

safety bulletin

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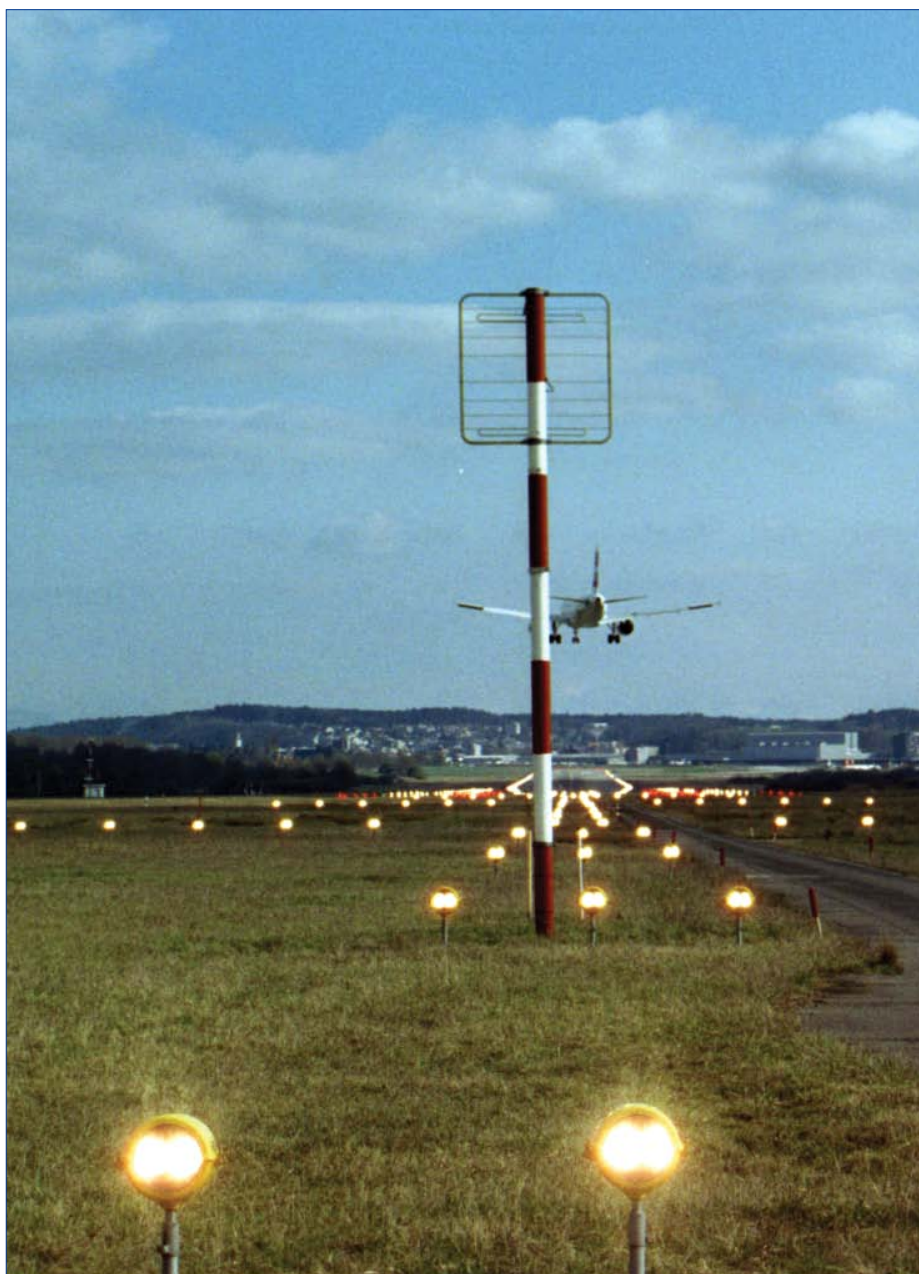
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No ESARRs – no more ISO 9001 certificate!

I would like to devote this editorial to a simple but crucial concern: we must bring the current introduction of our Safety Management System (SMS) to a successful conclusion, in compliance with the timetable specified in the Single European Sky Common Requirements, if we are to retain the ISO 9001:2000 certification which was secured last September.

