



# Mr. Orion's Wild Ride

By Lt. Mitch Jones

**B**arely two months into our Keflavik, Iceland, deployment, I was finishing my second detachment. We just had completed our last mission from the icy, winter wonderland of Andoya, Norway. I was feeling more accustomed to the harsh operational environments these upper latitudes could impose. All we needed to do was get fuel, pick up our maintenance personnel, and fly a simple reposition to Keflavik.

After a quick turnaround on deck, I again found myself waiting at the holdshort for runway 15. I listened to my copilot give the takeoff brief I had heard so many times before. He briefed all the minimum-power requirements and airspeeds needed to get a 120,000-pound P-3C airborne. He included the various abort criteria and actions to perform if we had any engine or propeller malfunctions during takeoff.

We then talked about the current winds and RCR given by tower. Tower had reported the winds varied from 200 to 230 degrees, with speeds up to 28 knots, and the runway condition was wet, with good braking action.

Assuming the worst-case scenario, we faced nearly a direct 90-degree crosswind for takeoff. With that much crosswind, we needed at least an RCR of 15. Referencing our NATOPS wind component chart, we found an ICAO report that

said “good” translated into a minimum required RCR of 18. The tower did not report any standing water on the runway. Likewise, we hadn’t seen any standing water, nor any unusual braking requirements, on our landing only an hour and a half earlier. Everything appeared to be in order as I wrapped up the pretakeoff discussion with, “Let’s get outta here.”

Once cleared by tower to “line up and wait,” I completed the takeoff checklist, as my copilot taxied into position. Moments later, the tower cleared us for takeoff. My copilot had the flight engineer set takeoff power. Meanwhile, I scanned the engine instruments, checked the flight instruments to make sure no “off” flags were present, and said we were ready for takeoff. My copilot released the brakes, and we were on the roll.

I felt my copilot put in right rudder to counteract the P-factor caused by the four props producing nearly 4,100 shaft horsepower. In the P-3C Orion, the takeoff is normally conducted from the left seat, since the nosewheel-steering control is located on that side of the flight station. Until reaching an airspeed where directional control can be maintained with the rudder, the pilot in the left seat has one hand on the nosewheel-steering control and the other hand on the power levers. The pilot in the right seat guards the other



set of power levers with his left hand and places his right hand on the flight control yoke. The flight engineer sets power.

As we accelerated down the runway, I could feel the crosswind acting on the flight controls, and I put in right aileron to counteract the lifting effect of the wind. At 50 knots, my copilot came off nosewheel steering and placed his left hand on the yoke. I called out “80 knots,” scanned the engine gauges to make sure we had the required SHP, and reverted my scan mainly to outside. What happened next caught everyone off guard.

Passing 85 knots, I looked up from the instruments to check the aircraft’s lineup on the runway as the entire aircraft suddenly shifted to the left. Now, instead of having the nosewheel positioned on the centerline, I had the right mainmount tracking down centerline. I felt my copilot initially increase right rudder, trying to stop the aircraft’s left drift. He then added a little more right rudder to correct back toward centerline.

No sooner had I thought to myself, “Good. Nice correction,” than the nose of the aircraft violently cocked to the right, into the wind.

I told my copilot, “Easy with it,” thinking he maybe had overcorrected back to centerline. As we crossed centerline, the right-rudder input was

taken out, but the aircraft continued toward the right side of the runway.

Naturally, we applied left rudder. Almost immediately, we found ourselves heading about 110 degrees on runway 15. We quickly passed the centerline again, this time on our way toward the left side of the runway.

I noted the airspeed was only about 95 knots. The option to abort the takeoff entered my head for a nanosecond, and, just as quickly, I dismissed the idea. The aircraft did not respond to the control inputs like it should. Every control input we applied caused an exaggerated reaction by the aircraft. Not realizing we were hydroplaning—none of us had ever experienced it—I assumed ice had developed on the runway during our turnaround on the deck. I thought there was no way to stop on the runway. We barely were in control as it was, and the idea of taking the aircraft off the side of the runway didn’t exactly appeal to me.

I thought about taking the controls from my copilot, but he was doing everything correctly to keep us on the runway.

I rode the controls along with him and concluded I wouldn’t do anything differently. So, I decided to follow the advice I give to every pilot who ever flies with me. When we discuss the numerous “what if scenarios,” I simply say, “First and foremost, fly the plane!”



Having made the decision to get airborne as quickly as possible, I rechecked the airspeed indicator, looking for the 123 knots we had briefed as the rotate speed. Just then, right rudder was reapplied. Again, the nose cocked to the right, and we were on our way to the right side of the runway. Unfortunately, the airspeed needle just passed through about 105 knots—we were 50 degrees off runway heading.

As we passed the centerline for the third time since starting our wild ride only a few seconds earlier, I knew there was not going to be a fourth time. The oscillations induced by our rudder corrections got worse with every application, regardless of how smooth we tried to be.

One last look at the airspeed showed 110 knots. Good enough. “Rotate!”

The mighty Orion hesitated for a moment, decided she had had enough of these runway antics, and took to the air. The edge of the runway passed beneath us, as the landing gear cleared the deck. A great sigh of relief swept over me, and my gluteus maximus released its death grip on the seat cushion. The whole evolution had lasted only a few seconds, but it had felt like an eternity.

We cleaned up the aircraft, completed the climb checklist, and made a call to tower to report the less-than-desirable runway conditions. In a not-so-polite voice, I suggested they check the runway for ice. The tower commended us for our “airmanship,” told us he had had his finger

on the “red button” to call for the crash crew, and said they would inspect the runway.

I switched to departure and copied the rest of our routing to Keflavik. I then checked with the crew to make sure everyone was OK. About 10 minutes into the flight,

Departure called us and said Andoya tower had reported no ice on the runway. They never mentioned if there was standing water, but it was obvious to me there had been. I acknowledged Departure and then began a long discussion with my flight-station crew about hydroplaning. We talked for the next four hours of the transit.

Again, weather had reared its ugly head and reminded me never to let down my guard. We had been operating in Andoya for a week. The temperatures had been below freezing the whole time, and all precipitation had been in the form of snow. There had been light snow showers earlier that morning when we took off for our first flight of the day. However, by the time we were ready for the last takeoff from Andoya, the temperature had increased to a balmy 34 degrees Fahrenheit.

I surmised the snow on the runway earlier had melted, and, perhaps because of the slush buildup on the sides of the runway, the resultant water had failed to drain properly. Having just landed on runway 15 only an hour and a half before with no problems, I became lax.

In retrospect, I should have asked tower about any standing water on the runway before taking the active. That simple question could have prevented the whole situation. I would have tailored the takeoff brief to include the unique possibility of hydroplaning. While it is impossible to cover all contingencies you may encounter during every phase of flight, you certainly can reduce your risks for each situation. 🛩️

Lt. Jones flies with VP-45.