

**From:** ATSB Officer  
**Sent:** Monday, 6 August 2012 7:10 PM  
**To:** Sangston Ian  
**Subject:** RE: [SEC=UNCLASSIFIED]

Thank you for your comments

I do agree that the ATSB analysis methodology is robust and provides a good source for retaining evidence, arguments and analysis to support a logically defensible report. I have on a number of times asked you about your understanding of the methods normally used to manage high safety levels normally found in commercial aviation, and you quote the relevant sections of SIIMS that define the different types of safety factor.

The difference in the expected safety levels across civil aviation varies by one to a hundred thousand. At the lower end of our target audience, regulatory compliance provides the most effective safety tool, as demonstrated by the well received avoidable accidents series. At the opposite end of our target audience, (the one that our minister requires us to focus on), regulatory compliance is only the start of the game, and is relatively insignificant compared to the tools and philosophies, and the corresponding evaluative and investigation tools that must be used when investigating for the much higher expected safety levels for high capacity or turbine operations.

I have, and intend to continue to use those tools when investigating occurrences with a high expected safety level, however I have had varied success in convincing reviewers of the validity of my arguments.

I believe the last bureau-wide training or education on safety management, high reliability organisations, defences in depth, error management, and similar subjects happened around 2006. Since then, I am not aware of any training more sophisticated than Diploma level subjects. All your teams can investigate and comment effectively up to a regulatory compliance level, however the ability to make useful statements on the management of higher safety levels is patchy at best. I find that the biggest risk to the quality of my reports is based on who reviews them. I have little problem with low safety expectations, such as the recent Tiger Moth job, but life is different when considering a number of accountable stakeholders.

These statements are fairly confronting, and I do not enjoy making them. However, they should to be supported by facts.

The Moorabbin midair investigation was reduced to an argument that the deceased pilot had an obligation to see and avoid, but he didn't, so there was the justification for the occurrence. The interaction between him and ATS was discounted because the influence of ATS input could not be assessed.

Norfolk island has been reviewed by many different reviewers. I was then presented with wildly varying opinions about what should, or should not be included in the report. These reviews demonstrated to me a concerning inconsistency in knowledge about safety management among the investigation staff.

There has been an alarming inconsistency in understanding about what is an 'organisational issue'. I have successfully argued for statements about the lack of organisational issues not to be included in the Norfolk Island and 'Tiger One' reports, and I was unhappy to see unflattering comments in Pprune about 'no organisational issues' in the analysis of the Darwin Brasilia report

. These facts lead me to believe there is little understanding of what an organisational issue actually is, and when it is, or is not important. I believe this lack of understanding is widespread.

Many of my arguments that have been rejected have been ones where I have applied safety management methods and tools, and those arguments have been rejected by a reviewer who looks from a regulatory viewpoint instead of a safety management viewpoint. Yes, regulatory arguments are the easiest to defend, but the maintenance of high reliability, complex systems must rely on so much more than only regulatory compliance. To make useful comments on these matters relies on our belief in, and use of, contemporary safety management theories and methods. To

me, this was particularly evident when CASA's Norfolk island audit report came into our hands, and some of the arguments I had tried unsuccessfully to include in the report were subsequently included on the basis of CASA's findings, not mine! When I have to rely on CASA's opinion to persuade the ATSB, How can I claim that the ATSB is independent when it investigates CASA?

On your instruction, I have emailed \_\_\_\_\_ 2 or 3 times to participate in the analysis review, and received no response. I do not believe I would be welcome in this committee.

I agree that we have adept writers in the Bureau that rely on critically considered and thorough evidence tables (that after all only capture our intellectual arguments and considerations). What we are missing is consistent methods, theories and knowledge among those writers to provide good arguments about the application of effective safety management principles in high reliability processes. I do, like some people here, know how to apply these principles, and I am also of a firm mind that this is the correct way ahead to maintain the reputation that we need.

Cheers,

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