordination between sectors at the same unit (e.g. two sectors at the same unit)

Internal co-ordination: Co-ordination between physically collocated working positions (e.g. executive-planner, or APP-DEP)

Procedures (poor/wrong): Design of procedures inadequate, no violation by ATCO.

For more than one third of the occurrences the causal factor was co-ordination!

In order to decrease the amount of occurrences caused by co-ordination OSG has issued the following recommendations, which were approved by the O-Meeting.

Recommendation

- As verbal co-ordinations are a main cause of incidents, avoid verbal co-ordinations as far as practicable by:
 - Sticking to standard operating procedures (SOP)
 - Using silent transfer (unless otherwise prescribed)
 - Using electronic means for co-ordinations (CALM)
- If verbal co-ordination is needed, use ICAO standard and insure that co-ordination contains following elements in this order:
 - Purpose of co-ordination (e.g. REQUEST)
 - Position of traffic
 - Full aircraft call sign or SSR code
 - FL or altitude
 - Heading and/or speed (if assigned)
 - Reference to other traffic
 - any other pertinent information

For OM division, different local regulations may apply.

- In order to avoid misunderstandings, we recommend also to read back critical items such as:
 - Full call sign
 - FL
 - Heading
 - Speed
 - Decision to co-ordination (e.g. REQUEST APPROVED)

Your suggestions

Co-ordination is the controllers' daily business. If **you** have any suggestions how to reduce the amount of occurrences caused by co-ordination, send them to Martin Probst or any member of the Operations Safety Group. Your ideas will be discussed in the OSG.

Martin Probst, DMS

Radar Data Quality (RDQ)

With the current volume of traffic a high quality of radar data is a need for controllers to provide a safe service. The following article shows some activities that are undertaken to assure and improve the quality of radar data.

The Radar chain

From the early days of single radar picture to the current multiradar pictures with correlated tracks (tracks with the correct flightplan associated), we have passed from a direct connection to the source (with all the limitations of a single source) to a complex computer-built picture trying to reflect in the best possible way the real airspace situation.

The current radar chain can be summarised by the following simplified scheme:

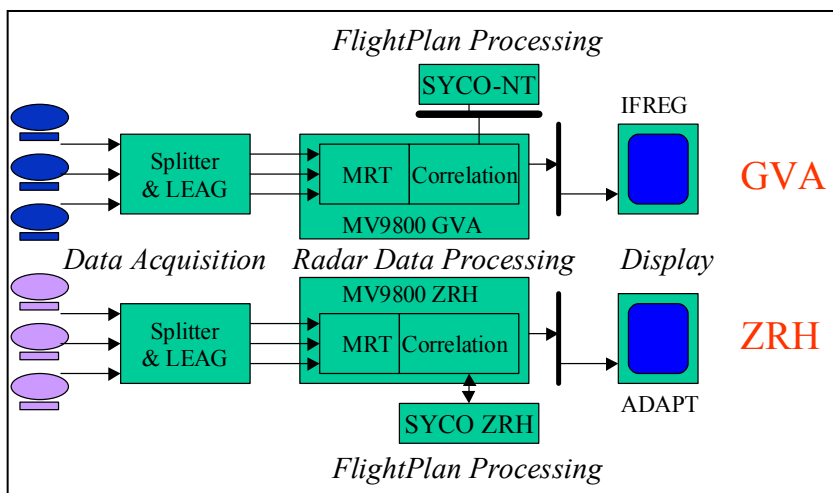


Figure 1
Current radar chain

The core of this chain is still the MV9800 and its associated Thomson software delivered to swisscontrol in 1988. This software has been enhanced by our internal engineers through the last 15 years. A major enhancement is expected for end of 2003 with the introduction of the new PRIMUS architecture.

