Situation #1: “The Ride Then Went from Smooth to Violent”

For a Part 135 flight crew on a night flight, maintaining wings level became a full-time job with an autopilot malfunction, severe turbulence, icing, and crew member injury.

Upon leveling off, the autopilot was not maintaining the 14,000 as selected. At 14,100, I reselected 14,000 and it corrected back down. Within seconds we were at 14,400 when I said to the Captain, “What is wrong with the autopilot, how come it won’t hold altitude?” The Captain then disconnected the autopilot and pitched down to correct for the uncommanded climb. The ride then went from smooth to violent. I pulled both throttles back to idle as soon as I was able. It was so rough that it was impossible to control your arms and legs at times. Both of us hit our heads on the breaker panel...Initially I heard a hissing sound and thought decompression and mask. Then no sound at all, we are only [at] 14,000 feet. The hissing was a burst sound and thought decompression and mask. I don’t know for sure. The Captain had a severe cut on his head and was bleeding...The airframe was covered with ice and a generator was offline.

What would you have done?

Situation #2: “Both Front Windshields Became Fully Obscured in Oil”

An instrument-rated pilot of a single-engine aircraft departed the airport on a VFR pleasure flight. The pilot contacted Approach Control and requested clearance through Class B airspace...

Clearance was obtained with an initial climb to 6,000 feet MSL. Approximately two minutes after leveling off at 6,000 feet MSL, began to notice fine oil mist on front windshields. Advised Approach of situation and requested initial climb to 6,000 feet MSL. Approximately two minutes after leveling off clearance was obtained with an initial climb to 6,000 feet MSL. When I got to the left-hand forward fuselage area, I noticed numerous lightning strikes on the skin starting from the nose radome working aft past the wing-to-body fairing. Upon further investigation, I found the left-hand forward alternate static port had 3 each lightning strikes which had welded the surface of the static port...In my experience this was a pretty good strike, and I had not even been up to the aft fuselage or the tail yet to look for the exit point...What was puzzling was the clean book with no pilot report from the flight crew, I assume with this much damage the flight crew would definitely know if they had been hit by lightning.

What would you have done?

Situation #3: “I Noticed Numerous Lightning Strikes on the Skin”

A maintenance technician performing a service check on a B737 noticed numerous signs of lightning strikes, but was puzzled by the absence of a report from the flight crew.

What would you have done?

Situation #4: “The Aft Jumpseat had Broken…”

The presence of Flight Attendants in the cabin during landing ensures that in case of an incident (such as an aircraft evacuation), safety leadership will be provided to the passengers. When a Flight Attendant jumpseat breaks on a full aircraft, that Flight Attendant must be seated somewhere else for landing – but where?

About 3/4 into our flight we received a call from the B7 Flight Attendant jumpseat had broken and was now uninhabitable and unsafe to occupy. Apparently it had come off of a support mechanism and was leaning at a steep angle toward the floor. For this flight, we had 137 passengers, 3 Flight Attendants, and one rider on the fourth Flight Attendant jumpseat.

We queried if the jumpseat would be safe to occupy for on a full aircraft, that Flight Attendant must be seated somewhere else for landing...What was puzzling was the clean book with no pilot report from the flight crew, I assume with this much damage the flight crew would definitely know if they had been hit by lightning.

What would you have done?
and reported the previous day. A conditional inspection was performed by contract maintenance with no defects noted
and the aircraft returned to service. It then flew for the better part of two days before the service check
here in ZZZ where it was caught. The aircraft was towed to the hangar line
in the morning and they have since found a melted static wick on top of the
vertical stabilizer and apparently it is now scheduled out of service for the next
3 days to repair the damage found.

Situation #4: “The Aft Jumpseat had Broken...”

■ The First Officer and I discussed having the ‘B’
Attendant and fourth rider sit in the cockpit jumpseats for
landing. We both felt that this was the safest alternative.
Of the 137 passengers, there were none authorized to sit in
the cockpit. We decided to have the ‘B’ Attendant and fourth
rider in the cockpit for landing for their safety.
I did think of the fact that in the event of an evacuation,
there would be no Flight Attendant at the rear of the
aircraft. However, I felt that I needed to opt for the safety
of the Attendants during the landing and rollout portion of
the flight. I did not want them just holding onto something
in the back for the unlikely event of an evacuation.
We arrived [at destination] uneventfully and the aft
jumpseat was deferred via the MEL. Additionally, we
informed Ground Operations of our situation.
This situation probably had no perfect solution – but what
would you have done?

Meet the Staff

Richard (“Rich”) Bourque joined the ASRS staff as an
Aviation Maintenance analyst in April 2007. Rich has a
long-time association with the ASRS program as a
maintenance representative on the NASA ASRS Advisory
Subcommittee. In his years with the ASRS Advisory
Subcommittee, Rich helped develop the ASRS maintenance
reporting form and encouraged aviation maintenance
technicians to support and use the ASRS program.
Rich has a long and distinguished career as an Airframe/
Powerplant Inspector, mechanic, and leader of a Local
Lodge of the International Association of Machinists and
Aerospace Workers. In his early maintenance career, he
served with the U.S. Marine Corps, an East Coast FBO,
and Western Airlines in San Francisco. In 1985 he joined
United Airlines in San Francisco as an Airframe/Powerplant
mechanic, eventually rising to the position of Inspector.
During this same period he held a
variety of offices with Local Lodge
1781 of the IAMAW—including
President. Rich retired from
United in April 2007.
Outside ASRS, Rich enjoys his
family, politics, music, natural
sciences, ice hockey, his dog,
motorcycles, gardening, live
theatre, horse riding and
racing—and always airplanes.