



I lost my RIO

*a passenger on an incentive
ride ejects from an inverted F-14*

By Lt Geoff Vickers

My squadron and air wing were detached to Naval Air Station Fallon, Nevada, for strike training. Most of us attended lectures all day, but I was tasked with giving the battle-group air warfare commander an orientation flight in the F-14D. As skipper of the cruiser in charge of the battle group's air defenses, he had been spending time with the air wing to better understand how we conduct our missions. He had observed a number of the strike events through the tactical air combat training system (TACTS) replays, and he had flown with the E-2C and EA-6B squadrons. He was proud that the Prowler guys hadn't been able to make him sick.

My job was to demonstrate the Tomcat's performance and tactical capabilities. Though this flight was my first without a qualified radar-intercept officer (RIO) in the back seat, I had flown with a number of aviators who had very little Tomcat experience before. The captain arrived at the squadron a half-hour before the brief to receive his cockpit-orientation lecture and ejection-seat checkout. Once in the ready room, we briefed the flight with our wingman. I covered the administrative and tactical pro-

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cedures in accordance with our squadron's standard operating procedures (SOP).

I told the captain that after the G-awareness maneuver, we would do a quick inverted check to verify cockpit security. Looking back, I should have recognized his anxiety when he mocked me and said, "Just a quick inverted check?" then laughed. I didn't realize hanging upside down with nothing but glass and 11,000 feet of air separating you from the desert floor might not be the most comfortable situation in the world for a surface warfare officer.

I continued the brief and told the captain we would do a performance demo and a couple of intercepts, followed by tanking from an S-3. I told him if, at any point, he felt uncomfortable, we would stop whatever we were doing, roll wings level, and take it easy. I was determined to avoid the temptation to intentionally make him sick and uncomfortable.

The start, taxi, and takeoff were normal. We joined with our lead and did the standard clean-and-dry checks. We pressed into the working area and assumed a defensive combat-spread formation in preparation for the G-awareness maneuver. I told him what was happening, and he seemed to remember the sequence of events from the brief. After we completed the checks, I asked him, "Are you ready for the inverted check? Do you have everything stowed?"

"All set" was the last thing I heard him say.

I checked the airspeed and confirmed it was above the 300 knots recommended to do the check, and I rolled the aircraft inverted. I decided not to really put on a lot of negative G and unloaded to about .3 to .5 negative Gs — just enough to make any-

thing float that wasn't stowed properly. If he was uncomfortable in such a benign maneuver, it would be better to find out then, rather than when we were racing toward the earth during a radar-missile defense.

As I started to push on the stick, I heard a loud pop, followed by a roar. The cockpit filled with smoke, and we suddenly lost cabin pressure. I first thought a catastrophic environmental control system (ECS) had failed. I said to myself, "This is new. I've never even heard of something like this happening." Time compression turned the next few seconds into an eternity. I knew the first thing I had to do was to roll the jet upright and

assess the situation. About 3 seconds after the first indication of a problem, I had the jet upright and knew exactly what had happened.

I transmitted, "Lion 52. Emergency, my RIO just ejected." I was yelling into the mic, thinking I would have to make all the calls in the blind, because I didn't expect to be able to communicate clearly with all the wind noise from flying at 320 knots without a canopy.

As I turned the jet to try and get a visual of my wayward passenger, Desert Control asked, "Understand your wingman ejected?"

"Negative, my RIO ejected. I'm still flying the plane."

"OK. Understand your RIO ejected. You're flying the plane, and you're OK?" I almost said I was far from OK, but I just told them I was all right, except I was flying a convertible. I was relieved to see a good parachute below me, and I passed this info to Desert Control. Very quickly after the emergency call, an FA-18 pilot from the Naval Strike and Air Warfare Center, who also was in the area, announced he would take over as the on-scene commander of the search-and-rescue (SAR) effort.

