

## **JOINT STANDING COMMITTEE ON TREATIES - REQUEST FOR COMMENT ON CURRENT INQUIRY - AIRWORTHINESS PROCEDURES USA**

Thank you for your request for comment on the Senate Inquiry into the following issue.

*Amendment 1 to Revision 1 of the Implementation Procedures for Airworthiness covering Design Approval, Production Activities, Export Airworthiness Approval, Post Design Approval Activities, and Technical Assistance between Authorities under the Agreement on the Promotion of Aviation Safety and Addendum to the Implementation Procedures for Airworthiness between the Government of Australia and the Government of the United States of America.*

I note the questions put by the Committee both in the hearing and in the separate follow up questions. Those questions are relevant to the subject, I await with interest the CASA responses to the additional questions.

At the high level, in my personal opinion, this Amendment is good for the Australian aviation industry, and is something which has been pursued by industry for many years. It is unfortunate that the industry segment involved has contracted significantly over the more than ten years this has been negotiated. Nonetheless, it opens the pathway for benefits in the future.

At a lower level there are issues which relate to submissions made to the Aviation Safety Regulation Review (ASRR) in 2013/14. This was alluded to in comments and questions made by Senator Fawcett in the Committee hearing. These issues could be significant in the efficacy of making use of the Amendment provisions, and relate to the time which CASA takes to approve STCs and other approvals for aviation designs and modification, as well as the amount of approvals which CASA does or does not delegate to industry.

Australia is a small market for aviation engineering (airworthiness) by world standards. The two major airworthiness and aviation regulation jurisdictions are the Federal Aviation Administration (FAA) in the USA and the European Aviation Safety Agency (EASA) in Europe. These two agencies are the benchmark for aviation safety standards, and approval from one or both agencies is usually required in order to successfully market and sell aircraft and modifications, including the STCs mentioned in the Committee hearing and supplementary questions. This Amendment facilitates obtaining the FAA approvals required.

However as noted in the hearings, it often takes CASA a long time to approve complex STCs and similar modifications. The fundamental reason is that in a small aviation manufacturing country like Australia, CASA cannot hope to attract and retain the calibre and quantity of people required to fulfil the task required. Nor can it afford to do so. These limitations apply equally across the spectrum of CASA's activities. The problem is exacerbated by the lack of trust between CASA and industry as noted in the ASRR, which denies CASA assistance from industry to acquire at least some of the required knowledge.

In the past, CASA delegated more of the highly technical assessments to industry through a range of delegations, which meant that the experts in industry assessed the modifications and similar airworthiness amendments. The industry delegates were almost always highly experienced and technically competent engineers, who took their delegated responsibilities very seriously. The reduction in use of these delegations has added considerable time to obtaining approvals, across all sectors of aviation. During the ASRR, some of the larger operators advised delays of several months,

which cost in the hundreds of thousands, if not millions of dollars. This is untenable, unfair and a burden on industry which makes it less competitive with overseas operators.

The ASRR recommended a staff exchange program between CASA and industry (Recommendation 9), and that CASA utilise third party expertise in audits (Recommendation 27). These recommendations could and should apply equally to the STC and airworthiness approval system if approval via delegation to industry is not possible.

A related issue is that CASA should automatically approve STCs, modifications, licences and other approvals from both the EASA and FAA jurisdictions without delay. Recent examples of failure to do this include CASA sending two airworthiness inspectors to Europe to assess Lufthansa Technik, one of the world's largest and most competent maintainers, at the Australian operator's considerable expense, when it was abundantly clear that CASA had neither the expertise nor the need to carry out such an assessment. This unnecessary delay and approval of operators, pilots, engineers and maintenance organisations already holding FAA or EASA authorisations adds considerable cost and delay to Australian organisations and individuals.

One final issue is worth mentioning. It did not go unnoticed during the ASRR, and I have personally noted this during my years in industry, that CASA has often employed people who have a bias toward maximising employment in Australia, both in CASA itself and industry. A significant number of regulations in Australia have not been harmonised with FAA or EASA for no valid safety reason. For example, the cabin crew to passenger ratio in Australia is 1 to 36, but elsewhere it is 1 to 50. The example of CASA auditing Lufthansa Technik noted above is another questionable decision, which might be related to making it difficult and expensive for Australian operators to outsource maintenance to overseas providers. Months of delays in approving qualified airline pilots from overseas is another example. This is another potential hindrance to efficacy in utilising this Amendment.

## **SUMMARY**

In my opinion, this Treaty Amendment has the potential to significantly improve opportunities for Australian aviation manufacture and design.

As noted in the questioning at the Committee hearing, in particular by Senator Fawcett, and by the nature of the follow up questions to CASA, realising the potential benefits depends on CASA's ability to provide approvals in a timely manner. CASA does not have a good track record in this area as evidenced by industry submissions to the ASRR, and more recently by submissions to the CASA Industry Stakeholder survey.

To fully realise the potential benefits of the Amendment, CASA will need to significantly increase the use of industry delegations, improve its relationship with industry to increase trust and thus information exchange, and automatically approve STCs, modifications, licences, and other approvals from the FAA and EASA.

David Forsyth AM  
Adjunct Professor  
Department of Aviation  
University of NSW