

The Secretary
Senate Standing committee on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
CANBERRA ACT 2600

AUSTRALIAN SPORT AVIATION CONFEDERATION (ASAC)
Submission to the inquiry into the Administration of the Civil Aviation Safety Authority
and related matters

Dr. R. J. Hall
President ASAC
June 29, 2008

INTRODUCTION

ASAC¹ on behalf of Sport Aviation is pleased to contribute to this enquiry, but is a little surprised and perhaps a little concerned that this enquiry should be called at this time, given the broader discussion on aviation policy leading to a proposed green and then white paper introduced by the Minister.

This timely and well received initiative of the Minister will put these and many other questions into a broad context and will lead to a balanced and more comprehensive approach to future aviation policy. Sport Aviation hopes that this enquiry will do nothing to pre-empt or upstage this important initiative of the Minister.

Overall, while there remains more to do, Sport Aviation strongly supports the direction taken by CASA senior management over the period from 2003.

Nevertheless, because of the following facts, perhaps is appropriate to deal with some of these issues in a shorter timescale and it is in this context that ASAC is happy to comment.

BACKGROUND

I have been President of ASAC for some years now and before that I was firstly, Chairman of the Operations Panel, and then, President of, the GFA (Gliding Federation). Professionally, I am a chemical engineer with extensive experience in complex mathematical models, including risk assessment models. As a consequence I have been responsible for discussions with the regulator in its various guises for nearly 20 years now. Accordingly I am able to comment with some authority on the success of interaction between Sport Aviation and the regulator over the years.

Overall, I can say with confidence that current senior CASA management have turned that interaction around so that it is now open and transparent and effective. Provided we have a good case to put, the current CASA senior management has listened and worked towards an outcome satisfactory to both sides – always provided it delivers good safety outcomes.

In particular Mr Bruce Byron, as CEO of CASA, and Mr. Greg Vaughan, Group GM for General Aviation, have understood the importance of self administration to Sport Aviation and have set out to put this important concept on a firm and ongoing basis. Because of the nature of our operations, Sport Aviation needs to rely on a different approach to safety regulation which depends on pilot responsibility for good safety outcomes, backed by effective pilot training and education and assured by expert peer supervision

¹ Australian Sport Aviation Confederation which includes gliding, (GFA), hang gliding (HGFA), Parachuting (APF) ballooning (ABF) and aero modelers (MAAA).

and surveillance. This approach has delivered, over more than half a century, international benchmark safety outcomes and a vibrant and expanding aviation sector.

This allows CASA to concentrate on the protection of the travelling public with the knowledge that the Sport Aviation Organisations will deliver good safety outcomes on their behalf.

In this context Sport Aviation is aware that AOPA has the view that CASA needs to concentrate more on the travelling public and less on General Aviation (GA). While Sport Aviation understands and supports AOPA in the difficulties referred to, Sport Aviation believes that these difficulties have a different source.

The current CASA senior management and particularly its CEO, Mr Bruce Byron have taken on the very difficult job of turning the 'culture' of the regulator around while maintaining a functioning regulator.

The old culture was dependant on the view that the maintenance of good safety outcomes depended on the imposition and enforcement of centrally imposed, prescriptive, mandatory rules. These rules were implemented by CASA field officers who saw it as their responsibility to make judgements and impose these rules with vigour when they thought it appropriate.

The result was, all too often, arbitrary but rigid imposition of the letter of the law.

This culture prevented the transition to a modern risk management approach to safety regulation. And, equally seriously, created a distrustful and confrontational relationship between CASA and the industry.

While some consequences of this old culture remain to be rooted out, current CASA senior management has largely turned this culture around. This job was particularly difficult because many CASA officers believed that the old ways were essential to the maintenance of standards and that it was their duty to oppose these essential changes.

For some, reliance on a rigid, centrally imposed rule set is comfortable because it creates a 'cocoon of safety' which is seductive. But this approach actually delivers poor safety outcomes and must be eliminated.

Further, CASA senior management had to manage this essential change so that they took both CASA employees and the industry along with them while at the same time maintaining CASA as an effective regulator. This was by no means an easy task.

The task involved a fundamental change in attitude by CASA field officers AND a change to the nature of the rule set used.

Both are well in hand and it is clear to us that CASA is moving in the right direction.

However, as a direct consequence of this, and during this time, CASA has been subject to heavy criticism which comes from two sources.