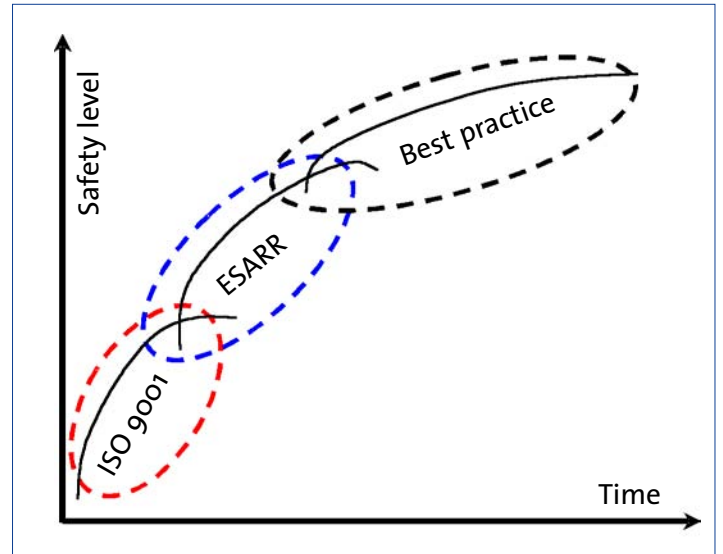
International standard ISO 9001 requires a quality management system to demonstrate its ability to provide products or services that fulfil the needs and expectations of customers and other stakeholders. ISO 9001 is recognised worldwide, and can be obtained by any organisation. In view of this, its criteria are kept very general, and have to be specifically interpreted for each industry. To play an effective role in each of the sectors in which it is applied, ISO 9001 also demands that all statutory and regulatory requirements that apply to an organisation's products, services, processes or activities must also form part of the corresponding quality management system.

In the case of skyguide, this means we must have a process-based quality management system which describes what we do to ensure the safe, orderly and expeditious flow of air traffic. Safety is a key feature in the provision of these services.

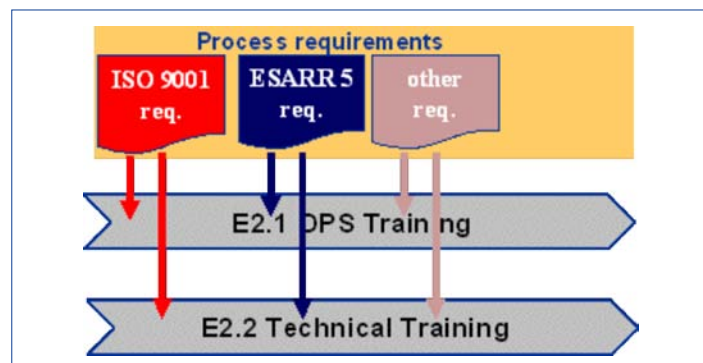
Our quality management system must thus pay due and full regard to both the requirements of our regulator, the FOCA (such as ESARRs) and the requirements specified by skyguide itself (such as ISO 9001). Since – for the reasons explained above – ISO 9001 is deliberately kept very general and makes only minimal requirements. This norm is insufficient to satisfy our own high safety requirements. This is where our detailed industry-specific ESARRs come into play, along with the best-practice philosophy which is designed to help make us one of Europe's leading providers of air Navigation services.

I will visualize what I mean by using the example of the skills, awareness and training that are required of any personnel who perform an activity that will influence our product or service quality.

These are described in Chapter 6.2 of ISO 9001 and in ESARR 5. The ISO



9001 provisions make no mention of any licensing or medical check requirement; but ESARR 5 specifies that these are clearly required for certain functions. We must ensure that due and full regard is paid to both sets of requirements in the relevant processes, in accordance with the skyguide process landscape.



New requirements are constantly made of any organisation. In view of this, it is not always feasible to wait until all the requirements are met before obtaining ISO certification. But if certification is sought in advance of such fulfilment, an implementation plan is required covering the as-yet unmet demands, whose progress can be assessed during the annual maintaining audit. This is why our accredited audit body – the SQS- only awarded us ISO 9001 certification last autumn provided our ESARRs were introduced in the timeframe envisaged. Without fulfilling the ESARR requirements, we will lose our ISO certification.

MICHAEL BERTSCHMANN
Head of Quality Management

ISO 9001:2000

The International Organization for Standardization's ISO 9000 series of norms was originally set up for the manufacturing industry to define minimum requirements in the customer-supplier relationship, but is now valid and applied all over the world. ISO 9000 represents a business model known as quality management, which is based upon structured processes.

