

TRANSPORT AIRCRAFT TECHNICAL SERVICES COMPANY, INC.

*An Aircraft Remarketing Services Company
Providing Technical and Remarketing Services Since 1974*

***** NEWSLETTER *****

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***"The world is a dangerous place, not because of those who do evil,
but because of those who look on and do nothing."***

Albert Einstein

YOU THINK THE TSA IS HARD ON YOUR LUGGAGE HOWABOUT THE AIRPLANES

American Eagle had to ground nine Embraer ERJ regional jets at Chicago O'Hare Airport on August 19 after a TSA officer used the airplanes' total air temperature (TAT) probes to hoist himself onto jet bridges to perform routine security checks. According to an American Eagle spokesperson, at around 5:30 a.m. one of the airline's maintenance workers witnessed the inspector trying to climb onto a jet bridge with the help of a TAT probe; upon questioning by the Eagle employee, the TSA agent admitted to using the TAT probes as handholds on eight other airplanes while attempting to check that their doors were locked.

Although subsequent inspections found no damage to the probes, the incident forced American Eagle to delay 40 flights while it spent as much as two hours checking each airplane, the last of which went back into service at 10:45 a.m. The TSA said it would retrain its inspectors to avoid similar incidents in the future.

By Gregory Polek

August 20, 2008

Air Transport and Cargo

THE LATEST FROM SEATTLE – The IAM (union) and Boeing continue their contract negotiation in locked rooms at the SEATAC Double Tree Hotel – *Boeing's best and final offer* has been revised when they gave the Union two of the three *hard points*. It appears that the only *open item* is MONEY. I'll revert to an old expression – *cuando veo yo creo! Seeing is believing!* In the meanwhile we have two items . . . one new and the other old.

BOEING GIVES GREEN LIGHT TO HEAVY-LIFT AIRSHIP PROJECT
AVIATION INTERNATIONAL NEWS July 18, 2008

Boeing has teamed with a Canadian firm to develop a massive commercial airship capable of lifting an 80,000-pound load and carrying it up to 200.... Friends in Seattle have confirmed that the lifting force would be helium – not hot air!

1020 YATES WAY – SUITE 229 SAN MATEO, CALIFORNIA 94403

jim@tatsco.com – 650.931.4326

SPEAKING OF HOT AIR AIRCRAFT FIRES SCARE THE HELL OUT OF ME I'm known by some of my old friend as, let me see... is it fearless or foolish? I used to commute to my work area, Central and South America, from Wichita (Cessna Service Engineering Department) in single engine airplanes, like the 185, 206 and 210 – come fair weather or sorta' nasty (but seldom at night – most airports closed early and they always charged more after 6PM -- **and** cocktail hour at the dealerships I was calling began at 5:30).

My introduction to *in-flight fires* began when I was cautioned about wearing my shorts while flying around The Kingdom in our USAF Air Rescue Service SA-16s - *flash fire Helms and you'll be a crispy critter.*

Speaking of The Kingdom -- the site of the worst Lockheed L-1011 accident *Flight SV163 landed at Riyadh at 16:06 GMT for a scheduled intermediate stop after a flight from Karachi. At 18:08 the aircraft took off for the final leg to Jeddah. Six minutes and 54 seconds after take-off, while climbing to FL350, visual and aural warnings indicated smoke in the aft cargo compartment, C-3. Climbing through FL220 (at 18:20), a return to Riyadh was initiated. About two minutes later smoke was noted in the aft of the cabin, and passengers were panicking. At 18:25:26 the no. 2 engine throttle was stuck. The fire had by then entered the cabin of the TriStar. Because passengers were fighting in the aisles, aft of doors L2 and R2, the captain asked everybody to remain seated (18:27:40). On final approach engine no. 2 was shut down, and the captain told the cabin crew not to evacuate. Flight SV163 landed back at Riyadh runway 01 at 18:36:24. The crew continued to a taxiway and told the tower that they were going to shut the engines down and evacuate. The engines were shut down at 18:42:18. Because no evacuation had been initiated by then, crash, fire and rescue personnel tried to open the doors. At about 19:05 they succeeded in opening door 2R. About three minutes later, the interior was seen to be engulfed in flames.*

I spoke to one of our local fireman – on his Starbuck Break – recently. *When you enter a fire damaged building, what do you note about the deceased folks?* He quietly responded *They seldom have flame damage - they were asphyxiated.* Being curious I asked – *how long does a person have to get out of a “smoke filled room”?* His face, now saddened *About a minute and half!*

My closest encounter with an *airliner fire* was in November 1957. I was in Honolulu waiting for a fellow flight engineer coming in from the *mainland* on one of our Stratocruisers (PAN AM). He didn't arrive, and we were among the aircraft asked to search for debris on our eastbound flight the next morning. Charred debris was located a few days later. I looked over the remains laying on a warehouse room floor a couple of weeks later. The insulation blankets were burned around the edges . . . I seem to recall the only “hard item” was a lavatory door – I don't think the FEDS were into underwater searches for airplane *remains* in the 1950s¹.