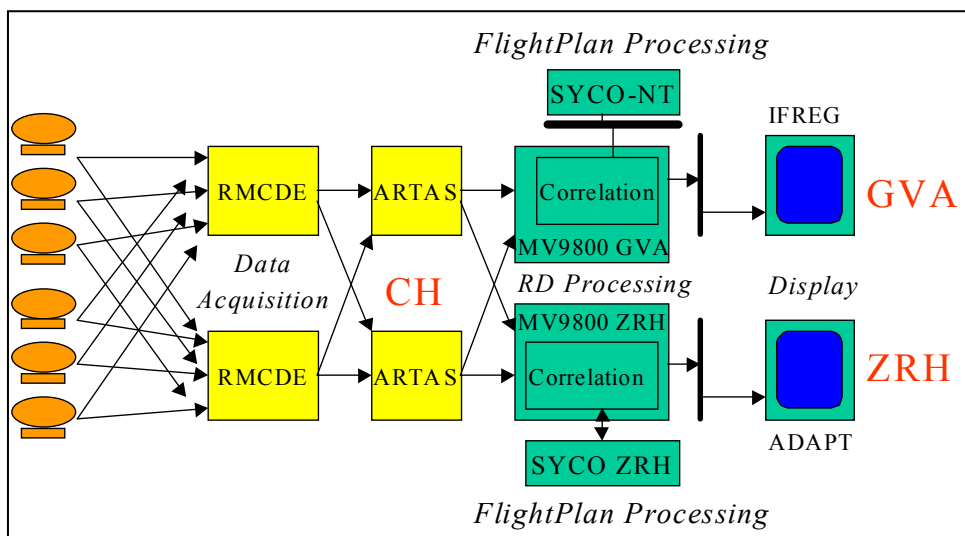


Figure 2
PRIMUS
introduction

PRIMUS will essentially bring the following changes:

- A totally new multiradar tracker (ARTAS) from Eurocontrol
- A redundant architecture between Geneva and Zurich to provide uncorrelated multiradar picture to both sites in a seamless way.
- An unique and consolidated swiss radar picture, required to build the future Swiss UAC.

This major evolution has had consequences in terms of radar data quality because ARTAS introduces a lot of new dimensions (timestamping, vertical tracking, mode of flight, enhanced precision) conducting to a higher quality. But to obtain this quality, all the radar chain has had to be reviewed.

Requirements

Beyond these ARTAS requirements, some other major trends have also pushed to take into account deeper the need for an enhanced radar data quality management:

- 1) Since 2000, the SASS-C tool from Eurocontrol has opened new perspectives in this area (see below)
- 2) In 1997, the initial version of the «Eurocontrol standard document for radar surveillance in Enroute airspace and Major Terminal Areas» has been released. It has been coupled with the launch of the Surveillance Appraisal Program to validate this document by real measures of the radar data quality in the ECAC countries. Skyguide has actively participated in this program since 2001
- 3) In Spring 2002, the AAIB report on the Skyguide radar quality has required some activities about the radar data quality to provide consolidated answers to the questions asked.
- 4) Open issues have required objective measures on radar data quality to help to decide on mitigation measures to implement: «Sud des Alpes» hole (2001), closure of La Dôle (2002), TG replacement strategy (2002), GVA2 Mode-S introduction (2003), ASR-10 primary detection (2003), ...

These drivers have highlighted the need to develop further the radar data quality initiative.

To address in a more formal way the radar data quality, we need a way to provide objective measures of the interesting parameters (i.e. Probability of Detection). The Eurocontrol recommended tools, SASS-S (Surveillance Analysis Support System - Sensors.) & SASS-C (Surveillance Analysis Support System - Centre), have been deployed in Skyguide since 2000.

SASS-S is dedicated to the radar antenna parameters and SASS-C is more dedicated to the radar data and multiradar tracker quality analysis.

In Skyguide, four people are dedicated to the SASS engineering with different levels of expertise.

