



by Lt Col Edward H. Lynch III, Davis-Monthan AFB, Ariz.

Have you ever sucked up a seat cushion due to a low fuel state? If not, then perhaps you should continue reading because you might be one sortie away from running out of fuel ... It only takes one seat cushion to permanently teach you to “never press the fuel.”

Human Factors account for approximately 80% of all aircraft mishaps.

That means the pilot/crew screwed up and the mishap could have been prevented. Sometimes your career is dangling by a thin piece of string and you get lucky and

survive. The story below is about my lucky day which occurred in 1995.

The recipe for disaster began with a 4-ship of experienced Viper drivers deployed to an exercise in Thailand at Korat AB. We were at the end of the deployment, and our mission was to burn up three bags of gas on a high speed low level over the lush jungles of Thailand as part of a “confidence flight” required to ensure the tanks would feed before deploying back to the US. What could possibly go wrong with that much gas and experience?

Shortly after takeoff, we were low-level in the weeds with our hair on fire “pushing it up.” I was number 4 and all I had to do was maintain position and enjoy the view. The scenery was outstanding and it was fun to cruise at high speed over the thick jungle canopy. I thought to myself that this must be what it was like to fly in Vietnam and Laos during the war. The last thing on my mind was fuel

management. We had too much gas and we needed to burn it up!

Everything seemed to be going fine and we were all comfortable in the weeds.

As I think back, this should be the time to “wake up” and check 6 . . .

... because history shows that this is the perfect set-up for a possible mishap. Little did I know that my Inertial Navigation System (INS) had dumped at the beginning of the sortie. Attempting to be the best “smart Wingman”

I could be, I misjudged one of our turns due to the INS failure and ended up in trail. No problem, I have lots of gas and I soon corrected the situation with the use of afterburner and speed. I was “hauling the mail” across the jungles and ended up 1,000 pounds less than everyone else in the flight — no problem. As I caught up with the flight, I finally realized that my INS had dumped and I had no idea where we were over the jungle. As you know, this is not a comfortable position, but hey, I’m #4 and all I have to do is follow and trust my lead. He’s the squadron commander and surely all will be OK.

Our low-level route ended with an Initial Point (IP) to target run with a pop attack. As we approached the target area, I was Joker. Joker was set at 2,500 pounds of fuel. The flight lead was surprised that I was Joker and decided to lower the Joker/Bingo to 2,000/1,500 pounds in order to complete the attack and egress. This “bingo” seemed

low since we had extra drag with three bags, but the flight lead was the squadron commander and no one challenged him. Thinking back, someone should have called Knock-it-off (KIO) but that wouldn't have been cool politically so we pressed ... bad move!

We flew across the target and proceeded south on the egress. Korat was west. I was thinking to myself, I should just KIO and go home alone, but I continued since my INS was inaccurate and navigating would be impossible with the TACAN out and communicating with the foreign air traffic controllers was challenging.

I'd sworn many times to never let a flight lead run me out of gas, **but here I was lost over the jungles with my squadron commander and I was low on gas in a situation I swore would never happen.** I called "Joker" (new Joker) on the egress, but due to the intense communication with the egress flow, lead didn't hear me. Soon, we "terminated" the low level and started our flight back to Korat ... just not at a fuel conserving maximum range airspeed. Thinking back, I should have called Bingo at this point.

Instead, I called Bingo at 1,500 pounds about 40 miles from Korat. This was not the best fuel state, but if we were flying direct to the field at the proper airspeed, I'd have it made in the shade. But, just as with every aircraft incident, the dominoes continued to fall. Besides not being at a fuel conserving altitude and airspeed, we had to deviate around an unforecasted thunderstorm. This deviation burned additional fuel and put me in an emergency state. I should've made a call on the radio, but hey, I'm #4 and I'm with two flight commanders and the squadron commander. Would I be challenging their credibility if I made a call? They know my fuel state. I should've made the call but I pressed with my flight and continued sucking on the seat cushion.

About 25 miles from the base, I got the "Home" mode fuel warning which in the F-16 indicates I'd arrive over the base with 800 pounds at 5,000 feet if I flew the computerized profile which we were definitely not flying. I called "Home mode Bingo" — a non-standard term since this is an uncommon fuel state. The flight lead acknowledged my call but continued to fly at 350 knots ... well above the max range airspeed. It seemed to me that no one in the flight was worried about my fuel, but in my cockpit the pressure of the seat cushion was on the rise — I was emergency fuel and I should have declared it but I didn't.

I was thinking "should I climb and go to high key or just press with the rest of the flight to initial?" I elected to stay with the flight. I look back at this sortie and kick myself every time. If you feel the need to go to high key for a fuel problem or the need to break out of the flight for any safety reason, then you have every right to do so. You're the aircraft commander and responsible for your jet. It doesn't matter who is leading the flight, you're the lead of your own jet and you're the one the mishap board will hang.

Due to the winds, in order to fly up initial, we had to pass the airfield on downwind. Approaching mid-field on a downwind for initial, the fuel totalizer was fluctuating back and forth and for a second I saw 300 pounds. In a three-bag F-16 this is an extremely bad situation. With external tanks, the tolerance on the fuel gauge can be up to 400 pounds. With the seat cushion firmly pressing against me, I finally couldn't take it any longer because if I followed my lead, I'd run out of gas.

I finally broke out of the flight (as I should have done earlier) and told the tower I was proceeding to a base leg to land — note, I didn't ask tower, I told them. As I rolled out on final I saw 500 pounds on the fuel totalizer, and as I landed the gauge went to 400 pounds. I shut down immediately in the dearm area after signaling the crew chief with the fuel gauge reading 300 pounds which is basically empty. The jet never flamed out due to the grace of God.

F-16s have flamed out with as much as 600 pounds showing on the gauge. God had decided to declare it a lucky day for me!

A few weeks after we returned from our deployment, a pilot flamed out his F-16 in the flare due to poor fuel management. That easily could have been me if I'd stayed with my flight.

There are many lessons I learned from this sortie that continue to shape my outlook toward fuel issues today from Joker/Bingo settings to extra divert fuel. The bottom line is you're responsible for your own jet and fuel management — don't press the limit with fuel. If you need to break out of the flight for any safety reason or need to KIO, then do so. You might have to do some talking in the debrief, but in the end game, your chances of surviving and having a mishap-free career are higher.

So, the next time you set a lower Joker/Bingo for your flight in order to get one more Basic Fighter Maneuver set or one more pass at the range, ask yourself how much seat cushion you'd like to suck up today and that should be enough to change your mind. If not, you'll learn the hard way and just remember that sortie could be today. How lucky do you feel? Check 6! 🗡️



"... but here I was lost over the jungles with my squadron commander and I was low on gas in a situation I swore would never happen."

Photo by SSgt Samuel Rogers