STOP worrying about ESARR4

After three years of «learning by doing» in the world of Safety Assessments, skyguide released on the 7th of September 2005 its first formal solution to ESARR4. By publishing this way a comprehensive «framework for Safety Assessments», the question of ESARR4 compliance shouldn't be anymore a concern for those leading or participating to the construction of a Safety Case.

Skyguide's solution to ESARR4 is provided by the means of a formal framework composed of contextual documents (presenting its approach to Safety Assessments), procedural documents (describing the procedures to be followed) and supporting documents (providing guidance, templates and tools).

The link between Safety Assessment procedures and other internal change management processes like PMHB or ATM/AD is actually being finalized. Once completed, everybody will have a clear understanding of the way Safety shall be handled when changes are impacting skyguide's ATM-System. **Systematic application of the published procedures is the only thing you have to care about when considering the role you are expected to play within activities related to «Management of Safety».**

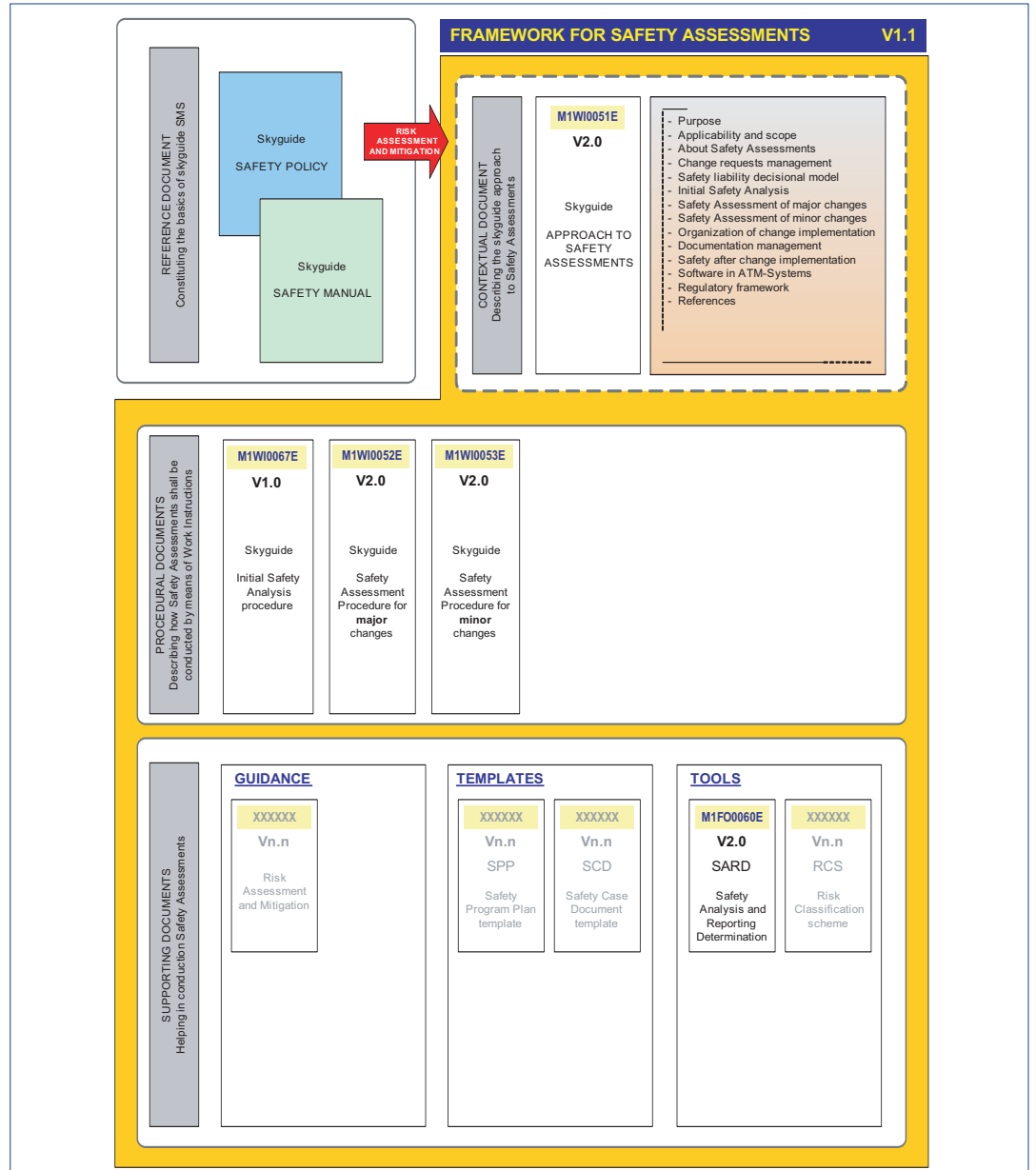


Fig 1 - skyguide's framework for Safety Assessments

► stop worrying about ESARR4...