Current situation

The different radar data quality analysis have allowed us to tune the SASS-C tool to a level we use it as a commodity. SASS-C is now running on a permanent basis and delivers all the daily figures needed for the radar data quality assessment. On the Eurocontrol radar data quality side, all the Surveillance Appraisal Program figures have been provided and are re-assessed on a trimestrial basis.

A group called RSIC (Radar Source & Investigation Correction) meets every 6 weeks with TD and TN representatives to address opened quality issues regarding the radar chain.

All the Swiss radar are currently compliant to the «Eurocontrol standard document for radar surveillance in Enroute airspace and Major Terminal Areas» except for the Geneva ASR-10 primary for which a Safety Assessment (under the supervision of our national regulator) is under way.

About quality of foreign radars we use, common discussions have been initiated especially with our Italian partners to address the issues identified by Eurocontrol.

In the multiradar domain, Enroute quality is compliant with Eurocontrol recommendations. Approach accuracy currently still exceeds by 10% the Eurocontrol recommendations. End of 2003, ARTAS will totally comply with the Eurocontrol recommendations with an accuracy twice better than recommended.

«Swiss radar are well above average» sentence has been published in the Eurocontrol official position last autumn.

Current activities

Different projects are now addressing further radar data quality issues: GVA/ZRH radar separation, Mode S validation, closure of Lägern preparation, ASR-10 Safety Assessment...

By its strong and continuous investment on this subject, especially with the SASS tools, Skyguide participates now to the most advanced developments in this field under the supervision of Eurocontrol.

Philippe Chauffoureaux, TDA

The skyguide Risk Management policy

The implementation of a company-wide Risk Management System is actually taking place within skyguide and is driven by a policy document, which has been recently endorsed by the Swiss aviation regulation authorities. This article presents the skyguide Risk Management policy in a global Safety context and highlights its most relevant topics.

Safety is, has always been and will always remain one of the major concerns in the aviation business. However, to be properly and efficiently managed by an organisation, Safety shall be implemented in a formalised manner by the mean of a well-defined Safety Management System.

Let's take the example of the airline industry: a formal Safety-oriented approach based on well-known standards has been developed and is now implemented since many years. But when considering the ATM business, despite the fact that Safety has always been taken very seriously, the introduction of a formalised approach in that domain tends to remain something making everybody afraid of the potential consequences it may have.

However, the constant increase of traffic, the development of an unsecured political context and the daily pressure on costs urged for a global European-wide coherent and cost-effective approach of the subject. For that purpose Eurocontrol has recently developed and released a set of mandatory European Safety Regulatory Requirements (ESARRs) applicable to the European Air Traffic Management domain.

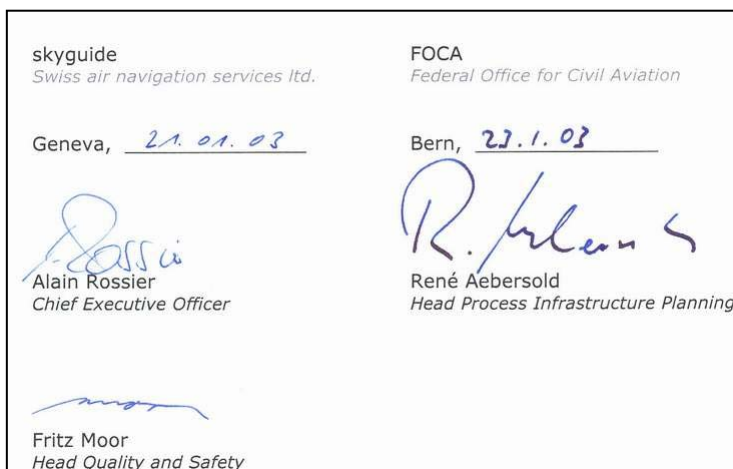
One of these Safety requirements (ESARR4) is specifically dedicated to Risk Management issues and states the following:

“An ATM service provider shall ensure that Hazard identification as well as Risk Assessment and mitigation are systematically conducted for any changes to those parts of the ATM System and supporting services within his managerial control ”

