

T-34 Assn. Technical Committee
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Dear Fellow T-34 Owners,

On behalf of the T-34 Assn. Technical Committee, I am extremely pleased to report that the FAA has approved the T-34 Assn. Technical Committee's AMOC (Alternate Means of Compliance). The FAA will, in the very near future, issue an amended SAIB which will name this AMOC as an approved method for compliance with the AD 2001-13-18. A three year effort has culminated at last with a relatively low cost, permanent solution to the T-34 wing spar AD which has caused T-34 owners to limit their enjoyment of this wonderful airplane and suffer with indecision for the future costs and value associated with their airplane. As previously reported this "doubler plate" AMOC developed with the help of several aviation industry specialists can be performed without removal of the wings, and will include a thorough inspection and reinforcement of the main wing spar and rear spar bathtub fitting. "Cold working" of the fastener holes is incorporated into the repair to improve the durability of the structure. This "cold working" contributes substantially to the design such that no further inspection of the main wing spar is required following the completion of this modification. The only subsequent inspection required is a penetrant and/or eddy current inspection of the rear spar bathtub fitting at intervals of 1500 or 500 hours respectively. Following the completion of the AMOC, the aircraft will be returned to its original flight envelope, i.e. airspeeds, G loads and aerobatics.

We want to thank the owners and friends of the T-34 Assn. that have contributed to the initial funding of this effort. We believe that in accordance with the Committee's charge, we have developed a lower cost, safe and effective solution for compliance with the AD that resulted from the fatal crash over three years ago. This has been an extensive investigative and technical effort that culminated in the submission of over 200 pages of documentation developed in conjunction with the description and the engineering substantiation of this modification. Although the initial funding of approximately \$100,000 was raised in the initial funding and spent carefully in support of this effort, and given the T-34 Assn. Board of Director's refusal to endorse additional funding requests, significant voluntary contribution was necessary to complete this effort. This was shouldered for the most part by GAMI and the DER (Designated Engineering Representative) Victor Juarez. GAMI has not received any monies to date from the funding and has made arrangements to retain Mr. Juarez in this effort and has made arrangements to complete payment for his services directly from GAMI.

Using GAMI's FAA approved Parts Manufacturing Authority, GAMI will manufacture and supply the kits for the AMOC "doubler plate" modification. The kit will contain the web doubler, fasteners and a few other related parts that will provide an easy and low cost source for these components. Due to the special size requirements for the fasteners involved, and the limited quantities used in the modification, the fasteners are relatively expensive and not readily available. GAMI will purchase lot quantities sufficient to equip over 200 aircraft. This will be more than \$60,000 of these fasteners and will reduce the individual kit cost of these fasteners by a significant margin.

The AMOC modification will require customized, special tooling for performing the cold working operation. We have one qualified vendor for this kit of tooling and are working on qualifying another to have a second source and offer competitive pricing. Currently, this tooling is estimated at approximately \$12,000.00. Eddy current bolt hole and surface inspection as well as penetrant inspection is required to inspect the fastener holes and bathtub fittings, respectively. This can be done either by in-house personnel, for those shops that may have these capabilities, or will need to be subcontracted at the time of the modification. Personnel performing these inspections will need to be Level II certified.

The two fuel cells will be removed and preferentially replaced with new or newly overhauled fuel cells following the modification. The sheet metal work which involves minor trimming, backdrilling, drilling, reaming and cold working is done mostly from the wheel well side of the main wing spar. The required access to the forward side of the spar is limited, yet acceptable if appropriate care and skill is exercised. It is important that whomever performs this modification do so carefully, in accordance with the instructions and be experienced in this kind of work. We are in the process of qualifying approximately 6-10 regionally located shops to perform the AMOC modification. We will have the full text of the AMOC modification available for review on our web site in the near future following the FAA's revision to the SAIB.

We anticipate the total cost to the owner for the performance of the T-34 Assn. Technical Committee's AMOC to be in the neighborhood of \$12,000 per airplane provided that no problems are found outside the normal scope of this modification. This includes the cost of the parts kit, newly overhauled fuel cells, inspections, cold work and all assembly related to the installation of the "doubler plate".

Special tooling costs and training will likely necessitate that facilities performing the modification have at least 10 airplanes planning on having the AMOC done at that location. Discussions are currently being held with several shops interested in getting set up to perform this modification. Final decisions as to who will be authorized to perform the mod will be arranged in the next 30-60 days. To sign up for the AMOC, complete the sign up form posted on the web site and forward it along with the \$3750.00 deposit and to Tim Roehl at GAMI. The kit of parts will be sold to the owner for \$3750.00 upon registration for completion of the AMOC at one of the authorized locations. Kits will be shipped when they are available in the near future (estimated 45 days). The owner will have the choice of having the AMOC performed at one of the qualified locations or at GAMI in Ada, OK.

As an adjunct to this letter, I am pleased to report that we have just returned from the AOPA convention in Palm Springs, CA, where we attended the AOPA sponsored “type” club meeting on behalf of the T-34 Technical committee. Much to our surprise, we were awarded a special plaque by AOPA for “setting the standard of type club involvement in remedying airworthiness concerns through your outstanding actions and great success in responding to the T-34 wing spar AD”. We are happy to accept this award on behalf of all those that assisted in this effort which we believe serves as an example of what “type” clubs can do to support their aircraft.

Best regards,

Tim Roehl
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