

By Lt. Russell Girty

I was the lead of a section of Hornets on another Operation Iraqi Freedom (OIF) mission. Since the “end of major conflict,” the shooting had all but stopped for fixed-wing aircraft. We had provided “presence” on most missions, and, as a result, missions had become no-brainers.

Unfortunately, my day to learn a hard lesson about naval aviation had arrived. I remembered something about there being no such thing as a routine flight. I also recalled complacency was

clean; I didn't see any traffic. My next thought was I had taken a bird, but I hadn't seen a bird in months in the Gulf, so I didn't think that could be the problem. Besides, birds are too smart to fly when its 120 degrees. A check of the engine instruments showed nothing. I decided to press on.

About 10 seconds later, a series of thumps reverberated throughout the jet. I could feel the thumps in my seat. I never had had a compressor stall in a Hornet before, but I was certain that's what was happening. Immediately, I got on the auxiliary radio to get the spare launched

# No-Brainer

an issue, which even if you talked about it and were aware of it, still could get you. You have to beat back complacency on every mission.

Our mission was straightforward—the stars had aligned. We were launching Case I for a daytime, feet-dry mission, and it only got better from there. The plan was to get big-wing gas from a KC-10, and close the deal with a night trap on the pinky recovery (with a commander's moon)—it's great working ops.

I would not be writing this article if the event had been flown per the brief. Here's what actually happened. I manned up my FA-18A and was the first off cat 4. After the clearing turn, I leveled at 500 feet and accelerated to 300 knots. At 10 miles, I started my outbound climb and, at that instant, felt a not-too-unusual thump. My first thought was I had flown through jet wash from another aircraft. The radar picture was

and began turning back toward the boat.

I hadn't received voice warnings or cautions on the DDI, so I couldn't tell which engine was chugging. A few seconds later, however, I got an “engine right” voice warning, but still nothing showed on my DDI. I trusted the aural warning and pulled the right throttle to idle, which stopped the stalls. I called tower and told them I'd like to land this recovery. I would need a half-flaps, straight-in approach as a precaution (if the engine failed, I'd be in the single-engine-landing configuration).

Paddles was listening and asked what the plan was for the chugging engine. I told him I planned to use the engine for landing as long as it wasn't stalling. I also told the squadron rep in the tower the same information. The rep and I talked about the hydraulic system that powers the landing gear and brakes and is associated

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with the right engine. If the engine failed, I needed to blow down the gear, and then I would need a tow out of the landing area.

I already had begun to adjust the gross weight. I continued to get set at 1,200 feet, 10 miles aft of the carrier. I started inbound with 1,000 pounds of fuel left to dump to reach max trap of 33,000 pounds. Much to my surprise after dirtying-up, I could not maintain on-speed. Since this was an OIF mission, I was configured with three drop tanks, two GBU-12s, two AIM-9s, and a TFLIR.

The jet continued to slow below on-speed; OK, a little burner would fix that. Then I remembered the NATOPS caution that says, "Simultaneous selection of fuel dump and afterburner during high AOA maneuvering may cause fuel to ignite." I deselected afterburner. The two seconds I had selected afterburner got me the needed energy, so I continued the approach. At three miles, paddles said we had the winds for a half-flap approach. I reminded him I would marry up the throttles at the ball call. At three-quarters mile, I brought up the right throttle, and the jet again had compressor stalls.

I brought back the throttle and told paddles I would be single engine on the ball. After a low, lined-up-right start, with a couple of power calls, I got the jet on deck.

During the postflight inspection, maintainers found that FOD had damaged the starboard motor. Every first stage blade was nicked or bent. Our best guess was the motor ingested the FOD on the catapult stroke. When I got to the ready room, many personnel, including those from the tower, told me they thought they had seen sparks coming out of a motor, as well as an afterburner blowout that had relit. In the end, I had run a FOD-damaged motor for more than 15 minutes. Fortunately, the GE 404-400 is a great engine, and this situation didn't end up with a catastrophic engine failure.

Like most naval aviators, the other thing we did was evaluate everyone's performance during this situation. We did most things well, but, as always, we can tighten up on procedures and our mindset.

We were six months into an eight-month cruise, and I had a little “been there, done that” attitude. If things had gone as briefed, it should have been a fun flight and a routine landing aboard mom. What is most amazing is we just had discussed complacency at an AOM; I was complacent during that discussion. I guess the old guys know this is an issue; we need to be careful not to drop the pack before the jets and all the people are back at home plate after deployment.

I stuck to the fundamentals of aviate and navigate by climbing and turning back toward the ship. However, the next step, communicate, meant I should have told the ship about my situation and let them worry about launching the spare, while I talked to a squadron rep and started handling my emergency. You must focus on the closest alligator to the canoe, which, in this case, was landing the aircraft; launching the spare was secondary to the problem at hand. An approach to the ship with one motor at idle, even with plans to use it, still is a single-engine approach.

Ultimately, we did the correct procedures, but our CRM between the squadron rep in the tower and the emergency aircraft could have been better: making sure we covered all the items I had not memorized. All Hornet drivers know you will be half flaps on a single-engine approach, even if you are going to use both engines. However, all the NATOPS steps, including warnings and notes, need to be read. Single-engine-failure notes in the landing configuration reveals that adjusting gross weight, at or below recommended weight, ensures less than 50 feet of altitude is lost during an on-speed AOA/on-glide-slope condition. If I had known that, I would have expected the settle and would have known I needed afterburner to dig me out of a hole.

We met the requirements of 33,000-pounds max trap for a half-flap approach, but we did not consider the atmospheric conditions. The Arabian Gulf on a hot, humid, summer day, single engine, is no place to be trolling around at max trap. A look in the big book shows we could have adjusted the gross weight considerably lower and still had fuel for a bingo. This action also would have eliminated the continued deceleration of the aircraft past on-speed AOA, and again eliminated the need for afterburner. 

Lt. Girty flies with VFA-97.

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