Pop the Tires, Light the Fires

By Ltjg. John Nelson

Newly graduated from the fleet-replacement squadron (FRS), I was excited to head back to the boat for 10 days of carrier qualifications (CQ) and about a week of cyclic ops. Strangely, the boat wasn't the most dangerous part of this detachment; runway 36 at NAS North Island held that distinction. It was on that runway that my EA-6B blew both mainmount tires and dragged their burning remains down the runway.

This event illustrated how a nugget, six weeks removed from the FRS, must adopt a more proactive role within the crew, instead of using the right seat as a crutch. I learned that being the new guy, fresh out of the training commands, is no excuse to check out from ORM and decision-making.

The day started with a hot-switch into a Prowler for CQ on board USS *Abraham Lincoln* (CVN-72). After the required two traps and two touch-and-goes, we were shot to the beach for the afternoon, with plans to return later that evening for night CQ. Our crew consisted of a brand new pilot; ECMO 1, the senior O-3 ECMO (electronic-countermeasures officer) in the squadron in the right seat; ECMO 2, who had one cruise under his belt; and ECMO 3, who was a former FRS instructor settling into his department-head tour; and me.

After day CQ, we launched from the ship several hundred pounds above hold-down fuel, figuring we would be on deck and soon eating fish tacos. Just when we thought things were about to work out just right, about 50 miles from North Island, we heard a Hornet on a bingo profile declare an emergency. LA Center vectored us west, out of the way. As we orbited 30 miles from shore, watching our fuel count down, we became concerned.

Ten minutes later, after a short discussion inside our jet, we declared min fuel. Immediately, LA Center asked us if we wanted to divert to Miramar. Knowing this change in plan most likely would prevent us from returning to the boat later that night, we persisted in asking for North Island. Finally, with 3,000 pounds of gas remaining, we were given vectors back to North Island and told to proceed VFR.

Even though gas was now our top concern, the situation still looked good. Pointed at our destination airfield, we had 2,800 pounds of gas, enough for 25 minutes of flight, and were only 15 miles away. ECMO 1 told the North Island tower we would like to land on runway 36, as the Hornet in front of us just had done. This request meant we would be on deck several minutes sooner, but we also would be landing with a 10-knot crosswind. We quickly discussed the risks involved with our plan and proceeded.

At 10 miles, we double-checked our ship-to-shore checklist and briefed the landing. A crosswind landing meant we couldn't aero brake. We briefed flying the VASI a little low to maximize the runway available, and we'd gingerly use the brakes because of our carrier-pressurized tires.

ECMO 1 advised me to use a min-rate-of-decent landing because of the higher pressurized tires, and I agreed. On touchdown, the left wing came up in the

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left-to-right crosswind. ECMO 1 then called "negative pops," meaning that our flaperon popups had not activated. In my mind, negative pops equated to not being able to stop, so I lightly tested the brakes.

Although we couldn't hear it in our jet, the rest of NAS North Island was treated to a spectacular "boom, boom!" Both main landing-gear tires had popped in quick succession. The jet began to swerve, and I feverishly worked to maintain centerline.

Passing the 5 board, tower came over the radio with, "503. Your right wheel is on fire."

Our backseater reported seeing flames, and, panicking, I decided to shut down the right motor. In the process, fuel from the engine manifold was expunged overboard, directly above our burning wheel. Hot-brake procedures be damned; today was shaping up to be quite the *Approach* article.

Shortly after we were told about our fire, I called for the hook. We decelerated as the tires shredded down to the rims, and, fortunately, we ground to a stop 500 feet before the long-field arresting gear. Did I mention it wasn't rigged at the time? Had we been unable to stop in the remaining 2,500 feet of runway, the jet might have wound up in San Diego Bay.

Once we finally were stopped, we safed our ejection seats, and I shut down the left motor. With flames growing on the right side of the aircraft, everyone egressed through the left side.

The finishing touch to the afternoon was when the first responding firefighter called to ECMO 1, now standing on my boarding ladder, "Sir, you're on fire! You're going to have to jump onto my truck!"

While trying to digest this piece of information, ECMO 1 lost his footing and fell eight feet to the tarmac.

Three fire trucks quickly extinguished our mini-conflagration. The ambulance crew told ECMO 1 he had a minor sprained ankle.

A dedicated crew of VAQ-131 maintainers worked two 20-hour days to put the ground-down wheel assemblies back together; 503 joined us on the boat 48 hours later.

The post-incident safety investigation revealed a failed anti-skid system. Because of a confluence of events (landing with a crosswind, failed anti-skid, negative flaperon popups, and pilot-landing technique), the old Swiss-cheese holes lined up perfectly for us.

If asked about lessons learned, my first response would be, "Where do I start?" Fresh out of the FRS, I still was in the mindset that the right seat drove the show. Just because I'm junior and new in the fleet doesn't mean I get to throw good headwork out the cockpit. I'm still the pilot-in-command, and, ultimately, it is my responsibility to place the jet in the safest and most advantageous situations in all regimes of flight.

We discuss ORM every flight, and we need to take time to discuss the critical phases of flight. The CQ environment poses great inherent risks, even without the added jets with fuel concerns coming back to the beach. With plenty of gas remaining, I needed to fight off the urge to get on deck as soon as possible and, instead, land on the runway with the most favorable winds. I also should have used my past experience of landing in crosswinds to put the jet firmly on the deck and dissipate energy, rather than using a min-rate-of-descent landing.

Thanks to the professionalism and hard work of our maintenance personnel, the jet only was out of service for two days. With an assertive and proactive pilot-in-command at the controls, the jet never would have missed a cycle.

Ltjg. Nelson flies with VAQ-131.