

by LCdr. David Silkey

We had just heard a blow-by-blow account of an FA-18 pilot's ride in the nylon, following a night ejection during a JDAM strike into the Fallon Range Complex. He drove home the fact that an ejection from 35,000 feet on a dark winter's night over the deserts of Nevada was an extremely cold undertaking! Before he separated from the seat, the cold had forced him into the fetal position several times in an attempt to keep his arms and legs warm. This sobering discussion left me with a healthy respect for a high-altitude winter ejection.

Two days later, I was fragged for a post-maintenance check flight on one of our Lot 18 Hornets. The jet's right engine had been replaced recently, which meant it should have been a straightforward PMCF. The maintenance brief covered the engine swap, as well as a flight-control adjustment, which had been done in response to a pilot's recent concern over the jet's handling characteristics in high-speed flight regimes. I hadn't been aware of this flight-control problem, so I made a mental note and signed the book.

There were two PMCF hops on our schedule at the same time, so we discussed airspace de-confliction and dry-suit requirements. The water was between 50 and 60 degrees and the air temp was above the minimum for exposure suits. The combination of those temperatures made the use of dry suits "optional," according to our SOP. We opted for comfort.

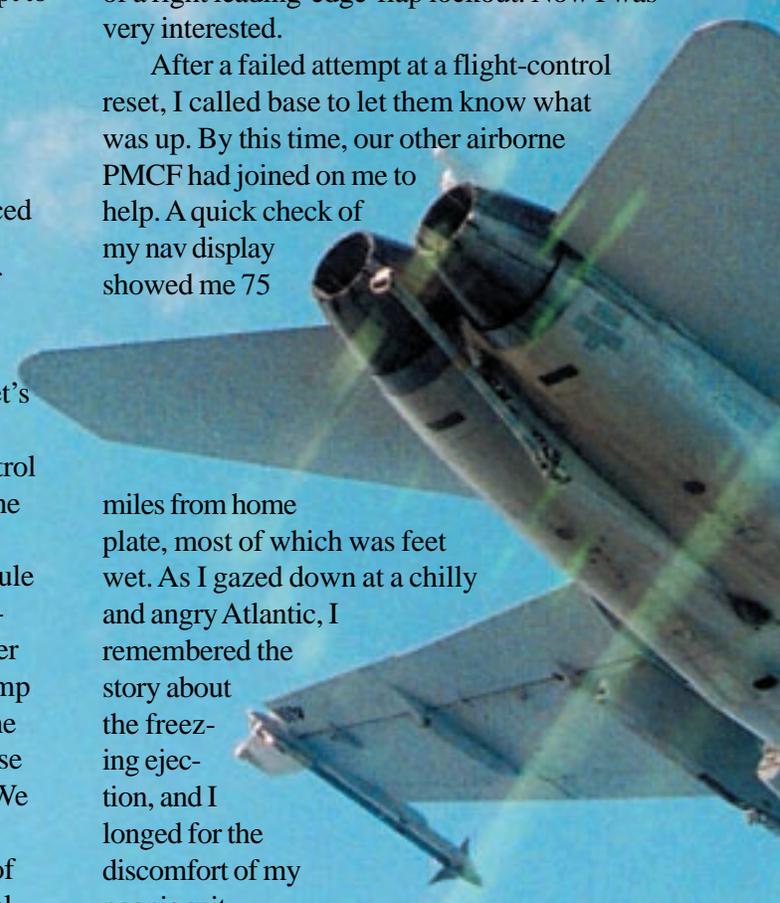
Start, taxi, takeoff and the PMCF portion of the hop were uneventful. I wrapped up the final checks and pointed her home as I began cleaning up the cockpit. It was a beautifully clear autumn

day, and I had just settled in for an enjoyable flight home when Betty sang, "Deedle... deedle... engine right... engine right." In the Hornet, Betty usually doesn't offer good news, and this was no exception; my right engine had flamed out. I wasn't worried, because the Hornet flies effortlessly single-engine. However, as the hydraulics on the right side began to fall off line, I was warned of a right leading-edge-flap lockout. Now I was very interested.

After a failed attempt at a flight-control reset, I called base to let them know what was up. By this time, our other airborne PMCF had joined on me to help. A quick check of my nav display showed me 75

miles from home plate, most of which was feet wet. As I gazed down at a chilly and angry Atlantic, I remembered the story about the freezing ejection, and I longed for the discomfort of my poopie suit.

