Now that spring has sprung, our thoughts turn to those of flight and flying machines. Our country continues to heal from the effects of September 11th. This was evidenced by an airshow in Columbus on March 23 – 24. Numerous World War II aircraft were flying and on display, and the airshow had a very patriotic theme.

Opening with flybys by World War II aircraft and the Star Spangled Banner, the Columbus Airshow was a wonderful experience. Among the aircraft present were: a B-17 Flying Fortress, a TBM Avenger, a P-47 Thunderbolt, a B-25 Mitchell, and (my personal favorite) a P-40 Warhawk in the colors of the American Volunteer Group/Flying Tigers.

Speaking of Flying Tigers, two of the AVG veterans were in attendance at the Columbus airshow signing their books. Frank Losonsky (a Flying Tigers crew chief) was present signing his book, Flying Tiger: A Crew Chief’s Story. Chuck Baisden (a Flying Tigers armorer) was present signing his book, Flying Tiger to Air Commando. Both gentlemen had kind things to say about Gen. Chennault, the Flying Tigers commander and later the Commander of the 14th Air Force. For those of you who have not been to the Georgia Aviation Museum in Warner Robbins, there is a very good display of Flying Tigers artifacts and photographs. If you want to learn more about them in cyberspace, the web site www.flyingtigersavg.com has useful information and publications.

For those of you who did not attend our elections in January, Lisa McCrinmon has assumed
(Continued from page 1)
the position of Deputy Chair. Since Steve Ashby was not present to defend himself, he was reelected to the position of Secretary. Mark Stuckey continues to serve as our newsletter Editor, and John Webb continues to serve as our Program Director. I must confess that our meeting in January of this year did not have the appropriate number of persons to constitute a quorum. John Webb is working on a program for Thursday, July 11, which should feature Bob Morgan, the pilot of the Memphis Belle. Perhaps during this meeting, a quorum will be present, and we can “ratify” the vote taken in January at the Downwind Restaurant.

Happy landings,

Alan

AA Flight 587: How Does Your Rudder Reversal Feel?

By Mark Stuckey

Well, the plot thickens. In our last issue I pontificated that all the world’s evils could be ended by an ultrasonic inspection of all Airbus aircraft that had similar composite tail construction to that of AA Flight 587 (N14053). Well, as has often been the case, the picture has become more complicated than that.

An ultrasonic inspection of another AA Airbus (N90070) earlier this year suggested delamination damage to the tail section. N90070 withstood extreme lateral forces during a flight in May 1997 (AA Flight 903). Ultrasonic testing of the vertical stabilizer confirmed this damage, although Airbus has continued to maintain that the damage was not significant enough to warrant grounding of the aircraft. However, the vertical stabilizer in question has been removed from N90070 and has remained available for additional inspection and testing by the NTSB, NASA and Airbus.

After the AA Flight 903 ultrasonic tests were completed and publicized, the FAA ordered additional ultrasonic testing on Airbus A300s that had undergone similar lateral load forces. These inspections, involving six aircraft in the United States, were reportedly normal. Additional visual inspections were also required (ADs 2002-07-05, 2002-06-09 and 2002-03-11).

The news regarding the damage to Flight 903, as well as facts of AA Flight 587, have unsettled several of the pilots involved with operations of the Airbus A300. A group of American Airlines pilots petitioned the FAA in March to consider grounding the entire A300 fleet. However, both the Allied Pilots Association (APA) and the NTSB have recently gone on record against grounding the entire A300 fleet.

Initial NTSB testing has suggested that another factor in the crash was the reaction of the Flight 587 pilots to the wake turbulence that apparently occurred due to a Japan Airways 747. It appears that the pilots made significant side-to-side rudder control motions just prior to the vertical stabilizer detaching from the aircraft. In a February press conference, the NTSB noted that repeated rudder reversals by pilots may cause overloading of the aircraft structure, even in those aircraft with rudder limiter

(Continued on page 3)
systems. Indeed, on Flight 587, the FDR indicated that 5 full rudder reversals were made in the space of 7 seconds before the data became unreliable.

Aircraft certification does not currently test rudder limiter systems under the repeated rudder reversal scenario, and thus these reversals can overload the aircraft structure. Such action appears to be the cause of the stabilizer damage to Flight 903 in 1997 and is a significant suspect in the Flight 587 crash.