I told my wingman to pass the location of the captain because I could not change any of my displays. Once my wingman started to pass the location, I started dumping gas and put the needle on the nose back to NAS Fallon. One of our air wing SH-60 helicopters was in the area and responded, along with another chopper. The captain was recovered almost immediately and transported to the local hospital for treatment and evaluation.

The only F-14D boldface procedures for a canopy problem include placing the canopy handle in "boost close" position and then moving the command eject lever to "pilot." Obviously, the canopy was already gone, so that lever action didn't apply, and, if the command eject lever



wasn't already in "pilot" as briefed, I also would have been ejected.

I slowed the aircraft and lowered my seat because that's what I remembered from the rest of the steps in the checklist. However, after sitting at eye-level with my multi-function display for about 30 seconds, I thought it would be more prudent to see outside, so I raised my seat. Slowing the aircraft had little affect on the windblast, but, as long as I leaned forward, the wind hit only my shoulders. Because it was very cold at altitude, I decided to return quickly to base, but I needed to watch my airspeed since the ejection had occurred.

The Pocket Checklist (PCL) says to fly less than 200 knots and 15,000 feet and to complete a controllability check for the loss of the canopy, but I never pulled out my PCL to reference it. I figured with the way my day was going, I'd probably just drop my PCL down an intake and complicate my problems. In retrospect, I should have requested my wingman break out his checklist and talk me through the steps. Though this practice of having a wingman assist is common in single-seat communities, Tomcat crews tend to forget this coordination technique is a viable option. I did the controllability check, and I directed my wingman to check for damage to the vertical stabilizers — she found none. The faster I got on deck, the faster I would get warm.

I slowed to approach speed in 10-knot increments at about 3,000 feet AGL and had no problems handling the jet. As I approached the field, I was surprised at how quiet it got. The noise was only slightly louder than the normal ECS roar in the Tomcat. I'll admit I felt silly saying the landing checklist over the ICS when no one else was in the cockpit, but I didn't want to risk breaking my standard habit patterns. The landing was uneventful, and when I pulled back into the line, I was surprised to find how many people had come out to see the spectacle. The magnitude of the situation finally set in when my skipper gave me a hug after I got out of the jet.

The captain and I were very fortunate; all of the ejection and aviation life support systems (ALSS) equipment functioned as expected. Our life support techs had taken the time to properly fit the captain, using components from three different sets of flight gear. This caused a problem after the mishap — getting everyone's gear replaced — but it renewed my faith in our escape systems. A 48-year-old man ejected from the jet when it was inverted, at negative .5 Gs, at 320 knots, and the only injuries he had were two minor cuts to his face.

After talking to the captain at the O'Club later that night, I realized I could have briefed ele-

ments of the flight better. Though I covered all of the details, I didn't fully consider his perspective. He said he didn't know where to put his hands. Consequently, he just left them in loosely clenched fists on his lap, about 2 inches away from the ejection handle. It never occurred to me that someone would not know what to do with his hands. Obviously, I fly with the stick and throttle in my hands 95 percent of the flight, but I failed to consider his situation.

The mishap board surmised that, during the inverted maneuver, he must have flinched when he slightly rose out of the seat and pulled the ejection handle. Now, before any brief, I try to place myself in the other person's shoes and imagine what the flight will be like for them. Whether it is the person who never has flown a tactical aircraft before or just the new pilot who has never flown with Night Vision Goggles, remembering what it was like when I was unfamiliar with the environment will prevent this type of mishap from recurring. ▶

Editor's note: *Incentive rides are a great way to reward fellow Airmen and to give civic leaders and the press a better understanding and appreciation of what the Air Force provides. ACC has had several minor ground mishaps (lost canopies) occur in the past during incentive rides, but thankfully nothing of this magnitude. Aircraft operations may be second nature to aircrew members, but not to incentive passengers, so put yourself in their shoes and brief accordingly to make every incentive ride a safe and memorable experience. Reprinted Courtesy of the Naval Safety Center.*