

Never a Dull Moment

By Lt. Chris Ognek

Each platform in naval aviation has a dreaded emergency scenario that, while rarely or never seen in flight, invariably appears during NATOPS-simulator training. The only way to even the odds with these scenarios is to crack open the

NATOPS every now and then and to squeeze every ounce of training out of your precious flight time. In the land of Prowlers, one such scenario is the flaps 30/no slats approach to the ship. Here are a few lessons learned from my night flaps 30/no slats approach to the ship.

We were on the last event of the night, conducting blue-water ops on board USS *Kitty Hawk* in the South Pacific. I was on a short, night sortie to reset my landing currency before we pulled into Singapore. After an uneventful cycle, I tried to dirty-up on final approach. The slats extended

just one inch, with a corresponding barberpole in the landing-gear-position indicator (IPI). We circled overhead at 2,000 feet to troubleshoot the problem. We eventually got to the checklist item to electrically lower the slats. As I put the electric flaps-slats switch to the down position, the flaps moved to 30 degrees, they remained at their one-inch-extended position, and the emergency-slats-motor circuit breaker popped—not a good configuration for landing a Prowler at sea.

The required increase in airspeed and the extremely narrow margin between the angle of attack required to catch a wire and stall makes this configuration especially challenging. Because of wind-over-deck requirements and hook limitations, we decided to come aboard in a flaps 30/no slats configuration. The base airspeed for this approach is 127 knots, and it is flown at 13 units; normal Prowler approaches are flown at 17 units.

In addition, NATOPS states: “WARNING-Maintain airspeed. During waveoffs or bolters in this configuration, over-rotation must be avoided. Above 14 units AOA, flying qualities deteriorate rapidly with an abrupt pitchup/wing drop occurring at 15 units AOA. Do not attempt to flare during landing. This may result in pitchup.”

It took three attempts to get aboard, with one pass a hook-skip bolter, one a waveoff (SIM), and finally an OK 1-wire.

My first indication the slats were not extending was the barberpoled IPI. I did not decelerate rapidly to on-speed when I dirtied-up, so, at 160 knots, before I could feel the problem, I told the crew the slats were not extended. With 7,000 pounds of gas, the calculated approach speed was 138 knots. I hit 13 units angle of attack (AOA) several knots

faster than that, so I flew AOA for the approaches.

While flying around the boat, there was no sweet-trim spot for 13 units. I constantly trimmed and bunted the nose to stay at or below 13. The jet wanted to go slow. On two occasions, I hit 14 units and op-checked the rapid deterioration of flying qualities. It was comparable to the standard clean-approach-to-stall practiced in the FRS but much less comfortable at an altitude of 2,000 feet.

Glide-slope control was by far the most challenging, with lineup corrections taking a close second. I used larger power corrections than normal for extra power, and I was flying in a configuration I never before had seen. I was very hesitant to pull a lot of power, which caused me to work on the slightly overpowered side during the approach. As the saying goes, “Be smooth. If you can’t be smooth, be high.”

The approach was very flat, as should be expected at 13 units. Staring at a red chevron doesn’t make it any easier. We practice flaps 30/no slats approaches at the beach, but this boat approach was truly a new sight. My earlier flying-qualities op-check had convinced me that I didn’t want to try any type of hook set to compensate for the flat, fast approach. I, however, did make an extra effort to maintain attitude as my wheels touched the deck.

The last two tidbits I have to pass to you regard aircrew coordination. When you are reading a checklist, always approach it as though you are reading it to the pilot, especially for “rare” emergencies when the pilot’s recollection of the checklist specifics may be clouded slightly. My rightseater that night happened to be my skipper, and his cadence and tone of voice allowed us to move through the checklists without my ever having to ask, “What was that last step again?” or “Did you say 127 knots or 137 knots?”

Finally, if you don’t carry a piece of black electrical tape on your kneeboard for those nasty lights that aren’t behaving, I urge you to do so. In this case, low oxygen pressure caused the master-caution light to flash on each of the approaches. It made an otherwise sporty night trap a little sportier. 

Lt. Ognek flies with VAQ-136.



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