As a result, the NTSB issued Recommendation A02-01 that pilots be fully trained on both the effects of full rudder reversals on the aircraft structure and that less than full force on the rudder pedals is needed at higher speeds to achieve the desired flight correction. Additionally, NTSB Recommendation A02–02 required that training manuals be reviewed and updated so that pilots are aware of both the danger of full rudder reversals and the safe alternatives to such action when an emergency arises during flight. However, the subtle criticism of the NTSB regarding the existent certification standards raises issues regarding (a) whether aircraft structures should be altered in a significant manner so as to withstand repeated rudder reversal (something that will cost a significant amount of money), or (b) whether rudder limiter systems should be adjusted to better prevent the rudder reversal problem from occurring in the first place.

Current rudder limiter systems are designed to prevent use of the rudders accidentally. For example, most rudder limiter systems require initial loads of 20-22 lbs on the pedals so that the pilot will not accidentally move the rudder when their feet are placed on the pedals. These systems are also designed to prevent overuse of the rudder to the extent that such action causes overloading of the aircraft structure. In the case of an A300, the limiter will prevent the rudder from moving more than 9.3° at 250 kts, while the pilot can manipulate the rudder 30° while the aircraft is on the ground.

The problem with these systems in the rudder reversal scenario is that modern commercial pilots are used to engaging the rudder at low speeds but not at high speeds. However, at high speeds, less force is needed to achieve the desired correction. For example, if the aircraft is on the ground, 65 lbs of force is required to get full rudder deflection on an Airbus A300. However, full deflection at 250 kts only requires 32 lbs of force. If the pilot is not aware of this fact, their first reaction in a high speed situation may be to “stomp” the pedals, because such force is required at low speeds. By stomping the pedals back and forth, and by doing so at high speeds, the stresses on the aircraft are drastically increased to the point of failure. It also appears that A300 simulators are currently not programmed to take this scenario into consideration, which prevents pilots from experiencing the shock of losing their vertical stabilizer when they do repeated rudder reversals.

So where does this leave us? The ultrasonic testing of aircraft having suffered significant lateral forces has already been conducted, and the emphasis on pilot training should at least keep the commercial pilot community informed of the risk of repeated full rudder reversal. It is likely that, as the NTSB investigation progresses, the weight of blame laid on these various factors will determine whether the NTSB recommends significant (and thus expensive) changes in the rudder limiter systems and the overall load capability of the composite vertical stabilizers found on these aircraft.

Cockpit of Airbus A300
The Section’s mid year meeting was opened by Chair Alan Armstrong who recognized the contribution of the membership in the success of the General Tibbets presentation last July. Alan especially thanked John Webb, Program Chair, for his many hours involved in the arrangements for the program.

After the necessary formalities, officer nominations were accepted by the Chair. The nominations for the 2002 –2003 years were: Chair: E. Alan Armstrong; Vice Chair: Lisa McCrimmon; and Secretary: Steve Ashby

These officers were confirmed and accepted by Chairman Armstrong subject to membership vote.

Chair Armstrong appointed Mark L. Stuckey Newsletter Editor based upon the excellent job Mark has done on the past section newsletters. In acceptance of the appointment, Mark addressed the need to have more section members participate in article submissions for the publication. He urged the members to submit any worthy material to him at mlslaw@bellsouth.net. Mark also commented that he intended to “spice up” some of the articles for reader interest.

John Webb was appointed Program Chair for the section. John has served the section well for many years in this capacity. Chair Armstrong commented on John’s success in the General Tibbets’ production, the fifth in a row of successful presentations. John’s acceptance speech moved beyond his past successes to address this Spring’s anticipated event. John is working to present Col. Robert K. Morgan, pilot of the Memphis Belle, at a 57th Fighter Group lunch and book signing on July 11, 2002. Space will be limited to 100 people so mark your calendar and watch for your invitation in the mail.

The Florida Bar Aviation Section has displayed an interest in a joint Georgia-Florida continuing legal education seminar. The program will likely take place in Atlanta with ICLE credit available to all participants. Stay tuned.

By Ed McCrimmon


Gen'l Joel has been a long time supporter of the Aviation Section of the State Bar of Georgia by his regular attendance at our annual programs. He was our guest speaker at our Bar luncheon a few years ago where he entertained us with thrilling stories of his P-38 Lightning command pilot days. From all of us at the Aviation Section, our hardiest congratulations to the Major General Joel B. Paris, III.