Obviously, compliance with legal requirements is very important not only because it is imposed to skyguide by the Swiss aviation law but also because it is a pre-requisite for being eligible as a future provider under Single European Sky legislation. For this reason, a dedicated ESARR4 certification project has been launched and is actually being driven within skyguide's Systems Safety Management unit (DMS).

The main goal of this project is to adapt and deploy skyguide's framework for Safety Assessments and to make sure that the results produced by those using it are in full compliance with the legal requirements imposed by ESARR4. **This is what the Safety department has to care about when considering the role it is expected to play within activities related to «Safety Management».**

Obviously, our framework is actually submitted to a constant evolving process so that an updated version is already planned for the end of 2005. The main improvement will be the introduction of an Initial Safety Analysis procedure addressing the way safety significance of a foreseen change can be determined. However, it is planned to freeze a «certifiable»

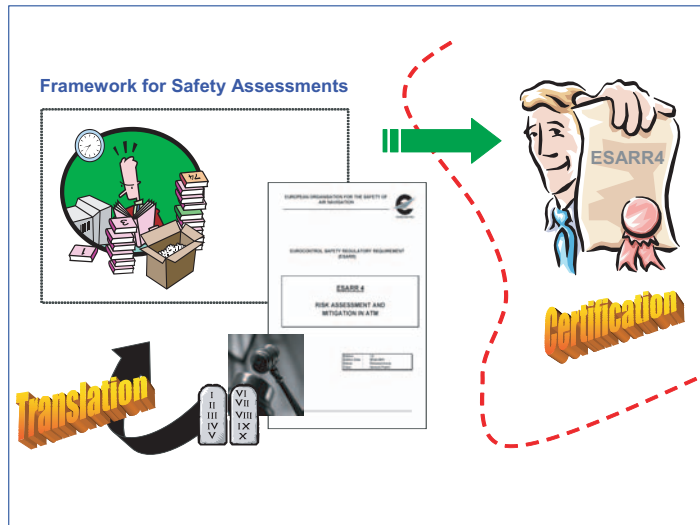


Fig 2 - ESARR4 certification project

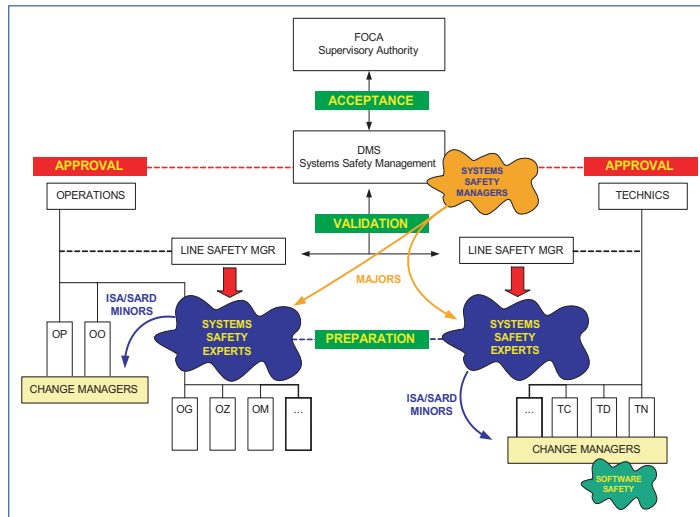


Fig 3 - Decentralized Safety Organization

version of the framework by the end of March 2006 and to provide intensive staff training within the operational and technical departments where an appropriate decentralized Safety Organization is currently being deployed.

When considering Risk Assessment and mitigation issues, skyguide has now to make a step forward by ensuring the deployment and the appropriation of its solution to ESARR4 within the operational and technical departments. This is obviously an important pre-requisite to the compliance audit currently planned by FOCA between October and December 2006.

However, those having particular needs before adequate training has been provided shouldn't hesitate to have a look at the documents available on skyline ([http:// skyline/skyguide/controller/safety](http://skyline.skyguide/controller/safety)) or to contact directly the Systems Safety Management unit.