1. Those who were convinced the old culture was essential to good safety outcomes criticised CASA for making these changes.
2. And those who understood the need for these essential changes but not the difficulty in achieving these without damage to the organisation, criticised CASA for not making these changes quickly enough or even 'talking the talk but not walking the walk' as it were.

The fact that CASA gets about equal amounts of criticism from both sources indicates the difficulty of the job faced and the fact that CASA senior management has probably got a very difficult balancing act about right.

Much remains still to be done but it is very important that those in power – particularly the Government – understand that there remain forces which would like to see a return to the comfortable ways of the past, where the regulator simply lays down the rules and individual operators simply abide by these rules (the ‘cocoon of safety’). If this view is given succour and hence allowed to delay this transition in progress then the effect in today’s aviation environment would be very poor safety outcomes indeed.

I will turn now to the specific questions

1. To Assess the effectiveness of administrative reforms undertaken by CASA’s management since 2003.

The reforms have been extensive and perhaps now CASA needs to be allowed to consolidate the advantages of these reforms rather than be required to impose further change.

The following changes seem important to Sport Aviation

Perhaps the major reform is the change in culture described above. This is not so much a change in administrative structure but organisation ‘culture’. By its very nature such change is difficult. It requires time and it is clear that more time is needed for this to take full effect – but the direction is correct and essential.

From the point of view of Sport Aviation the following are important and successful changes:

1. The separation of the organisation into, Strategy and Support, and Operations; and then Operations into Air transport and General Aviation (GA), has allowed a different and more appropriate approach to Air Transport and GA which has been very positive for Sport Aviation and, I believe, GA.
2. This has been supported by a changed policy with the introduction of a risk based (rather than arbitrary) ‘Classification of Activities’ which allows CASA to more realistically identify those types of activities which require close attention (protection of the travelling public) and those which can safely be allowed to reside under GA and a lower level of audit – as suggested by AOPA.

(It is important to understand that this distinction does not mean a lower level of safety – but a less onerous requirement for documentation and external audit.)

3. The decentralisation of the organisation and a positive attempt to involve the ‘decision makers’ with field operations has, as its aim, the removal of arbitrary and inconsistent interpretations of rules and requirements in the field. This is a difficult problem which clearly needs more time to address all difficulties encountered – but this change to the administrative structure of CASA provides, probably, the best means of addressing this need.
4. The best safety outcomes depend on pilot (operator) cooperation and primary responsibility for good safety outcomes. However very different approaches are required for Air Transport Operations than for GA.

Air Transport Operations need to rely on an internal Safety Management Systems to achieved this cooperative approach to good safety outcomes, with the regulator enabled to audit both the internal SMS (internal to the aviation organisation) and the overall outcomes.

GA needs a different approach and this has been initiated by the introduction of Field Safety Officers who do not deal in enforcement but provide advice and consultation in the field. Enforcement is still required but this is provided by a separate system involving different CASA Officers. This changed structure allowed the introduction of two different approaches to surveillance – one cooperative and the other enforcement for where cooperation does not work.

5. CASA has introduced a strong emphasis on consultation via the SCC (Standards Consultative Committee) the ACF (Airspace Consultative Forum) and the ASF (Aviation Safety Forum). The CASA administrative approach makes clear to all that consultation is required – not just advised.

I am sure there are other changes – but these are the main ones affecting Sport Aviation.

2. To examine the effectiveness of CASA’s governance structure.

Good corporate governance depends on a separation of powers between policy setting and implementation. Current governance structure depends on the CEO and two Deputy CEO. This places much on the shoulders of the CEO.

This load has been supported by other members of the Office of the CEO and to a small but significant extent by the ASF (Aviation Safety Forum) – but this structure depends too heavily on the CEO.

This structure was set up to solve some historical problems and Sport Aviation is not aware of the details – but believes that the cultural changes referred to above were the necessary means of dealing with these problems and that the removal of the Board would now not be supported by many.

Sport Aviation looks forward to this change and trusts that this will be implemented in an appropriate and timely manner.

Board members need experience as Board members and need to both be, and be seen to be, free of sectional interests. Both the Board and the Director of Aviation safety need current, high level, expert industry input to decision-making. This requires a panel of experts – but this panel of experts must not have, or be seen to have, any decision-making power.

The board needs to be supported by a body similar to the current ASF to provide this essential expert aviation input.

Accordingly Sport Aviation recommends the re-introduction of a CASA Board and the retention of the ASF.