This requires a deep cultural change, which has to be introduced in a careful and gentle manner, while remaining in accordance with the Eurocontrol ESARRs implementation planning. Indeed, despite the fact that a good individual “Safety culture” exists since many years within skyguide, Project Managers have to be convinced of the benefits of a more stringent approach and Managers shall be ready to make decisions based on risks that are no more implicit but well identified and documented. This can't be done from one day to another without requiring a huge increase of resources and impacting planning and costs of many projects actually running. For that reason a pragmatic, gentle and intelligent transition has to be considered and applied from now on within the company.

This is the aim of the skyguide Risk Management Policy.

This document has been released in January 2003 after a successful jointly endorsement between our CEO Alain Rossier and the National Regulator.



It defines the basic guidelines applicable to a realistic and time-limited transition phase towards a skyguide ESARR4 compliant Risk Management System. The document is structured around **basic assumptions** and **working principles** constituting the daily drivers for initiation, organisation, conduction and validation of specific Safety Assessment Programs.

This document can easily be found on the skyguide Intranet under: **management/safety/documents**

And for any question or remark you may have on the subject, don't hesitate to call directly our Center of Competence.

Basic assumptions

The following basic assumptions shall be well understood by all parties involved in the conduction of *Safety Assessment Programs* within skyguide:

- The actual ATM System (People, Procedures, and Equipment) used by skyguide for a daily operation is considered being safe, until proven otherwise.
- The chosen *Risk classification scheme* will be initially based on European models not fully representative of ATM operations in Switzerland and refined step by step with National statistics.
- Projects chosen for initial *Safety Assessments* shall be considered as field trials helping in the understanding and adaptation of a proper Risk Management approach. However, identification of unacceptable risks may significantly impact planning and costs.

Working principles

In addition to the basic assumptions, to ensure the success of the transition phase towards a well-defined and usable *Risk Management system*, following principles have to be kept in mind:

- **Avoid the “Safety Case mania”**
Up to now, we did our job as aviation professionals. There is no reason to doubt thoughtlessly and change everything from one day to another: projects being not part of the initial *Safety Assessment Programs* should be handled as before.
- **Take time to do it properly**
The required cultural change is so big that expecting everything from the beginning will certainly contribute to a significant degradation of the actual level of Safety. To avoid this, enough time should be allocated to do it properly.
- **Let’s do it by ourselves**
The only way to acquire a high level of expertise on the subject and to initiate the required cultural change is to do the job with people of the company.
- **Promote awareness and develop responsibility**
Risk management is not a simple subject: company awareness has to be increased and should lead to further development of individual responsibility.
- **Understand and accept the assumptions**
In other words, we will begin by doing what we can instead of doing what we would like to.
- **Be careful when interpreting results**
Due to our lack of experience and to the absence of mature International guidance material in that domain, results of initial *Safety Assessments* may not be exhaustive and shall be used with extreme caution as decision tools for the release of Clearance for Operations.

Communicating and applying these principles on a regular basis will significantly increase the credibility of Safety actions and deliverables.

Stéphane Barraz, DMR

Review 2002

In this edition of the Safety Bulletin we will present a review of Audit Management activities of last year. In the next edition of the Safety Bulletin we will give further information about the findings that were made during 2002.

5 evaluations in civil units and 7 evaluations in military units were performed during 2002. The civil units have always been evaluated together with a TriNET-auditor from DFS or Austro Control. The military units have been evaluated by skyguide internal staff.