And please, stop worrying about ESARR4...

just take some time to discover and use our framework!

By STÉPHANE BARRAZ
Head of Systems Safety Management

Update on the Honeywell transponder issue

A brief recap: skyguide discovered in 2004 that some types of transponder can revert to stand-by mode unintentionally, without having been commanded by the crew! With the TD and DM divisions it has been possible to find out rather quickly what was the actual source of the problem (the transponder itself).

It has to be noted that a «dormant transponder» implies the non-functioning of all safety nets, in particular of TCAS, which is the last safety barrier before a possible mid-air collision.

Since the discovery of the issue there have been some more or less successful measures taken (have a look at the last safety bulletin for details). This short article brings you the latest news and an update of the long lasting story regarding the Honeywell transponders.

An airworthiness directive (AD) has been issued in August 2005 by the EASA and is valid for all European operators. It gives them until May 2006 to fix all faulty Honeywell transponders. In the meantime, Honeywell has modified 322 out of the 1346 incriminated units of the PRIMUS and EPIC transponders. The bad news is that the European AD is not applying to all non-European aircraft, many of them flying with US-registers. Therefore, a non-European aircraft could still cruise with a faulty transponder in our skies in summer 2006. But all indicates now that the FAA will issue soon a similar AD valid for all non-European aircraft as well. But the deadline is for sure after summer 2006.

As you can see, things are moving, slowly but still, they are moving!

By the way I dare to say (it is not shouting about victory) that the number of occurrences have decreased these last months (have a look at the table below).

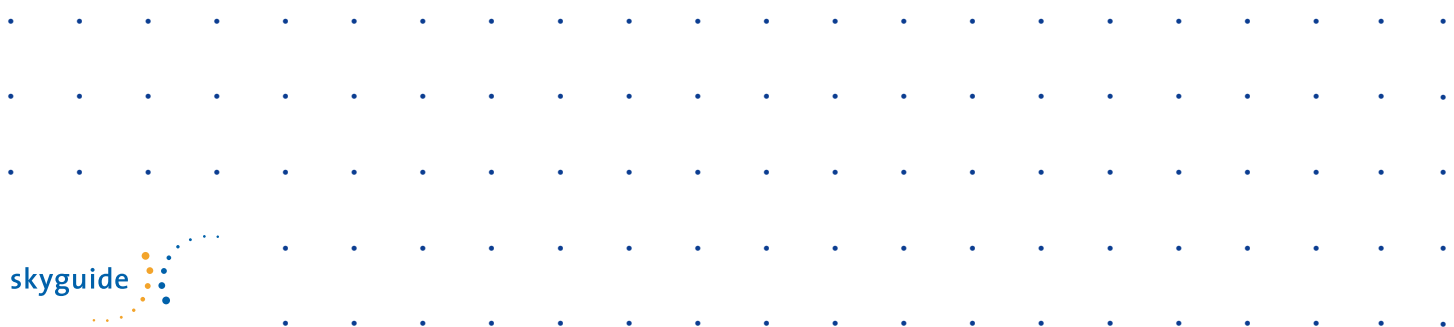
If you would like to have a look at the Honeywell AD and the technical newsletter:

[skyline/issue/safety/honeywell transponder](#)

CHRISTOPH GILGEN
Safety Officer Geneva ACC/UAC

YEAR 2005					
JUL	AUG	SEP	OCT	NOV	DEC (til 12th)
7	5	2	1	0	0

Graph: number of OIR reporting loss of tracks due to transponder failure (experience usually demonstrates that reporting only shows the peak of the iceberg, therefore the numbers may well be more important than presented here)



Airbus and parachute flight

Event description:

A crossing between an A321 inbound to Zurich and a PARA Beromünster (type:PAC750) led to an AIRPROX in the Zurich ACC West Sector in the vicinity of WILVOR. The traffic load according to RE/RP West was medium. The position RP-West was handled by a licensed Air Traffic Controller and a trainee.