3. To consider ways to strengthen CASA’s relations with industry and ensuring CASA meets community expectations of a firm regulator.

These dual objectives can only both be met if the decisions made by the regulator are based firmly on the best risk management approaches to achieve the best safety outcome – and never on the desire to ‘control’ what individuals might do or not do. This approach must be backed by open and transparent decision making.

These objectives are current CASA policy but outcomes still need to be improved.

1. Modern Safety Regulation

Modern (21 st century) approaches to safety regulation emphasise the primary responsibility of the individual operator for good safety outcomes. This is being implemented:

- a) For operations under the control of an aviation organisation via the requirement for an internal (to the organisation) SMS (Safety Management System).
- b) For airworthiness and engineering regulation by the implementation of the EASA approach based on AMC (Acceptable Means of Compliance)
- c) And for GA by the implementation of outcomes or performance based regulations and surveillance by Field Safety Officers.

These approaches are being implemented but should be implemented with more emphasis and urgency. Particularly where GA is involved.

The implementation of modern SMS in all aviation organisations, with the associated documentation allowing easy and effective audit, is the best way of ensuring all operations – particularly Air Transport Operations – meet the very best safety standards and continue to produce improved safety outcomes.

2. Compliance, Surveillance and Enforcement.

Within a modern safety management system, as suggested above, the balance between compliance, surveillance and enforcement needs to change.

An SMS depends heavily on individual operator involvement and frank and honest exchange of problems and failings in the current system which is incompatible with reliance on enforcement as a primary process of achieving compliance. The cooperation of pilots must be obtained and it must be clear that enforcement will only be used in cases of recalcitrant behaviour.

It must be clear that enforcement will be used vigorously in such cases but no operator must ever be given reason to fear enforcement action where that operator is conscientiously attempting to be part of the safety system.

While, clearly, enforcement remains an important part of the regulator's job, it is also an essential part of this change that the emphasis between compliance and enforcement actions alters as the regulator and individual operators cooperate to achieve improved safety outcomes.

Both the Government and the regulator need to remember:

Compliance is the outcome,
Surveillance is how you achieve certainty that compliance levels are adequate
and **Enforcement** is what you do after it has gone wrong.

In regulatory systems dependant on centrally imposed mandatory rules where the regulator is seen as responsible for ensuring good safety outcomes, the regulator often relies on enforcement as a major or perhaps even the primary means of ensuring compliance, with little attempt at a cooperative and educative approach to good safety outcomes. 'If pilots won't do what is necessary, then what else can we do but mandate it and enforce it'?

This leads to two Independent Surveillance Systems.

Surveillance relying on a cooperative approach (monitoring) and forming the basis of the SMS would take place within aviation organisations as part of the (internal to the organisation) SMS.

Cooperative surveillance (monitoring) of GA operations – or those not under an industry based SMS – would be via the Field Safety Officers

Surveillance leading to potential enforcement action would be separate and include audit of the organisation based SMS and ‘ramp’ checks of overall outcomes (as now).

This dual approach would allow for the necessary cooperation between individual operators and the SMS while allowing appropriate surveillance leading to necessary enforcement action.

3. All decisions must be made on a risk management basis.

This is a current policy – but if this approach is to be relied upon to deliver world benchmark safety outcomes, risk assessment and the resulting risk management outcomes, must be of the highest quality and reliability.

To date, the regulator (CASA and now the OAR) have had significant ‘in-house’ risk assessment capability, but these have been restricted by resources available to the regulator. Accordingly, frequently, when a significant project is under way the regulator has had to outsource this risk assessment and risk management decision to external contractors.

In some cases this approach has been seen to have the advantage of being ‘independent’.

This approach has not been successful.

The Government needs to provide CASA with the resources to set up and maintain a ‘Centre of Excellence for Risk Assessment and Risk Management’.

Many of the major projects which would need this facility will be in airspace regulation and much of this expertise exists with the service provider, Airservices. The Government should consider requiring CASA and Airservices to set up and maintain a jointly owned and managed Centre of Excellence for Risk Assessment and Risk Management.

The processes used and the outcomes of studies must be made available to industry scrutiny as an essential part of their acceptance of the outcomes as arbiter of conflicting interests.

4. Consultation

CASA must continue to consult and involve the industry in all significant decisions made by the regulator so the above risk management approaches can be monitored by the industry. Risk assessment and risk management is the only appropriate means of determining the appropriate outcome where there are conflicting needs.

Bob Hall

R. J. Hall, BSc (H1), PhD