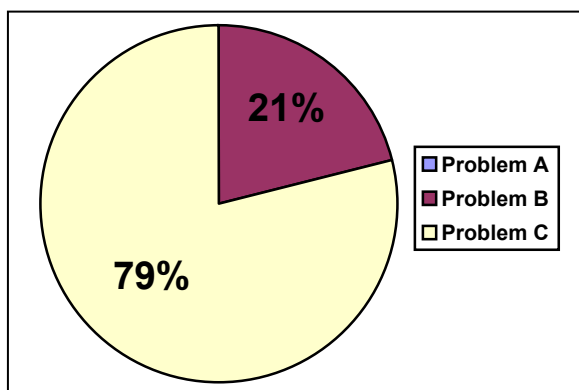
Civil evaluations
STC Zürich
Les Éplatures TWR
Grenchen TWR
Zürich TWR/APP
ST. Gallen – Altenrhein TWR

Military evaluations
Meiringen TWR/APP
Dübendorf TWR/APP
Emmen TWR/APP
Payerne TWR/APP
Locarno TWR/APP
Sion TWR/APP
Alpnach TWR/APP

Summary of all problems of all evaluation

“Problems”	Total
Status „open” before reporting period	138
Status „new“ during reporting period	262
Closed during reporting period	161
Total Status “open” at the end of reporting period	239
Overdue	5

Problem classification



All 239 problems are classified according their severity in three classes:

At the end of 2002 there were no open problems of category A.

Problem A: The problem has a direct effect on the ability to provide a safe ATM service and/or requires the immediate implementation of corrective measures by the responsible person.

Problem B: The problem has an indirect effect on the ability to provide a safe ATM service and/or requires the implementation of corrective measures with priority to the daily business by the responsible person.

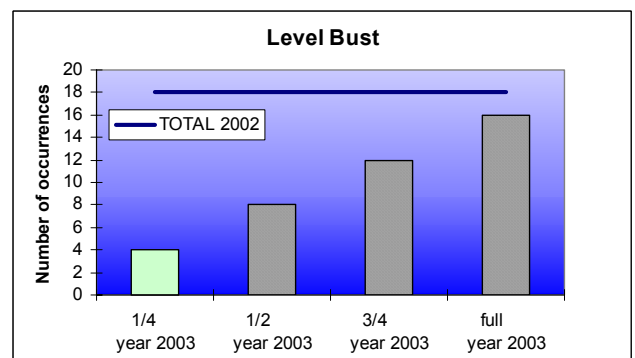
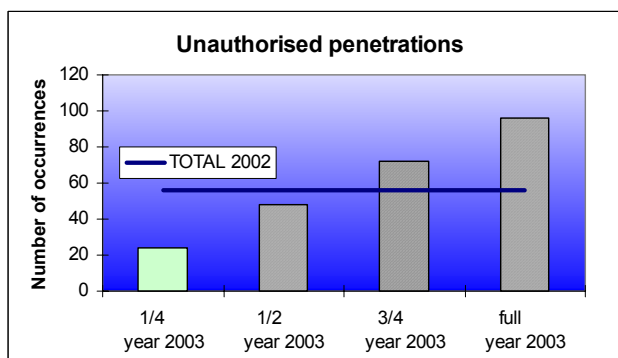
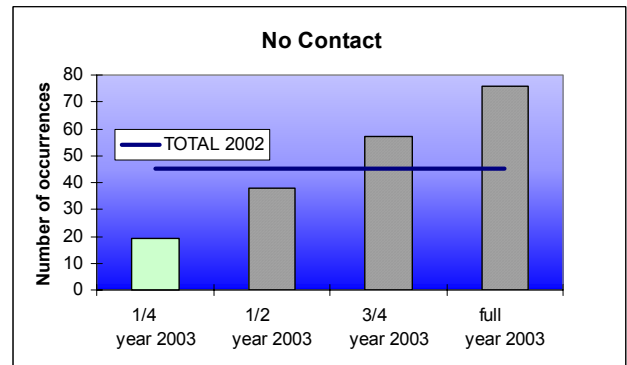
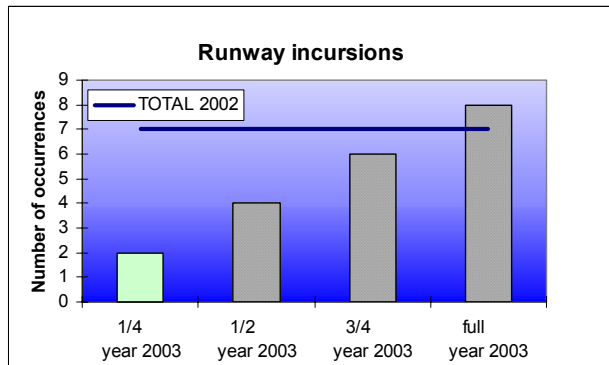
Problem C: The problem could have an effect on the ability to provide a safe ATM service and/or requires the implementation of corrective measures during the daily business by the responsible person.