Our most (fire related) spooky experience was two years ago when we were commuting to an aircraft records project in central Ohio. We were on our third trip, each

¹ See Comet Airliner history for details of the extensive searches for the “remains” after the second Comet fell into the sea.

one on Delta *Regional Jets*. The Sunday morning we left, COMAIR (operating for Delta) had an *RJ* crash and burn nearby (Louisville). The only survivor was the copilot (he had lined up on the short runway). The airplane barely got off the ground when it ran into trees – the fuselage and wing broke in several places, the passengers *were doused with fuel* (which came thru the holes in the fuselage) *then ignited!* We swore off DC-10s *after Chicago...* now we have added RJs (built by anyone) to the list!

SPANAIR MD-82 crash in Madrid kills 153 . . . The MD-82 came to a rest between runways 36R and 36L with the fuselage broken in several pieces, exploding in flames and igniting a large brush fire in the vicinity of the wreck site. “*The plane struggled to get airborne, hit the ground tail-first, skidded and bounced three times over more than a kilometer before disintegrating and burning, the head of the Spanish commission overseeing the investigation, Francisco Soto, said Tuesday night.*”

At the present time the *take-off flap settings – they may not have been set – is the suspected culprit.*

EVER SEE THE WORD MCAI in an FAA document? It means Mandatory Continuing Airworthiness Information² . . . I found it while using Dick Williams’ *Aviation Data Source* A/D database for *fire, lav-fire, lav-fire & 707, fire & passenger, and fire & epoxy*. Dick has 56,630 Airworthiness Directives in his database. His search engine is fast with full Boolean search capabilities. Oh! How many did I find? **1,717** (from 1941 to today). We have been relying on “Richard” for the past ten years . . . he is a “collector” and a “pack-rat” (must have learned that in his years of flying F-4s for the Marine Corps in Vietnam and Kaneohe (Oahu)). *Google him* and look at his Menu and sample files . . . Click on SYSTEM DESCRIPTION to see the 26 items he has on his *menu*.

THE GRANDFATHER OF PASSENGER CABIN/LAVATORY AIRWORTHINESS DIRECTIVES WAS PUBLISHED IN 1974 – 74-08-09 – AFTER A VARIG AIRLINER LANDED SHORT (the crew couldn’t see) BECAUSE OF THE DENSE SMOKE IN THE COCKPIT! The 123 passengers weren’t crispy critters -- more like *smoked salmons*. It took almost a year to issue the A/D, which was followed by a court ruling after Varig sued the FAA for negligence in certifying the aircraft. The reason for the dismissal was the Federal Tort Claims Act (FTCA)– the FAA was acting in accordance with its Discretionary Authority. (Any *legal action* arising out of the 787 certification will be interesting to watch. Commentators to one of the FAA NPRMs related to *structural items* were told – *duly noted.*) More on the FTCA in the next Newsletter.

² These are documents issued by the Foreign Civil Aviation Authority of the State of Design Approval in Accordance with ICAO Annex 8, section 4.3.2. If you are a Maintenance Person (MP in my lexicon), you should be familiar with Annex 6 – if a Design Person (DP), you should be familiar with Annex 8 – or if you don’t like NOISE it would be Annex 16.

