

## Scissors and Stalls

A section of A-7 Corsair IIs was performing tactics as part of fleet replacement squadron training. The instructor pilot (IP) felt the replacement pilot (RP) needed additional work in the "rolling scissors," so the flight set up for a repeat maneuver.

The Corsairs were at 20,000 feet with the IP on the left, RP on the right. The IP pulled up and rolled into the RP to begin the maneuver. Shortly, the IP's aircraft was in a nose-high attitude. The A-7, he recalled, became "unresponsive to control inputs." The IP bunted the nose slightly forward to avert a departure because "it felt strange."

Then, recognizing a departure, the IP disconnected the automatic flight control system and released the controls. "I've departed," he transmitted.

Believing he had adequate airspeed for the maneuver he was performing, the IP assumed an aircraft malfunction had caused the departure. The A-7 pitched nose down to about 90-120 degrees nose low. The IP experienced a "weightless" sensation, followed by negative G, with helmet pressed against the top of the



canopy. He pulled aft on the stick, watching the angle of attack (AOA) gauge but noted no change in AOA and no aircraft

response. He pushed himself back into the seat, still believing the Corsair had suffered a malfunction, and deselected yaw stab. He tried to determine his AOA, airspeed, and altitude and recalled the AOA "approaching zero" units, airspeed "increasing," and altitude "above 10,000 feet mean sea level." A moment later, the altitude warning alerted the pilot that he was descending through 10,000 feet. Convinced he was in uncontrolled flight, he decided to eject.

The pilot tried to reposition himself for ejection by pushing off the canopy with one hand and grasping the ejection handle with the other. Just prior to initiating ejection, he used both hands to pull the handle. He felt "weightless" at the time of ejection, and off the seat.

The seat started up the rails but seat motion was arrested at the canopy. Instead of the immediate fracturing of the glass, there was an excessive acceleration in the vertical axis with the pilot's body out of the seat. As the seat left the aircraft, eight of 28 parachute suspension lines were partially cut by canopy glass and subsequently parted when the parachute opened.

The pilot had no recollection of ejection, parachute opening or ground impact, although he vaguely recalled that his chute was a "streamer" and seemed "rectangular, not round."

The pilot lived but sustained fracture-dislocation of the spine, resulting in paraplegia.



**Grampaw Pettibone says:**

Great jumpin' jets! Where were the supervisors here? This pilot hadn't flown a tactics flight in two months, which mighta had somethin' to do with his gettin' into a departure. The squadron shoulda done a better job of scheduling. The tragic lesson here for pilots: if things turn to worms and you must punch out, get firmly positioned in the seat, otherwise the consequences can be dark indeed. This flyer gave it all he had but he was in a vertical stall flight situation – which was not yet described in NATOPS (Naval Air Training and



Operating Procedures Standardization), by the way – and couldn't press himself into the seat before pulling the handle. He had to leave the machine while in a negative-G condition.

We're not flyin' A-7 tactics anymore, but in any ejection seat aircraft, the message is clear: ejection without being firmly seated is out of the envelope. Tight belts and harnesses may be uncomfortable, but the possible consequences are worse.

## Command Decisions

A C-12 departed NAS Overseas for NAS Destination on an overwater flight with an island refueling stop. En route the crew experienced difficulties maintaining cabin pressure. A lower altitude was selected and the *King Air* completed the flight. The C-12 was to return to home base next day.

NAS Destination Beechcraft (BASI) technicians troubleshot the system and discovered foreign object damage to both bleed-airflow packages. Replacement parts would arrive in five to six days. The transport plane commander (TPC) was reluctant to make the return flight before repairs were made due to forecast seasonal weather and the higher fuel consumption expected at lower altitude flight. Home Base ops concurred the crew should wait for the parts.

By the fifth day, Home Base grew impatient and directed the crew to return by any available means if the parts did not arrive within 24 hours. BASI techs, meanwhile, told the TPC that another three to four days' wait for parts/repairs was required.

At Home Base, the decision was made to reinstall the damaged parts with the condition that the TPC sign a statement releasing BASI of all liability for the aircraft's safety of flight.

The Home Base CO asked the TPC if he had any reservations about flying the aircraft home. The TPC agreed to make the return trip.

En route the TPC maintained 21,000 feet but had to divert to a civilian field 300 miles short of Home Base due to high fuel consumption. Because of weather and

crew flight-hour limits, the crew remained overnight and safely completed the journey next day.



Grampaw Pettibone says:

This one lights my fire, gents. Nobody got hurt, but I bet the stress levels of the TPC, BASI techs, and Home Base CO were toppin' the scales before this sorry episode ran its course. Turns out that in the past, the TPC had been intimidated by the CO. The TPC had 2,000 hours in the C-12; the CO held no qualification in the *King Air*.

What ifs don't mean an awful lot, but "what if" something had gone wrong on that return flight and it was discovered that damaged parts had been removed, then reinstalled? "What

if" the crew became hypoxic? "What if" all day. One of my old skippers (God rest his soul) always asked, "How will the accident report read? Soberin' thinkin' that always seemed to put the right amount of top rudder on every decision.

Gramps appreciates the pressures endured by our COs, but I've never been partial to leadership by intimidation and fear. It kills morale, confidence, and sometimes, even people.