The over-water transit was uneventful. Approaching the beach, I prepared to emergency



At Least I Wasn't the
Who Didn't Know W



extend the gear (in the Hornet without the right-side hydraulics, emergency extension is required to get the gear down). You have to slow to below 180 knots, but as I decelerated below 190 knots, the jet yawed to the left, and I didn't have enough rudder authority to counter it. I accelerated and climbed. With the leading-edge flap locked out, the consensus from the ready room was that I could not slow down enough to "blow" down the gear. I continued to explore the slow-flight characteristics to get a feel for how she was going to land. I decided that hanging out over the Atlantic was not the best option, so we headed south to a nearby bombing range. If I was going to give this one back to the taxpayers, I was going to do it over land or as close as possible!

The leading-edge-flap lockout would not reset and, because the jet kept yawing significantly as I slowed through 190 knots, I couldn't get slow enough to drop the gear. The NATOPS peanut gallery, all cozy and warm in the ready room, advised me to rotate the right-engine core in an attempt to reestablish the right-side hydraulic pressure, which should allow a reset of the flight controls. It worked like a charm, and I dirtied up normally and turned toward the field for what I hoped would be a "normal" arrestment to runway 5L at NAS Oceana. I couldn't trap on the right because an F-14 had just trapped with a hydraulic failure.

As luck would have it, the pattern was saturated with Tomcats in the FCLP pattern, as well as multiple Hornets that were returning from a bounce period at a nearby outlying field. In short, tower's bucket was full. At 10 miles I was concerned that the Toms in the FCLP pattern would further crush the tower, so I was relieved when I heard the tower tell all the Tomcats, "Delta overhead at 2K." Perfect—I could trap and be out of everybody's way.

My jet was still acting squirrely as my wingman and I tried to avoid the many populated areas on the approach. Coming out of 2,000 feet and decelerating through 180 knots, the jet yawed so much to the left that I felt it was on the verge of departing controlled flight. I hit the mil stop with the left throttle, arresting my rate of descent, and slowly climbed away as I regained control of the aircraft. As I approached 1,500 feet on the

the Only One
Where I Was Going

climbout, I found myself beak-to-beak with the F-14s established overhead in the Delta pattern.

As we climbed away, my wingman said that it appeared the right engine was beginning to smoke and that I should probably secure the rotating right-engine core, which I did. My mind was reverting to “brain stem” power, and I needed to land the jet ASAP. Heading northbound, I wrestled with the notion of button-hooking back to runway 23, but

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when I looked at the approach corridor, I changed my mind: It was nothing but high-rise hotels. I began to subconsciously include populated areas into my decision matrix for available runways. Out of ideas and fuel (1.9 on the IFEI), I chose to arc for a runway 32L arrestment.

As I arced toward the initial for that runway, I took stock. An F-14 was still in the gear on runway 5R, a Hornet was on short final to runway 5L for an arrestment (thanks to an unsafe-gear indication), and his wingman had just declared an emergency because of his fuel state. There were four F-14s hanging out overhead the field at 2,000 feet and numerous Hornets returning to Oceana from the bounce period at the outlying field.

“Is there anything else that can possibly be going on while I try to land this jet?” I wondered. The chatter, for which I deserved a lion’s share of the blame, had become a major distraction. As the tower freq became unusable with multiple requests for takeoffs, expected delay times, and landing clearances, someone in the tower mercifully blew the whistle. The next call I heard was “Ninety-nine, we have an FA-18 in an emergency, and we are not sure what he is doing or where he is going. Stand by!” It was comforting to know that I wasn’t the only one who didn’t know where I was going.