ONE MORE RELEVANT³ -- THE PILOT TRIED TO TAKE-OFF ON THE WRONG RUNWAY – ACCIDENT! I was at an *industry meeting* in Tucson on October 31st 2000 – when multiple voices echoed from the rear of the room and a person walked the aisle scanning the faces of the audience – they spotted “their prey” and invited him to step outside, only to return and select “another prey” who, when located, was also escorted out to the lobby. A few minutes later there was a “formal” interruption . . . A Singapore Airlines 747-400 had an accident at TAIWAN’S capital airport – Chiang Kai Shek (CKS). The first person to address us about the interruption was the representative of the Aviation Safety Council (the CAA of Taiwan), who had earlier made a presentation on their aviation accident investigation program – at his side was a friend of ours from Singapore Airline. We’ll quote from the “Occurrence Investigations” opening page . . . *On October 31, 2000, approximately 2317 Taiwan time (1517 UTC), a Singapore Airlines Flight SQ006, with Singapore registration 9V-SPK, Boeing 747-400 airplane entered the incorrect runway at Chiang- Kai-Shek (CKS) Airport, Taiwan. Heavy rain and strong wind from typhoon “Xiang Sane” prevailed at the time of the accident. The airplane was destroyed by its collision with the runway construction equipment and by post impact fire.* The destination was Los Angeles with 159 passengers, 3 cockpit crew members and 17 flight attendants. A total of 83 people⁴ died (including 4 cabin crews (the guys and gals that help you evacuate the airplane), and 44 were injured. Interesting to note that no first class passengers were killed or injured, but 8 upper deck & 2 lower deck business class passengers appeared (the seating chart isn’t too clear) to have died (we encourage you to view the coach class passenger death seat locations). The fuselage broke at “about” fuselage station 1580, the wing trailing edge – only two folks in the most aft fuselage (about seat rows 49 to 64) died. If you think the escape slides may help you, don’t read the factual report Table 1.3-2 Doors and slides conditions. You may not be “happy” with the failure of the overhead (carry-on) storage bin mounting hardware either (Table 1.3-3).

The Emergency floor lighting (escape path) did not illuminate, and only one door – 4 Left (there are 5 each side of the fuselage main deck) illuminated – remember – this was in the middle of the night.

Evacuation Commands

The cabin crew did not hear any evacuation commands from the pilots. Passengers in the forward, mid and the aft cabin sections were given evacuation instructions.

Evacuation Conditions

The upper deck and forward cabin sections were filled with dense smoke and fumes and it was dark and difficult to see. The visibility within the forward cabin was about arms length and only silhouettes can be seen. Fire spread to the forward cabin during evacuation. The fire inside and outside the wreckage,

³ Relevant to “personal injuries” caused by Fire – Smoke & Toxicity. (By the way, have you noticed the law firm advertisements when you *google* “aviation accidents”?)

⁴ This is approximately 46% of the souls on board (SOBs) vs 90% and 98% respectively on SPANAIR and COMAIR. NOTE: Big airplanes have more energy absorbing “crush space” and “crawl room” for exit routes – stay off “little airliners”!

poor visibility within the cabin because of smoke, the presence of fumes in the cabin and the heat from the fire hampered the evacuation process. The lack of useable exits, and the obstructions in and the orientation of the aft fuselage section also added to the difficulties.

Post Evacuation

After evacuating, cabin crew did not see any rescue personnel or notice any fire fighting activities. The pilots assisted passengers at the crash site. Some cabin crew had to guide and help their passengers to cross a drain and to get to the terminal building. Some of them were pickup by a bus approximately halfway between the drain and the terminal building. There were a lot of comments by cabin crewmembers that there were barely any first aid facilities and medical assistance provided to them including 19 of the injured at the terminal building. Most of the assistance they received were from their fellow crewmembers and passengers. When help arrived at the terminal building, there was poor co-ordination and identification of those who needed urgent medical attention.

Emergency vehicle response

Emergency vehicle time to respond tests were performed (daytime – no typhoon) after “the dust settled” -- it took up to 11 minutes to reach the crash site, but it appears the first responder arrived within 3.5 minutes. The description of the fires is very graphic – you read it – I’ve lost my *fearless feeling!* By the way, the wind was 36 knots with gusts to 56 knots (41 to 64 miles per hour).

EPILOGUE

I like metaphors and writing fiction. This report almost borders on fiction because it is so sad. The firemen had to fight the fire from the “upwind side” because of the smoke and flames. The pathology reports were not provided to the investigators so we don’t know how each person died. Blend this report with the B-2 bomber crash at Guam toxicity reports and you may have “a real horror story”.

Why did I select this topic? I just read the second response to the 787 Special Condition NPRM by Derek Yates (re FIRE – SMOKE & TOXICITY of Composites). The authorities response to the first report will be the subject of the next NEWSLETTER. In the meanwhile love often -- eat and drink a little more because, well, you never know when you will have your most frightening experience.

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JIM HELMS,
PRESIDENT