

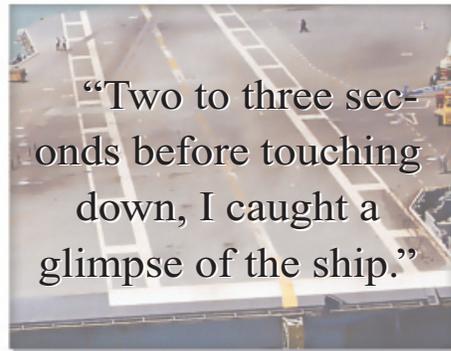
# Using the Noggin

By LCdr. Joel Jungemann

“This manual contains information on all aircraft systems, performance data, and operating procedures required for safe and effective operations. However, it is not a substitute for sound judgment.”

The preface to all aircraft NATOPS manuals contains this statement. I’ve often wondered when and how you decide to disregard or modify NATOPS procedures. We found out one day in the Sea of Thailand.

In the third week of deployment, we were conducting a PASEX with the carrier



After proceeding to our station at max conserve and making one run on the ship, we headed to marshal. Holding at the top of the stack at 18,000 feet, we were in and out of the clouds and rain. The defog came on four

minutes before our push time, and following the standard delta four, we commenced the CV-1 approach.

We immediately entered torrential rain, which I hoped was just an isolated shower. At 1,200 feet, the defog came off, and we dirtied up at eight miles, still in the rain. ECMO 1 and I discussed how we would use the windshield air. I told him that if we were still in the rain at three-quarters of a mile, to start toggling it on and off so we could get a good look at the boat. Our NATOPS has the following caution regarding the rain-removal system:

“Prolonged use of the windshield air may result in cracking the pilot’s windshield. Windshield air should be used in short durations...”

The following sentence is also found in the extreme-weather-procedures section:

“Windshield rain removal has been found to be marginal when flying through moderate to heavy precipitation.”

We flew the ACLS to three-quarters of a mile. Our clara call turned the pass into an LSO talk-down, and ECMO 1 began toggling the air switch. With the ship not in sight at 200 feet, I considered taking my own waveoff, but the LSO

we were relieving. Our Prowler crew was tasked with playing orange air for our 1+30 cycle, and I was also giving my rightseater his annual NATOPS check. The forecast called for low ceilings and heavy showers, and for once, the weather-guessers were correct. The long time it took to find clear air on the daytime Case III departure should have indicated what was to come.



calls were correlating with the needles, so we kept it coming.

My last-second line-up correction, with a healthy shot of power, sent us over the wires and off to the races with the happy lights flashing at us as we went by.

After releasing my seat cushion, we climbed and turned downwind for another try. I told ECMO 1 to toggle the air on and off from

windscreen. After lowering my seat and visor, we sighted and then lost sight of the tanker three or four times. A hundred knots of closure and an idle-boards-cross-control rendezvous later, we got our gas while telling our CATCC rep of our problem. I tried to inject a little levity by asking the skipper for a waiver to couple-up. He and CAG didn't seem amused by my request. So much for levity.



three-quarters of a mile to 200 feet, and then, if the boat was not in sight, to stand on the switch until we touched down.

With the ACLS controllers unable to get a lock-on, the bull's-eye approach resulted in another talk-down. When we still were clara at 200 feet, ECMO 1 started the steady stream of air. Unfortunately, this only spreads out the water on the windscreen. We sighted the ship earlier this time, but the deck-cycling, coupled with some excellent ham-fisting by yours truly, sent us over the spaghetti yet again.

Since we were blue-water ops, the signal was to tank. Departure called the tanker on our nose at four miles. I raised the gear as my rightseater hit the air again, trying to gain sight of the tanker through the rain and clouds. As I prepared to raise the flaps and slats at 185 knots, I told him to kill the air because I was looking at two cracks in the bottom of my windscreen. As we accelerated to 250 knots, I watched in disbelief as both cracks marched their way to the top of my

On downwind for attempt number three, we got the good news from CAG paddles that the weather had improved slightly. "I'm sure this spider web for a windscreen will more than nullify any slight improvement in the weather," I thought. Since we already had verified the marginal performance of the windshield air and confirmed the windscreen might crack, we decided to stand on the air again if we

needed it. Another bull's-eye approach led to another talk-down. We needed constant air from about 200 feet in, and some good calls by paddles and some marginal deck spotting by me got us into the ace. The windscreen remained intact throughout the touchdown and trap.

In our situation, substituting sound judgment for NATOPS procedures was a no-brainer. The weather had deteriorated to the point that not much else was going to work. Although we went against the NATOPS recommendation of using the windshield air "in short durations," and the windscreen cracked, I'm convinced we never would have seen of the ship, let alone gotten aboard, without constant use of the air. Knowing NATOPS procedures cold is always your first line of defense, but sometimes compound emergencies, situations not covered in NATOPS, or certain kinds of weather require—to quote Grandpaw Pettibone—"the use of your noggin," in addition to what's written in the book. 🦅

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