Lesley Smith Becomes Stearman Stunt Pilot

As a result of the hard work, encouragement, and dedication of Section Liaison Lesley T. Smith, the Aviation Section of the State Bar of Georgia recently presented Lesley with a gift certificate for a bi-plane ride in a PT 17 Stearman. The gift certificate is good for one year commencing on January 1, 2002, thereby giving Lesley time to muster her wings and soar with the roaring radial engine of the mighty Stearman into the wild blue skies of Georgia.

As always, we express our sincere appreciation to Lesley for all she does for our little band of aviation enthusiasts and lawyers at the Aviation Section.
By Joel Sherlock

Arthur Alan Wolk is a prominent aviation safety advocate and aviation attorney from Philadelphia, Pennsylvania. AVweb is an aviation informational website for pilots, aircraft owners, and industry. The feud between the two reached critical mass last June when Wolk sued AVweb, its editors, and four of its subscribers, for defamation stemming from comments about Wolk which were published on the AVweb site. The suit seeks compensatory and punitive damages in an amount in excess of $100,000.00 plus costs and attorney's fees.

The alleged libelous comments began with some editorial comments by AVweb editors Michael Busch and Joseph L. Burnside and continued via AVweb's bulletin board where at least four of its subscribers took aim at Wolk for his open criticism of the FAA, NTSB, and the airline industry in the wake of the TWA 800 crash and subsequent investigation. The government investigation resulted in the issuance of an FAA SFAR (Special Federal Aviation Regulation) which instituted new rules for center fuel tank safety for the airlines. Wolk took issue with the NTSB and FAA findings and on May 22, 2001, issued a press release condemning the SFAR in no uncertain terms. Wolk, an advocate of nitrogen based inerting systems, stated that the FAA had reasoned "that the cost of paying for lives lost and the aircraft would be cheaper than requiring a retrofit of a nitrogen based fuel tank inerting system...." Needless to say, Wolk's press release met with skepticism and hostility by many in the industry.

In Avweb's May 31, 2001 report on Wolk's press release, AVweb called Wolk a "self-proclaimed safety advocate," pointed out a factual mistake in Wolk's release, and attempted to poke holes in Wolk's reasoning. Wolk and AVweb had already locked horns months before with Wolk warning AVweb that their "reporting" was false editorializing and ridiculing. Once the May 31 report was published on Avweb's site, the bulletin board members took over. On June 4, 2001, the four bulletin board members named in Wolk's suit proceeded to attack Wolk personally. Some of the more colorful comments made by these individuals include calling Wolk an "ambulance chaser who feeds off the misery of orphans and widows," a "lying conniving bastard," a "self aggrandizing piece of crap," "Arthur Schmuck," and last but not least, a "butt nugget."

These comments were the last straw for Wolk, who then sued everyone involved. In his complaint, Wolk, while obviously upset by the comments, showed some good humor when addressing the "lying conniving bastard" comment by stating, "in truth, plaintiff does not lie, did not lie, is not a conman and, as luck would have it, isn't a bastard either." So what then is Arthur Wolk? Well, he is a good attorney who last August won a $480 million suit against Cessna for faulty seat locking mechanisms in an A185E model. He could also be likened to the Ralph Nader of aviation safety. Whatever anyone may think of Mr. Wolk, he is zealous in representing his clients and his advocacy of aviation safety. As for this author, I adopt the Boulder Weekly's statement regarding Mr. Wolk: "It's Boulder Weekly's official position that Alan Wolk is a fine upstanding lawyer who doesn't even know what an ambulance looks like. This man - who is truly a gift to humanity upholds all that is moral and right in the American legal system. We love you, Mr. Wolk. Now, please don't sue us into oblivion."

Joel Sherlock practices primarily in the areas of eminent domain and commercial litigation in Macon. He is an active member of AOPA, a student pilot, and a life long aviation enthusiast. He served in the United States Air Force from 1988 to 1996 on both active duty and reserve as an aviation fuels specialist and was trained in aviation cryogenics. He has worked for America West Airlines at McCarran Inter-
JOIN THE AVIATION LAW SECTION

To become a member, simply complete this form and return it with a check for $15 (for the new Bar year) to:

State Bar of Georgia
Membership Department
800 The Hurt Building
50 Hurt Plaza
Atlanta, Georgia 30303

Name ____________________________
Address __________________________

Bar No. ____________________________

CLASSIFIEDS:
2 F-18s, slightly damaged

Two F-18s suffered a midair collision, yet managed to land without physical injury to their hot-shot stunt pilots (their careers are another story). The one on the left suffered significant damage to the left wing and vertical fin and rudder, while the one on the right lost the nose cone, radar unit, 20mm gun and canopy as well.