

## Mentor Malady

An instructor and his student were practicing approach turn stalls (ATS) with gear and flaps down in a T-34C. Beginning at 7,500 feet msl, the student executed a satisfactory ATS to the right but was a little rough with rudder control on the first two ATSS to the left. On the third, the aircraft dipped a bit on the wing so the instructor recommended that the student let out a little more back stick and not kick the rudders so hard on recovery.

The *Mentor* began the fourth ATS to the left at 6,500 feet. The aircraft had lost about 300 to 500 feet per maneuver up to this point.

At the stall, the student added full right rudder, maximum power and right aileron. The aircraft rolled steeply to the right as the power was added. The instructor told the student to let out some back stick because a secondary stall buffet was felt.

The student actuated the rudder pedals vigorously and the aircraft rolled rapidly to the left almost "standing on its left wing."

The instructor took control of the aircraft and quickly checked to see that power was at maximum. He raised the flap and gear handles to prevent damage in the event of excess stress. He tried to roll the aircraft back to wings level by "kicking" right rudder and moving the stick out of his lap and to the right.

He then realized that the aircraft was inverted as he felt himself hanging in the seat harness.

Now disoriented, he realized the aircraft was rotating and noted that the altimeter was indicating descent. Neither flyer noticed an airspeed reading while inverted. The instructor looked out of the cockpit but could not find the horizon and concluded he was in an inverted spin. He added right rudder and neutralized the stick. The revolutions continued and the instructor could not gain control of the *Mentor*. He tried back stick, forward stick, neutral stick and full right rudder without result.

When he saw the altimeter unwinding through 5,500 feet, he gave the command to bail out and opened the canopy. The student went first, dropping straight out. The instructor was hung up momentarily but quickly worked himself free. While in his chute, the student saw the T-34 in an upright position, left wing down, just



before impact with the ground. The aircraft was destroyed. The men landed in a field about 50 yards from each other.



**Grampaw Pettibone says:**

Great sufferin' stalls! Goes to show ya that trouble can find you in any aircraft — big, small, fast or slow. He don't care much if you're a high flyin' fighter or a primary flight trainer.

Looks like the student flew the bird into a secondary stall and got the machine up on that left wing. When the instructor took over, his initial control inputs were correct — for a normal approach turn stall recovery. The T-34 had gone beyond that point, however, and was at least in an unusual attitude, a post-stall gyration that was a might violent. It's all hindsight but could be that if the instructor realized when he took over that the *Mentor* was already in an unusual attitude, he might have been better off neutralizing the controls. He ran out of time, though, because ATSS are supposed to be completed by 5,000 feet and he was fast nearing that altitude.

The T-34 NATOPS, by the way, is a bit short on inverted spin entry info, post-stall gyrations and incipient spins. It does say that inverted spins are difficult to achieve and doin' 'em on purpose is a no-no.

It was also noted that the majority of instructors in the T-34C community come from fixed-wing, multiengine or helicopter backgrounds with little or no

training in uncontrolled flight.

Maybe so. But the main message is: If you're gonna do such maneuvers as ATSS, be prepared for the worst of consequences and save yourself and your aircraft with smart procedures. Wouldn't hurt to hold some special briefings on such matters in Mentor country, and maybe adjust the NATOPS manual somewhat.

## Boomin' Around

An *Orion* pilot had landed at a naval air station and was taxiing the aircraft between a row of P-3s, the tails of which were oriented inward toward the taxiway. The pilot felt he was in extremely tight quarters due to extensive ramp construction and the proliferation of *Orions* in the area.

He directed his copilot and flight engineer to look out the right side of the aircraft to ensure proper clearance was maintained as he motored the patrol plane along the taxiway's centerline under control of a lineman.

As the P-3 passed the second *Orion* in the row on the right, the pilot asked the flight engineer, "How are we doing over there?"

"It looks a little tight," the flight engineer responded, giving a thumbs-up signal, "but we're OK."

The lineman signaled the pilot to make a left turn into the assigned parking spot. As the four-engine bird swung slowly to port, the MAD boom — which extends from the tail of the P-3 — struck the MAD boom of the aircraft just passed on the right. There was damage and an aircraft incident investigation was conducted.

