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**JAN 29 2007**

Mr. Nick Stoss  
Director, Air Investigations  
Transportation Safety Board of Canada  
200 Promenade du Portage  
Place du Centre, 4th Floor  
Gatineau, Quebec  
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*Your file* *Votre référence*

*Our file* *Notre référence*  
AARQ 5002-A01W0276  
RDIMS 2191523

Dear Mr. Stoss:

**SUBJECT: Update to the Transportation Safety Board (TSB) Recommendations  
A06-08, A06-09, and A06-10**

This is in reference to your inquiries regarding TSB recommendations, which originated in the Safety Issues Investigation report A05-01 regarding Post Impact Fires.

TSB Safety Recommendation A06-08 recommends that Transport Canada (TC) and the FAA revise the cost-benefit analysis for Notice of Proposed Rule Making 85-7A using Canadian post-impact fire statistics and current value of statistical life rates, and with consideration to the newest advances in post-impact fire prevention technology. It is important to note that departments, such as TC do not select the Value of Statistical Life (VSL) to be used in regulatory-related cost-benefit analysis (CBA). The Treasury Board Secretariat (TBS) is the responsible body in Canada for revisions to VSL. TC is only one of many departments and agencies, which use TBS CBA guidelines including VSL.

Although this is not strictly an aviation issue because of its broad application, TC has contacted the TBS to make them aware of TSB recommendation A06-08. TBS staff have expressed some interest in reviewing VSL. In addition, TC stated that the Department would be interested in naming a representative to take part in any interdepartmental committee for a review. TC suggests that TSB may wish to also show its interest and willingness to the TBS to take part in any interdepartmental review committee associated with VSL rates or calculation methodology.

Since VSL is not solely an aviation issue, we believe that it would be inappropriate for Transport Canada to approach the FAA with such a suggestion. The FAA is aware of TSB Report SII A05-01 and will give the report the consideration that such serious issues deserve. TC staff is in regular contact with their FAA equivalents and will inquire of FAA intentions and rely the information to the TSB.

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The TSB report on post-impact fires in light aircraft is the most comprehensive and up-to-date source of statistics and analysis available on the issue. There is no question that TC, and we, strongly suspect, the FAA will refer to this report as an authoritative document in virtually all relevant consideration and decision-making in the future.

Regarding new aircraft production standards, TC still hold the fundamental position outlined in the Minister's response to the recommendation. We wish, however to clarify and explain that position more fully. There have been many amendments to the Airworthiness Manual (AWM) 523/FAR 23 regulations. The safety concerns identified as possible ways to prevent fuel and combustion sources from coming together are good ideas. These factors will be considered as the standards evolve. Included in such consideration will be the extent to which existing standards address the risks. It is evident that current standards provide a significantly wider margin of safety than that which prevailed before or during the 1960's when many of the aircraft cited in the report were built.

One of the factors which must be included in the regulator's due diligence is an assessment of what incremental gain will be achieved by a regulatory change. In some cases the engineering assessment may lead to a conclusion that much of the safety gain possible has already been achieved and the additional cost outweighs the benefits. These assessments will be made during all TC activities related to amending the regulations and TC will liaise with the FAA to maintain harmonization.

When aircraft are certified, the certification process consists of assessing the aircraft (and the same applies to components) against the standards in force at the time of certification. The state of design authority (typically the state of manufacture) maintains authority over the design for the life of the aircraft. Changes to the certified design do not originate from the regulatory authority. An aeronautical product designer, possibly the aircraft manufacturer, submits design proposals to the regulator for assessment against current standards. In some cases an operator or other organization proposes a modification for an aircraft or class of aircraft. The regulatory authority assesses the modification against existing standards and grants or withholds certification. This assessment is in fact a risk management process. It includes risk control in the form of certifying the modification or not.

It would be inappropriate for TC to mandate changes to current production aircraft as suggested in recommendation A06-10. As public and industry awareness of the post impact fire risk increases, manufacturers, operators or entrepreneurial organizations will design and propose technologies such as those identified in A06-10. When they are proposed, the TSB should be assured that TC will evaluate the proposals in light of its recommendations to assure the public that such modifications meet the highest level of standards possible.

Sincerely,

A handwritten signature in black ink, appearing to read 'Franz Reinhardt', written over a circular stamp.

Franz Reinhardt  
Director

Regulatory Services