

As a nugget, in the squadron with the Navy's newest FA-18C, I never thought I'd be single-engine, on the ball, at night, during my first cruise. But that's what happened, and I lost my right engine at 1,200 feet with my gear and flaps down, as I pushed over for the Case III approach.

Flight lead and I had briefed to bomb a couple of smokes while flying a 45-degree bombing pattern on NVGs. We walked the same as always, got our tapes and MUs from the SDO, read the book on the way to the paraloft, climbed into our gear, and checked our NVGs in the box.

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Something Just Doesn't Feel Quite Right Here

By Lt. Lea Potts

Photo by Capt. Dana Potts

As I read the ADB for aircraft 307, I saw a gripe for a “noticeable vibration in the right engine.” This gripe was from one of the other nuggets. A more senior aviator in the squadron wrote a note that it actually was a “rudder flutter.” The gripe was signed off and was not a concern. No other gripes were factors for the flight, so I walked. I expected to feel a vibration, and it would be the rudder—no problem.

It was one of those nights when you walk up to the flight deck thinking, “Great, no moon. Black as an ape’s armpit.” Almost as soon as I got airborne, I felt a definite vibration in the jet but wasn’t sure where it came from. Above 2,500 feet, I viewed my engine page as I did my checks with strike and noticed the highest vibrations were 0.7—well below the 1.5 limit. I found it hard to believe a rudder flutter caused this vibration because it increased or decreased with throttle movements.

I told my flight lead on tac frequency I was having a strong vibration but couldn’t tell if it was the engine. I played with the rudder to see if I could sense a change in the vibration with rudder movement—I couldn’t. The vibration was much less severe after a couple of minutes, so I decided to move the throttles, one at a time, to see if they influenced the vibration. I couldn’t tell a difference, and, by the time I rendezvoused, the vibration had stopped completely.

The engine page never showed out-of-limit vibrations, and I still couldn’t identify their cause. Because the vibration was gone and engine indications were normal, I felt confident the jet was good to go. I felt the problem related to the rudder because the more senior aviator already had checked it.

We pressed on and looked for a clear area to drop our smokes. Because the weather was poor, we decided to bring back the bombs. As we checked in through marshal and took separation for the Case III, I again noticed a slight vibration. Feeling a bit paranoid, I checked the engine page; everything was normal, with the right engine matching the left on all parameters. As I pushed out of marshal, I called flight lead on tac and said I had the unusual vibration but couldn’t determine a cause. I couldn’t even isolate it to one engine or the other.

I was concerned as I pushed out of 11,000 feet, but the vibration was gone. I reassured myself it was a known gripe that dealt with the rudder—common in Hornets. Still, in the back of my mind, a shadow of doubt remained. At 1,200 feet and approaching the 10-mile mark, where I would dirty-up, I again felt the vibrations. I planned to down the jet when I got on deck because this problem was too abnormal.

Approach asked me to “stay clean through 10,” so I waited until eight miles to dirty-up. At eight miles, I put down my gear, went to full flaps, and slowed to onspeed. I was careful to maintain 1,200 feet while making my AOA-airspeed check. With the landing checklist complete, everything again felt normal. I pulled up the engine page for a last check—all normal.

I was about to push-over at three miles when I suddenly heard two loud “bangs” as the aircraft began violently shaking and two fireballs shot out the back of the jet.

The reflection of the fireballs in my mirrors made the entire canopy light up, as if I had popped a load of flares. An immediate deceleration and altitude loss occurred as I went to max power on both engines and placed my flaps to half, trying to hold onspeed. Both generators cycled, and I lost all displays for three seconds.

I thought both engines were lost because of the two bangs and fireballs. Before the fireworks, I was at 1,200 feet and 143 knots. My last known airspeed was 134 knots and last observed altitude before the loss of displays was just below 1,000 feet. I hawked the standby gyro, fighting to keep the jet from losing any more altitude in the black soup of sky and water. I raised the landing gear to reduce drag. I heard the landing-gear tone for a few seconds, indicating a greater than 250-foot-per-minute rate of descent.

When my displays were restored, the aircraft maintained airspeed and altitude. Then I heard another loud bang and saw another fireball, and the jet slowly climbed. I gently pulled my right throttle to idle, making sure the jet still was climbing. I then heard the “engine right, engine right” aural caution. My flight controls felt mushy, and there was a large yawing force. I tried to counter the yaw with rudder in the climb.

Once the jet safely was gaining altitude, I called approach and said, “307 is emergency. I’ve lost my right engine, and I am climbing straight ahead. I need you to clear the airspace, and I’d like to talk to a rep.”

My situational awareness with tankers’ sanctuary-altitudes over the ship had spilled out of my “bucket.” I wanted to concern myself only with the aviate portion of our adage until I had the jet at a safe altitude, where I could navigate and communicate. At 2,000 feet, with the jet still climbing, I contacted my squadron rep, who asked questions about my indications, what steps I had taken, and how the jet was flying.

I leveled off at 5,000 feet and 300 knots, with my left throttle at mil minus a couple, and my right throttle at idle. I saw a RENG STALL caution on my left DDI.