

# Last in the

By Lt. Phil Ventura

**I**t was a great day in naval aviation. I was scheduled for two flights; my annual frontseat NATOPS check in the afternoon and a backseat, high-value-asset flight in the evening. It was a welcome change from the past few days of carrier qualifications off the Virginia coast in preparation for COMPTUEX.

Earlier that morning, the maintenance department had worked to get aircraft 500 ready for flight. The AEs changed out a faulty external power unit, the ATs checked antennas, and the airframers checked control lines. All worked with great intensity and focus to get aircraft 500 ready for the day's seventh sortie.

I returned from the NATOPS flight and jumped into my next crew brief for the second flight. We listened intently as ECMO 1 gave the administrative CV procedures and operations brief, including preflight responsibilities. The pilot and ECMO 1 would preflight the bottom of the aircraft; ECMO 2 and ECMO 3 would preflight the jamming pods and the top. We reviewed our crew responsibilities for the mission and for possible emergencies. During emergencies, ECMO 2 would monitor the pilot's airmanship by referencing the airspeed, altitude and attitude instruments in the back seat; ECMO 3 would follow ECMO 1 with the pocket checklist and make sure procedures were followed and all possibilities considered.

Our crew was on the flight deck 45 minutes before launch time to preflight aircraft 500. It was a beautiful evening. The seas were calm, skies clear, and the sun was on the horizon, setting the entire sky aflame with a bright-orange hue. The pilot and ECMO 1 began their walk-around, while ECMO 2 and I climbed onto the aircraft to inspect the top. By habit, preference and physical dimensions, I usually take the ECMO 3 seat. This position makes me responsible for preflighting the upper left fuselage. I went through my usual routine and inspected the lights, antennas, panels, inlets, flaps, slats, speed brakes, and ram-air turbine. I took one last look at the waning sunset, strapped into the jet, and prepared for our night launch. Throughout my scan of the upper fuselage, I failed to notice the panel screws from the morning's work were not set and tightened.

We completed our before-takeoff checks and waited for the directors to taxi us into position on the catapult. As we taxied around the flight deck, our plane was in full view of the plane captain, ground crew, and deck handlers, but all failed to notice the loose panel screws. We taxied to the cat 1 shuttle and were given one more cursory inspection before being put into tension. The pilot wiped out his flight controls, throttled the engines to military thrust, and quickly checked the instruments. We were ready to go. The pilot turned on the anti-collision lights, and we hurtled into the coming darkness. Fifty-six-thousand pounds launched from zero to 165 knots in three seconds.

As we accelerated down the stroke, the upper left shoulder panel violently flew off the aircraft. "Suspend cat two," shouted the air boss over the radio and 5MC. The panel flew 50 feet straight in the air and landed on the flight deck. Fortunately, the panel did not hit the \$40-million Hornet in tension on cat 2 or injure any flight-deck personnel.

"Combat FOD walk! Combat FOD walk!" announced the air boss, as all available hands conducted a FOD walkdown in the vicinity of cats 1 and 2. Redshirts, greenshirts, blueshirts, yellowshirts, whiteshirts, and purpleshirts all rushed to assist. Frantically, they searched the deck for FOD from the panel, which could damage a jet engine on takeoff or blown into flight-deck personnel. There was no FOD, and the launch continued.

"Five-zero-zero, switch to button nineteen for your rep," called departure on the radio.

"That's strange," I thought, as ECMO 1 switched to strike for checks.

"Five-zero-zero, rep," I recognized as the voice of our trusty operations officer. "A fuselage panel came off the jet during the launch," he reported with concern in his voice from the ship's carrier-air-traffic-control center (CATCC).

"We're fine," ECMO 1 answered. At the same time, I was in the pocket checklist reviewing the damaged-aircraft procedures, while ECMO 2 scanned the backseat flight instruments to verify ECMO 1's report.

"We think you should recover with this cycle just to be on the safe side," our CATCC rep suggested. "Five-zero-zero copies," ECMO 1 responded.

# Line of Defense

"Five-zero-zero, five-zero-two. Do you need a visual check?" the CO, who already was airborne, asked on our squadron's tactical frequency.

"No, sir. We're fine. The flight controls and engine instruments check out 4.0," ECMO 1 replied.

"We're here if you need us," the CO ended.

We quickly assumed the responsibilities assigned to us from ECMO 1's brief. ECMO 1 and I reviewed the checklist to make sure the fuselage panel hadn't damaged our rudder and horizontal stabilizer. The pilot and ECMO 2 verified our checks and agreed the flight controls and engine instruments indicated normal operation.

We followed our approach controller's instructions and trapped to an OK 3-wire. All eyes were on our aircraft as we taxied out of the landing area. Once we were chocked, chained and out of the jet, we saw that we had lost our left shoulder panel, and only two of 34 screws had been set and tightened. Two screws on a panel that close to the wing certainly were not enough to withstand the aerodynamic forces of a catapult shot. They also wouldn't have been enough to cope with 420 knots of airflow during the mission portion of our flight.

A great day of flying ended in a moment of humility. Our standard routine had turned into complacency. I had studied every aircraft system and prepared myself for any emergency scenario that could have been posed during my earlier NATOPS flight, but I failed to check for something as simple as panel screws during my evening flight. The aircraft-data book thoroughly recorded all work that was done on the upper left fuselage of aircraft 500. I should have double-checked the panel. More importantly, I should have noticed the obvious loose screws during my standard preflight of the aircraft.

As aircrew, we are the final checkers in a long line of maintenance workers, supervisors, QA inspectors, and plane captains who preflight our



Photo by PH3 Kris White

aircraft. The preflight items in NATOPS are the minimum, not the maximum. As our time and experience in the jet grows, we must continue to augment our preflight inspection with lessons learned from mishap reports and from our own experiences, just as I surely will. 🦅

Lt. Ventura flies with VAQ-140.