Risk areas in our Airspace

In the Safety Bulletin's first edition we wrote that according to Eurocontrol the most frequent and serious occurrences in European airspace are runway incursions, loss of air-ground radio communication, VFR flights penetrating controlled airspace and level busts.

From now on until the end of this year the amount of occurrences of these four categories will be published in the Safety Bulletin. This time we will find some additional information about unauthorised penetration of airspace.

Occurrences in the first quarter of 2003 and the linear extrapolation.



Unauthorised penetration of airspace

In the whole year 2002, 56 penetrations of controlled airspace have been reported.

These 56 penetrations led to:

39 potential or actual conflicts with one or several A/C generating:

- 18 ATIR reports
- 8 ATIR AIRPROX reports
- 4 ACAS reports (1 RA only was triggered, but was useful)

And further:

- 8 occurrences involved military TFC
- 3 occurrences are classified 'A' risk
- 3 occurrences are classified 'B' risk
- 2 occurrences are classified 'C' risk

Risk classification, according ICAO

Risk A (serious incident): the risk of an aircraft proximity in which serious risk of collision has existed

Risk B (major incident): the risk of an aircraft proximity in which safety of aircraft may have been compromised

Risk C (significant incident): the risk of an aircraft proximity in which no risk of collision existed

ATM contribution

ATM had a direct contribution for 3 occurrences, mainly due to wrong co-ordination between military and civil ATC.

Awareness

- **All controllers are requested to fill in an OIR for all unauthorised penetrations of airspace to get a complete picture of this hazardous situation.**
- Safety Management is making lots of efforts with FOCA in order to push the issue to the degree it deserves.

Thomas Novotny, DMS

CISM (Critical Incident Stress Management)

Introduction

Last autumn, our board of directors formalised and structured a Critical Incident Stress Management Programme. In fact, after the summer's disaster of Überlingen, it appeared clearly that a structured support was sorely missing and the collaboration with the CISM experts from the DFS was not only highly appreciated but helped many of our colleagues to overcome their stress reactions.

Few generalities about CISM

- **What is a Critical Incident?**

A Critical Incident is any situation faced by a person and provoking unusual and strong reactions. It is of highest importance to understand that it is the critical incident that is abnormal, and that a stress reaction to such an event is a normal human reaction. It is not the gravity of the incident that determines the strength of the reactions; the reactions are experienced differently from one person to another. *Crisis is in the eye of the beholder.*

- **What kinds of reactions are provoked by a Critical Incident?**

Abnormal events may cause a series of reactions. After a CI a person may experience recurrent and intrusive recollections of the event, including images, thoughts or perceptions. Critical Incident Stress reactions influence, for a shorter or a longer period, the functioning of a person. Stress reactions may develop immediately and/or with delay, i.e. up to several weeks after the exposure to the incident. Stress reactions can be divided into four categories: physical, cognitive, emotional and behavioural.

Here is a small selection of reactions:

Physical: excessive sweating, rapid breathing, increased heart rate, sleep disturbances, vomiting, and muscle tremors

Cognitive: concentration or memory problems, poor attention, confusion, nightmares, flashbacks, and intrusive images

Emotional: anger, fear, grief, depression, helplessness, mood swings, irritability, guilt, and uncertainty

Behavioural: excessive alcohol consumption, anti social acts, hyperalert to environment, withdrawal, avoidance, and inability to rest.