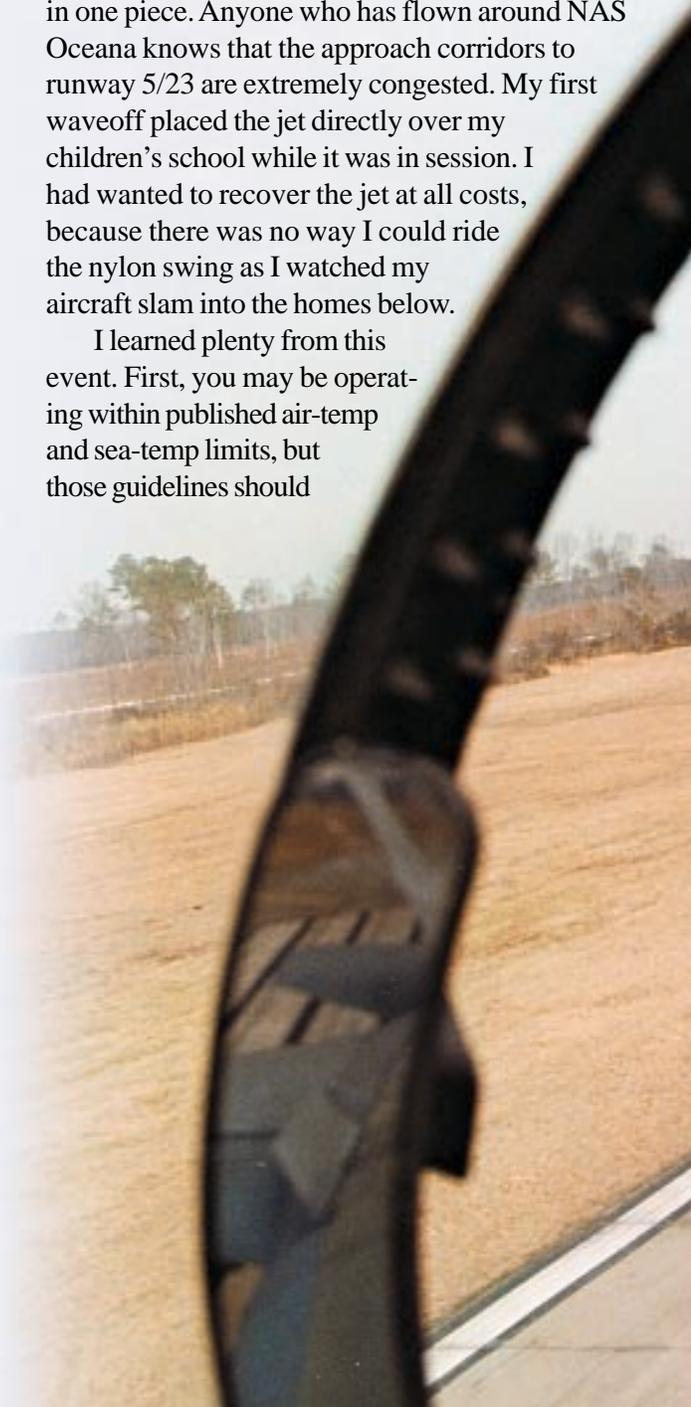
Once again out over the chilly Atlantic, I slowed the jet to 180 knots, and immediately the jet yawed to the left, followed by an immediate yaw

to the right and then back to the left. I had seen enough and accelerated once again, then stubbornly decided to give the jet one more chance at slowing down. Landing a Hornet at 220 knots is neither a natural nor a comfortable act. The follow-on attempt yielded similar results, so I elected to stay fast. This was the only airspeed that provided a predictable and constant level of yaw that I could counter with full rudder.

I flew the approach at 220 knots all the way down and, with minimal headwind, grabbed the wire on the fly. I estimate the engagement speed to have been about 213 knots, well above the 175-knot limitation of the E-28 gear.

I was amazed that I’d managed to keep the jet in one piece. Anyone who has flown around NAS Oceana knows that the approach corridors to runway 5/23 are extremely congested. My first waveoff placed the jet directly over my children’s school while it was in session. I had wanted to recover the jet at all costs, because there was no way I could ride the nylon swing as I watched my aircraft slam into the homes below.

I learned plenty from this event. First, you may be operating within published air-temp and sea-temp limits, but those guidelines should



never supersede your good judgment. I feel certain that if I had worn a dry suit, I would have tried to slow down the jet out over the water. I would not have felt the need to fly south to get over land. This would certainly have afforded me more time to troubleshoot the jet and attempt to solve the slow-flight problem. It would no doubt have given me extra time to consider other options. In the end, I took a jet that was questionable in its controllability and made a landing at an airspeed that exceeded the published limitation for the arresting gear. Wearing a dry suit might not have changed

the outcome, but at least environmental issues would not have entered my decision matrix.

Decide in advance—and include in your briefing process—what runway you would go to in the event of a significant emergency. The time to determine the least-populated approach corridor is not when you're in the middle of a compound emergency. If you have to shell out of a jet, shopping malls, high-rise hotels, and schools are going to adversely affect that decision, as they should.

During this emergency, the rep I had been talking with assumed that I had trapped on my first attempt at runway 5 and subsequently walked on to his own flight. As he started his jet, he was

shocked to hear on base radio that I was still airborne and in extremis. If you are in the ready room advising an airborne emergency, see it to its conclusion. In my case, I had a bunch of extra base-radio comms, explaining for a second time what we had done, what we were doing and what we were going to do.

Although we weren't a coordinated section, my wingman of opportunity provided invaluable assistance when I started to get frazzled. Crew coordination worked for us, not because we briefed it but because we were like-minded.

Tower needs to control the pattern and make timely decisions. They can't do it without information from inbound aircraft that are having emergencies. I was task-saturated that day and gave them what I could, when I could. In the midst of an airborne emergency, if you find yourself waiting at the hold short for an extended period of time, be patient. Continually requesting immediate departures, asking for delay times, and telling tower, "You have to get a handle on this," only adds to the confusion and frustration. It's not only embarrassing, but it makes you look like an amateur. 🦅

LCdr. Silkey flies with VFA-37.

Navy photo by Matthew J. Thomas