

# Straight to the Moon, Alice!



Illustration by Allan Amen

Somewhere between 20- and 25-degrees nose up, the stall-warning horn went off

By Lt. Scott Craig

I was happily walking onto the flight deck.

The sun just was setting, and I would have a pinky launch for my second-ever, night cat shot. We were off the California coast in W-291, and I was CQ-ing in the mighty Prowler. It was a cold start, and we had a standard RAG CQ crew of three: two in the front and a Cat I student in the back for circuit-breaker watch.

I did my normal preflight, checking the CQ items; double-checked the launch bar, hook and tire inflation. I gave a cursory tug on all the boxes and knobs in the cockpit. After start-up, everything appeared normal getting to the cat. We were to be shot from Cat 3. Our launch weight was 50,000 pounds, and our minimum-end speed was 120 knots, which I bugged on the airspeed indicator.

Holdback attached, I taxied into the shuttle and went into tension. I ran power up to mil and started my verbiage: “Tension, mil, strut-lock light on, cat grips up, lights out.” Then I started my wipe out; “Good hyds, good oils, good tapes, normal caution, no warnings, feet on the deck. All set?” Everything felt normal to my experienced hands. After an “All set” from ECMO 1, I went lights on. There’s the signal, and there’s the stroke. All right, back to the litany I had practiced for: “Ugh, good shot, good motors and tapes, good airspeed, 140 to 145, we’re...”

But the word “flying” never left my mouth. As soon as we left the deck edge, I knew something was not right. Time compression set in. It felt like the stick was being forced back into my

stomach. Releasing the cat grip, I instinctively moved my left hand to the stick to help my right, which I normally would, or should, have used to raise the gear. I looked at the stick for a split second in disbelief, and thought, “Why are you doing this to me?” As I released the cat grip, I could only stammer out, “#%&\* This is not normal. This is not normal.”

I scanned the flight instruments and was amazed to see the EADI going nose up through 15 degrees. I forced my back against the seat and tried to use every bit of leverage to make that stick do what I wanted it to. I was not going to let this aircraft get the better of me. Out the corner of my eye, I could see ECMO 1 trying to turn off the AFCS. Watching me fight with the controls, he acted promptly, but, as normal, the AFCS was off for takeoff. No help there. Now 20-degrees nose up, and I still was pushing as hard as I could. I went to brain-stem response and no longer possessed the ability to communicate to my crew what I was trying to do. Somewhere between 20- and 25-degrees nose up, the stall-warning horn went off—it goes off at 21 units AOA in the Prowler—and that got me to scan the airspeed and AOA. We were headed, as Ralph Cramden would say, “Straight to the moon, Alice!”

At about 30-degrees nose up, 23 to 24 units AOA, and 120 knots, I felt something snap in the flight controls. I immediately thought FOD, but I regained control of the aircraft. I quickly scanned the instruments and assessed all was well

with the engines and hydraulics. I saw the airspeed go through 150 knots, and I remembered the gear. ECMO 1 gave the airborne call and, a little later, called 2,500 feet on top. At 185 knots, I cleaned up the flaps and slats and continued the climb-out.

My mind was spinning about 1,000 miles a second. I still was recovering from the incident and time compression, while slowly coming to grips with the situation. I thought, "There is no way I'm going to land on the boat for my second time at night, not knowing exactly what was wrong with the plane, and with a perfectly good divert, North Island, only 80 miles away."

As I started to voice this, ECMO 1 said, "Let's just climb to 12,000 feet, our assigned altitude, and get a heading toward marshal."

Once situated, we talked about the events that had taken place. I related how, at first, I thought it was a hydraulic problem, but after regaining control of the jet and feeling the snap in the flight controls, I definitely thought it was FOD-related. I borrowed ECMO 1's flashlight and did a quick search at the base of the stick for any incriminating evidence but found none. We agreed diverting was the way to go. After a brief report to our rep, we headed to North Island for an uneventful straight-in.

After a shaky walk from the jet, we explained what had happened to our maintenance detachment, while the aircrew looked up our stall airspeed and ejection envelopes. Maintainers searched the jet for 45 minutes and found the filter for the pilot's radar screen under the left-rudder pedal. The screen is a piece of glass 8 inches in diameter, bordered by one-and-a-half inches of aluminum. The screen and the border are three-eighths-inch thick. This filter had a shiny notch in it where the stick had been jammed. The whole thing was bent about five degrees and looked like a semi-flattened taco shell.

The filter had popped off the radar screen during the cat stroke and was wedged between the stick and the radar screen. I was able to bend the filter enough to have it pop out, which freed the flight controls. To my knowledge, the screen has fallen off on several Prowlers, but this was the first one that had jammed

the flight controls. After reviewing the plat tape, although it seemed like an eternity, the whole event, from cat stroke to regaining control, took just four seconds.

Several lessons were learned. When I pre-flight the cockpit, I have a new way to check the screen: turning and pulling versus just pulling. I make sure every knob, button and box is secure and accounted for.

I reviewed our communications during this event. I was too preoccupied to say much, but, after I recovered, there was a lot of silence. I later found out our backseater had squeezed the lower ejection handle so hard he practically tore it in half, and he had planned to pull the handle if the airspeed went below our minimum-end speed of 120 knots. Good for him; at least he had a game plan. I recovered at 120 knots. He was going to eject when he saw 119 knots and no change in the apparently (to him) uncommanded nose-up pitch. He told me later how nice it would have been to hear some comforting words from the pilot like, "I've got it." My fault. I'm glad he stayed with us, but I wouldn't have blamed him had he punched out. We heard nothing from tower.

Should we have ejected? That thought did not cross my mind until we had passed 6,000 feet. We calculated our stall speed as 107 knots, based on the aircraft's gross weight. I regained control at 120 knots, 30-degrees nose up. We were bleeding off airspeed very quickly at that point. In the Prowler, the pilot, whether he is command ejected or ejects himself, suffers a 1.2-second delay before his seat leaves the aircraft. We had less than two seconds before the aircraft departed controlled flight, so I quickly would have been out of the ejection envelope. I have heard stories about pilots who stayed with an airplane long past the time to eject, just to try and fly it away. I never thought I would be one of those guys. I have given serious thought to many ejection scenarios. If I am ever in a similar situation and I don't have control of the aircraft when the stall-warning horn blares, I would decide it's time to get out. I may not be the one pulling the handle, but I'll be saying the "E" word. A \$70-million plane is not worth three lives. 

Lt. Craig flies with VAQ-135.