These are normal reactions to an abnormal event.

- **What exactly is a Critical Incident Stress Management Programme (CISM)?**

The CISM is a wide range of programmes as well as intervention strategies which have been designed to mitigate the impact of stress on people and to assist them in managing and recovering from significant stress.

It offers a structured assistance

- **Who is involved?**

Peers: peers are colleagues, selected from all staff levels and trained to support their colleagues suffering from stress after a CI. A peer is a volunteer and should show some characteristics such as: ability to listen to others, respect the others, trustworthy and inspiring confidence, aware of his limits, have a sense of confidentiality and experienced with CIs.

Professional psychological support: it is an external support by mental health professionals who will bring support either to a victim or to the peers whenever needed.

Management: a CISM Programme needs to be supported fully by the company's management not only during the introduction but above all during the implementation and continuous follow-up to keep the programme efficient and alive.

- **How does it work?**

The person affected by a CI can contact a peer in order to have one or various one-to-one discussions with him. The aim of an intervention of a peer is to give back the functionality to a person who faced an emotional shock. During the intervention, the peer will examine with the victim the incident as factual as possible, allow the emotions of the victim to be expressed and prepare the future.

A peer is a colleague and he shares the same professional experience and he is qualified to provide assistance after critical incidents.

The engagement of the peers is voluntary and, if needed, they can be contacted any time of the day or the night.

CISM-Program (4 levels)

Level 0: awareness or information phase, The first step provides information about the phenomenon, describes potential reactions to critical incidents and explains the different CISM support mechanisms. The information underlines the importance of proactively preparing and coping with critical incidents.

Information is actually provided to explain to the management what are the consequences of a critical incident on a person and how important it is to have the support by a trained colleague (peer).

A training programme is organised for all new peers and refresher courses will take place once a year

Level 1: intervention of a peer (one-to-one approach) with the victim after a CI.

Level 2: this level will be activated either when the victim prefers to have counselling by an external expert (doctor or mental health professional) rather than having an intervention with a peer, or when it seems necessary to advise the victim to consult the mental health professional.

Our peers are also offered this possibility to contact external experts when they need a coaching or a debriefing.

Level 3: skyguide will activate this level when the critical incident is of such gravity (disaster) that the first two levels will not be enough to handle and overcome the crisis.

We will develop international collaborations with other ATC providers in order to benefit from their experts or bring our expertise to them if needed.

Collaboration with local health services or rescue support teams will be built up

CISM-Organisation within skyguide

This organisation co-ordinates all activities in relation to CISM and will implement the 4 different intervention levels. It will also organise and support the training of the peers as well as co-ordinate the actions with internal and external experts.

The co-ordination for skyguide of all the actions in regard to CISM is made by Christiane Damal with Walter Eggert, Jacques Droz (both for West-CH), Marcian Tessin and Anita Eymann (both for Swiss Germany) and the operational support is provided by Inge Marchesini.

Peers assist this co-ordination group in all divisions; by the management; by doctors and external mental health professionals.

CISM support is a necessity and it is ideally always there, in the background. Anyone may and can, at any moment, approach a peer at work or at home.

We will keep you continuously informed on this subject and remain at your disposal for any further question you might have.

Christiane Damal, PDM for the co-ordination Team

AVRE Ambient Voice REcording: Legal aspects

An Ambient Voice Recording is just one possibility of a legal recording and there is no doubt that AVRE can improve the traceability of events if recording from other systems like R/T or phone do not provide the required evidence.

AVRE has now been discussed within skyguide for more than ten (10!) years but until now no suitable solution could be found. The main issue has been the difficult but important topic of data protection and misuse of the recorded information.

What is written in the Swiss “Data Protection Act”?