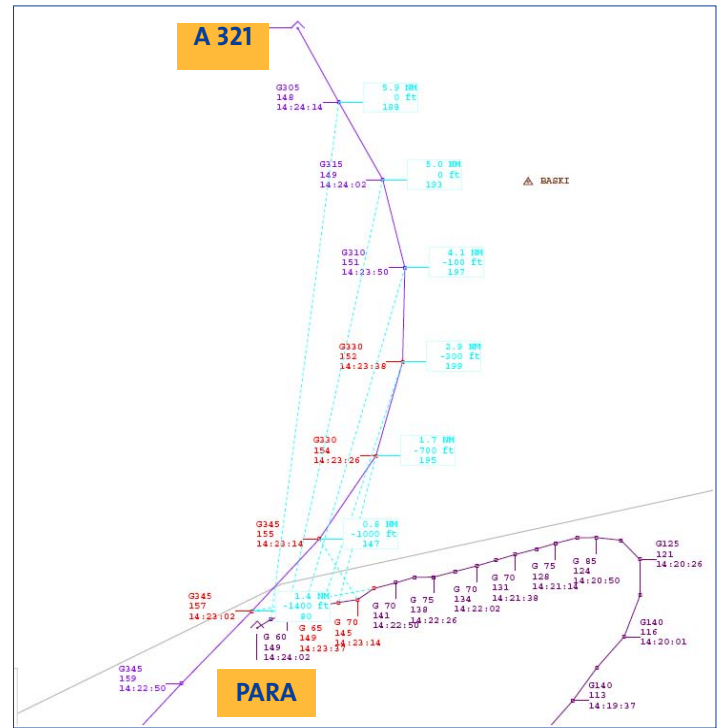
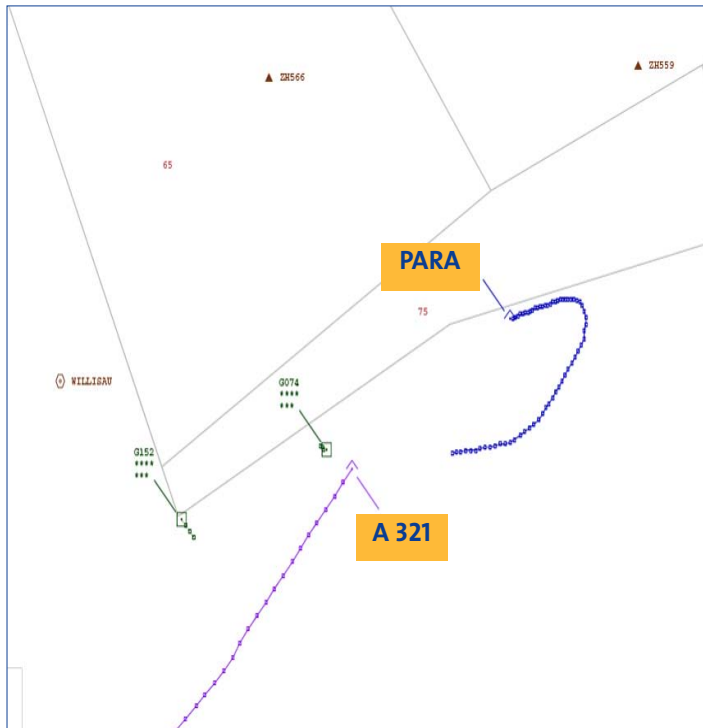
The A321 on the DOPIL1G arrival inbound to Zurich was cleared to

descend to FL 160. At the same time, PARA Beromünster was authorized to climb and to drop at FL 150 by RP West. This information did not reach RE West. The PARA was attributed code A4272 from the Delta Sector and this code correlated with a former not activated PARA flight from Locarno in the Radar system as «LOCA140» and was displayed as such on the Radar screen. Delta informed RP-West about this mis-correlation. This correlation was visible for several minutes and RE-West

re-cleared the A321 to FL 150. The label «LOCA140» was then interpreted as «local PARA cleared to FL 140». At a distance of 5NM/1000ft, both parameters decreasing the A321 had passed FL 162 for FL 150, the correct label «BERO150» appeared on the Radar screen.

The minimum separation measured by the Radar recording was 2.9NM and 300ft. The A321 had crossed the flight path of the PARA by 2.9NM already and was going through FL

152 for FL 150, while the PARA was at FL 145 climbing to FL 150 in the back of the A321. STCA triggered at the moment that the A321 came through FL 157 and the PARA through FL 143, horizontally separated by 1.4NM on a crossing track of a 80° angle. The ATCO turned the A321 direct to GOPIL while the A321 established visual contact with the PARA and had the intruder on TCAS. No RA was triggered.