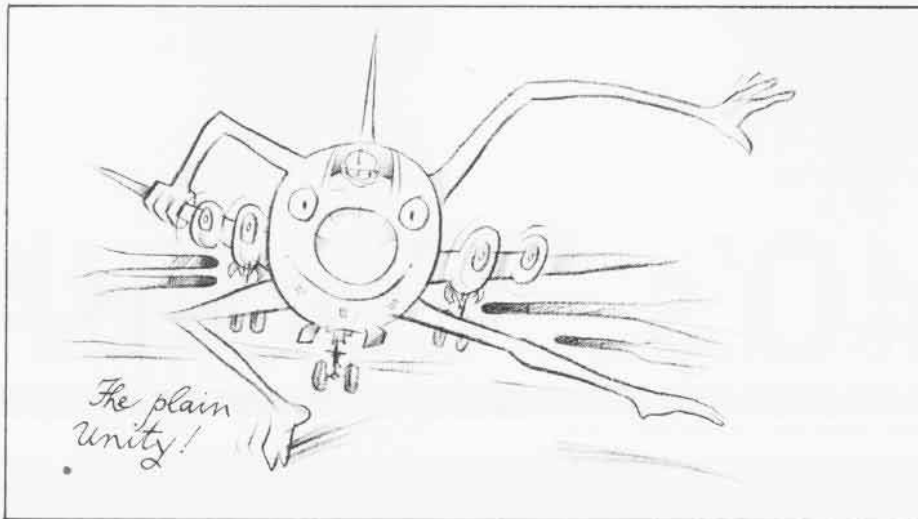


**Grampaw Pettibone says:**

I'm as mad as those booms! Smackin' into each other on the ground ain't easy to accept, specially when you got plenty of help tryin' not to do so.

First off, in a P-3, MAD boom clearance is 10.5 feet further than the wing tip clearance during the radius of turn. In this case, it appeared the movin' *Orion* would clear the one that stayed put. But all hands forgot about that extra 10.5 feet.

The pilot noted that his skipper cautions flyers to "strap on the aircraft," which is different from "strappin' into the aircraft." The former phrase, as the pilot put it, means "the aircraft should be an extension of yourself and



you must be as familiar with the airframe you fly as you are with your own body."

Good message!

### Confusin' Corsair

An A-7E pilot was hooked up to the carrier's number two catapult for a scheduled functional check flight. The pilot went to full power with throttle friction set at some point below full friction. A catapult officer under training (UT) was handling the launch under direct supervision of a qualified cat officer.

The pilot raised and lowered both hands above the canopy rail. In his left hand, he held a white functional check flight checklist card. He made writing motions with his right hand, indicating that he needed more time to record engine parameters. The cat officer (UT), interpreting these motions as a salute, acknowledged the pilot's hand motion with a salute, looked to center deck, deck edge and bow, and gave the launch signal. The qualified cat officer gave a thumbs-up.

The qualified cat officer, who had been checking deck edge and bow safety, had returned his attention to the aircraft and had observed a downward motion of the pilot's hand.

Still, the pilot's head was down since he was checking cockpit gauges and recording data.

Though they scanned the entire aircraft after the cat officer (UT) saluted, neither of the cat officers looked directly at the pilot until they observed the topside petty officer (TSPO) giving a suspend signal. The TSPO realized the pilot was not ready for launch. The deck edge operator, however, initiated the final portion of the firing sequence before the suspend signal was given.

The cat officer and several catapult crew members repeated the suspend signal but the *Corsair* was fired down the track and launched with 18 knots of excess end speed.

Surprised by the launch, the pilot was thrown back into the seat and his hands were pressed into his lap. After an instant of confusion, and at the end of the cat stroke, he gripped the stick. The engine was winding down and he reached for the throttle. The aircraft

rotated normally, although one observer thought the aircraft's attitude was slightly flat, but the generator dropped off the line and engine rpm was in the high 30-percent range and decreasing.

Unable at first to locate the throttle, the pilot worked his hand aft, got a grip on it, and tried to advance it. He could not do so, however, because the throttle was stopped at the outboard idle detent position. The throttle had moved to the "off" position during the stroke.

The pilot then moved the throttle forward of idle while holding the air ignite switch. At this point, he realized he was approaching the edge of the ejection envelope. He continued to fly the A-7 with his right hand, positioned his body, and initiated a lower handle ejection with his left hand. Ejection altitude was approximately flight deck level.

The *Corsair* struck the water slightly nose down about 2,000 feet from the carrier and sank immediately. The seat and chute worked as advertised and the pilot was quickly rescued by the plane guard helo and a swimmer who was sent in after him. The aviator suffered cuts and muscle strains.



Grampaw Pettibone says:

Sufferin' salutes! Everybody was tryin' hard but what a mess up.

It ain't easy takin' notes when you're cinched down on the cat with that turbine burnin' at full power — and Gramps admits we might oughta find a better way of collectin' such data — but when you do the unexpected, unexpected things can follow. The pilot was tryin' to explain he needed more time to do his checks by holdin' up that card and makin' a writing motion. That signal ain't in the books. But the guys in the yellow shirts thought they saw him salute instead. If they (the cat officers involved) had double-checked to ensure that the pilot had his head back against the head rest instead of bowing forward, this unhappy shot might not have taken place. So we gotta spread the blame around a bit.

And boy oh boy, when you carrier types have got that throttle at max thrust, you best have a strong paw on it and the cat grip, otherwise she might unwind and ruin your whole day. Taint easy restartin' the fire when you're low and slow and outa time.

Go by the numbers, folks, 'specially when you're workin' around the business end of that sling shot. Pilots, deck crew, everybody . . . give positive, no nonsense signals. The flight deck's crowded enuff. There's no room for doubt.