Loi fédérale sur la protection des données, Art. 4 Principes

¹ *Toute collecte de données personnelles ne peut être entreprise que d'une manière licite.*

² *Leur traitement doit être effectué conformément aux principes de la bonne foi et de la proportionnalité.*

³ *Les données personnelles ne doivent être traitées que dans le but qui est indiqué lors de leur collecte, qui est prévu par une loi ou qui ressort des circonstances.*

Ordonnance relative à la loi fédérale sur la protection des données, Art. 8 Mesures générales

² *Les mesures techniques et organisationnelles sont appropriées. Elles tiennent compte en particulier des critères suivants:*

- a. but du traitement de données;*
- b. nature et étendue du traitement de données;*
- c. évaluation des risques potentiels pour les personnes concernées;*
- d. développement technique.*

Bundesgesetz über den Datenschutz, Art. 4 Grundsätze

¹ *Personendaten dürfen nur rechtmässig beschafft werden.*

² *Ihre Bearbeitung hat nach Treu und Glauben zu erfolgen und muss verhältnismässig sein.*

³ *Personendaten dürfen nur zu dem Zweck bearbeitet werden, der bei der Beschaffung angegeben wurde, aus den Umständen ersichtlich oder gesetzlich vorgesehen ist.*

Verordnung zum Bundesgesetz über den Datenschutz, Art. 8 Allgemeine Massnahmen

² *Die technischen und organisatorischen Massnahmen müssen angemessen sein. Insbesondere tragen sie folgenden Kriterien Rechnung:*

- a. Zweck der Datenbearbeitung;*
- b. Art und Umfang der Datenbearbeitung;*
- c. Einschätzung der möglichen Risiken für die betroffenen Personen;*
- d. gegenwärtiger Stand der Technik.*

If AVRE is implemented according to the Data Protection Act any misuse can be avoided. It is amazing to see how long the details of implementation have to be discussed even after the positive declaration of principles between the involved parties (unions and management) in 1996. Let's hope that within the next months this project can finally be realised.

Martin Probst, DMS

This time the Readers' Page is dedicated to feedback related to the first edition of the Safety Bulletin. Please send your comments concerning the Safety Bulletin itself or articles published in the Safety Bulletin to s.b@skyguide.ch. No statements will be published without your permission.

I am happy for you, since you are proud to announce something we cannot even have a look at... What a shame!
By nature, I am optimistic, but it might not last!
P.S. I work in Sion, at the Tower and we are still not able to go on our website.

Marie-Noëlle Cottagnoud, Tour de Sion

Ich gratuliere zu dieser wirklich gelungenen ersten Ausgabe des Safety Bulletin!
Ich erhebe einzig einen gewissen Einwand gegen die Empfehlung der Eurocontrol auf Seite 11.
Innerer Widerspruch, darin bestehend, dass einerseits ICAO standard phraseologie empfohlen wird, gleichzeitig aber in Abweichung dazu
das Wort "degrees" nach headings angehängt werden soll (entgegen unserem ATMM APP4, 7.4)
und Flight level "one hundred" (entgegen unserem ATMM 5.8.2).
Die Empfehlung, wonach Heading- und Level-Instruktionen nicht in derselben Übermittlung erteilt werden sollen, ist zumindest bei uns im Approach problematisch. Für eine Anflugfreigabe gehören die beiden Anweisungen zusammen. Wenn wir jedes Mal zwei Funksprüche daraus machen wollten, käme es bei hohem Verkehrsaufkommen bald einmal zu Frequenzüberlastungen.

Reto Hunger, OZTQ

Très bonne information bravo mais attention à la distribution à tous par e-mail, j'ai peur que des centaines de pages sont en cours d'impression. Je propose que la distribution et l'affichage soit une des tâches du Safety Group.

Michel Masson, OG

Congratulations with your first safety bulletin.
My first impression is that you have done an excellent job.
Of course I will have to read it more thoroughly and that I will certainly do. If I have any feedback I will let you know.

Peter van der Geest, NLR / Member REACH Project