► Airbus and parachute flight

Conclusion:

Since this investigation doesn't operate in neurological or psychological fields, the conclusion will only adhere to a statement that something in the environment changed the RE W conception of the traffic situation. A human-human coordination breakdown left the RE out of

the loop in the recognition of a technical problem. The combination of this led to an unsafe clearance and a separation minima infringement of 2,9nm/300ft.

Emerging considerations:

The Problems with Para jumping

that this investigation came across are multi-faceted. The current procedures represent a very efficient and flexible use of airspace and seem to work well most of the time.

However with the actual debate on frequency separation in mind, this item should also be considered here.

During the investigation several ATCO's stated that it is very difficult and time consuming to keep track of the paras movements (especially climb/descent) while handling own traffic.

NICHOLAS SCHERRER
DMO Zurich

Gliders on the edge...

Last summer, two incidents involving gliders and IFR traffic happened...

An Airbus, inbound Geneva, was under radar vectoring on a right hand downwind for runway 23 and cleared down to 7'000 ft. As it was passing 7'300 ft, the crew reported: «We saw a glider in front of us at about 300 or 500 m maximum, diving under 45°, crossing our altitude and our track from right to left». This glider, was flying at the lower limit of TMA 3, very close to the edge of TMA 5, in the region of Montricher.

Due to this encounter, the IFR crew had to disconnect the auto-pilot, but did not take any other avoiding action as the glider was flying away. In their report, the pilots estimated the minimum distance of about 300m maximum.

No information about gliders was broadcast on the ATIS, as no gliding zones were activated in that area when the incident occurred.

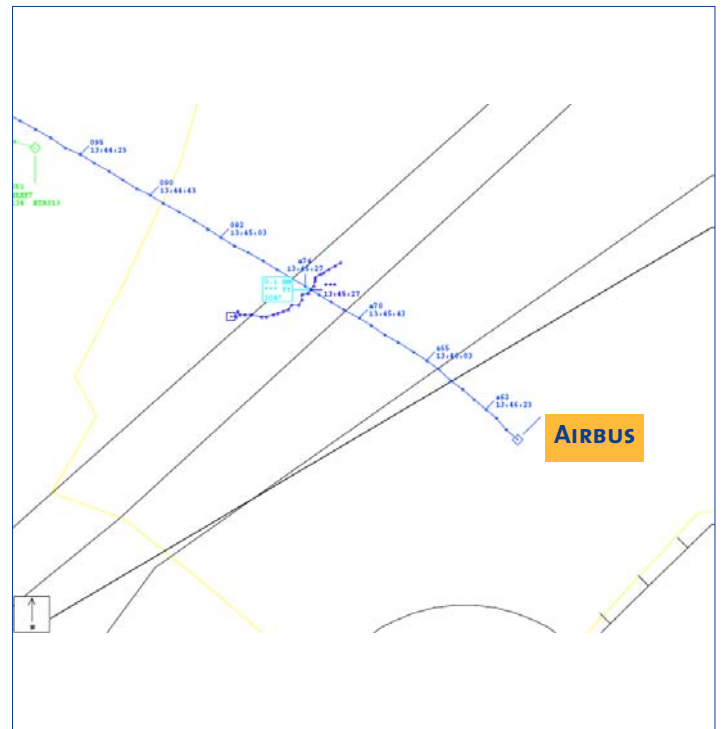
In order to have a better awareness, the crew mentioned in its report that they would find it useful that the gliding zones would appear on the GVA Approach charts.

The second incident took place just below TMA 4 in airspace Echo.

This time the IFR traffic, which was also an Airbus, received an anticipated descent clearance down to 7'000 ft and flew into E airspace for a short while. During their descent, the crew reported, on the Arrival frequency, having crossed a glider: «sur le jura, séparation très proche*». Later, on the Apron frequency, the crew even talked about a «quasi-collision avec le planeur sur le Jura**».

Measures were taken in order to prevent such incidents with a service order (SO OG 2005-019E), which is instructing ATCOs to stop all IFR descents at FL80 within TMA 4, in order to remain in airspace Charlie at all times.

XAVIER HENRIOD
DMO Geneva



All internal reports are available under:
[Skyline/safety homepage/occurrence/investigation reports/internal](https://www.skyline.ch/safety/homepage/occurrence/investigation-reports/internal)

* Over the Jura, very close separation
** Almost mid-air collision with the glider over the Jura

Can you operate safely

without
the
whole
picture
?

OIR information is vital in providing the full safety picture to the organisation

**DO YOU HAVE ANYTHING
TO REPORT TODAY ?**