



MEMORANDUM FOR RECORD

Albert Nixon
Senior Aviation Accident Investigator
Western Pacific Region-Aviation Safety

Date: Jun 3, 2021
Subject: Record of Conversation with Christian Oman (Draken International F-1 Tactical Mechanic, level 2)
NTSB Accident Number: WPR21FA203

In a conversation with Christian Oman, the following is a summary of what he stated:

- In attendance (online) was John Waugh and Rich Ramirez—Las Vegas FAA FSDO, Harlie Bodine – Draken International Director of Safety, Thomas Garrett, Draken International F-1 Maintenance Lead, Jason D’Amico, Senior Tech Advisor Draken International, and Andrew Swick NTSB.
- The witness chose to have attorney Jamie Rodriguez as his representative.
- Helicopter mechanic 31/2 years previously, and then came to work for Draken International since 2020. Has worked the F-1 since being hired with Draken.
- Reports to Anthony Smith, Draken International, Las Vegas Operational site lead.
- Started at depot level maintenance and then when he came to Las Vegas, assigned to flightline.
- Had 4 weeks of training at Lakeland for Draken International.
- Was prepping the accident airplane on the day of the accident.
- Showed up about 2-3 hours before takeoff.
- All preparations of the airplane were normal and went smoothly.
- Pilot showed up to do the preflight.

- “A” man – follows the pilot on the walk around. Checks the aircraft during ops checks.
- “B” man watching airplane overall and waiting for startup.
- “A” man and “B” man duties switch off.
- No abnormalities of flaps and flight controls when inspected.
- No comms with pilot after the pilot is strapped in - hand signals after that.
- Pre-flight was uneventful except for the combat flap check.
- Check droop flaps first for operation.
- Combat full open and close.
- Only droop slats would come down and not the flaps.
- Not sure how it got resolved. Tried a few more times (3) and it worked. Was not working for the first two times and worked on the third.
- Nose gear door area had the circuit breakers, do not know the specifics.
- First time this anomaly happened on this airplane. Extremely rare on other airplanes.
- If it did not get resolved it was a no go.
- Call out maintenance for issue is circumstantial, maybe just switch to another jet.
- There was a spare aircraft.
- He walked us through flight control checks – Check droop slats, combat flaps open-close, operate, rudder stabilizers, and ailerons.
- No anomalies during these checks – correct.
- He noticed a little hydro and fuel leaking which he said was normal.
- The engine start was on time.
- No flap and slat specialist were called, and the jet never shut down.
- Was not briefed on anything abnormal from the pilot and he said the airplane was good to go.
- Was the combat flap issue resolved in the nose landing gear area – he was not sure how.

- Not sure if they taxied out on time.
- He was not sure of the hydraulic reservoir readings.
- He does check them on his walk around.
- He was positioned in view of the pilot when he strapped in.
- When Nate was in the nose landing gear area, the pilot took no actions.
- When go through the slat and flaps checks, they reset back to the beginning each time.
- Was not sure of any maintenance notation. Annotated as least but could not confirm that.
- Says no maintenance was done on the airplane but did not know what happened in the nose wheel bay.
- He stands about 20 ft away and 45° from the pilot during engine start.
- Pilot gives signal when moving flight controls.
- Pilot gives parting of hand as signal for combat flaps.
- When flaps were not moving tried a few more times and told Nate they were not working.
- Once the flaps started moving normal, everything was smooth.
- Ran through the combat flaps check twice when it checked good.



MEMORANDUM FOR RECORD

Albert Nixon
Senior Aviation Accident Investigator
Western Pacific Region-Aviation Safety

Date: Jun 17, 2021
Subject: Record of Conversation with Chris Silva (Draken International F-1 Tactical Mechanic, level 2)
NTSB Accident Number: WPR21FA203

In a conversation with Chris Silva, the following is a summary of what he stated:

- In attendance was John Waugh and Rich Ramirez—Las Vegas FAA FSDO, Harlie Bodine – Draken International Director of Safety, Thomas Garrett, Draken International F-1 Maintenance Lead, Jason D’Amico, Senior Tech Advisor Draken International.
- The witness chose to have attorney Jamie Rodriguez as his representative.
- 2 years at A&P school and then worked for Draken International.
- Has worked for Draken International for about 2 years; 1 year in the F-1.
- Mechanic 2 is based on experience. 3 is the top level of mechanic there.
- Worked at Nellis AFB exclusively.
- Worked on L-159 previously with Draken International.
- Sent to Lakeland for 2 weeks for F-1 maintenance training, and then OJT at Nellis AFB.
- Instructor lead training at Lakeland.
- Still awaiting to be signed off on a few tasks.
- Worked the Friday and weekend before the accident (on Monday).

- 6 AM – 7 AM show– 10-hour shifts. Also worked Monday.
- F-1 typically do not fly on the weekend.
- Arrived Monday morning (accident day) everything was done and just double checking.
- “B” man was his position for launch of the accident airplane.
- The “B” man duties are to provide “A” man assistance and just another set of eyes. Looking for leaks, panels, and any issues with the airplane; anything out of the ordinary.
- After engine start, he positioned himself near the tail of the airplane. Moves a lot and is not stationary.
- No issues preparing the airplane for launch.
- When pilot showed up, do visual inspection with pilot.
- Saw pilot talk to “A” man; Seemed rested and looked normal and in good spirits.
- Positioned himself at the rear of airplane and after engine startup, approached the airplane and did his visual inspection and then positioned himself on the right side of the airplane, about 5 ft from the right wing.
- After slats, flaps did not extend. The “A” man continued signaling the pilot, but he could not see what the pilot was doing. The “A” man gave signal for flaps numerous times.
- At that point, he realized that there was a flap issue of some sort.
- Waved his hand to get attention of Nathan Wyatt – the flightline lead, to come over and he responded to the airplane.
- Could not communicate verbally but saw that Nathan and the “A” man had visual with the pilot.
- Nathan, made the airplane safe; safety switches for dive brakes and hydraulics, and he put those down and opened the nose gear door.
- Nathan visually looking in the nose gear area. He knows they are circuit breakers there.
- Nathan then put the safety switches back up and walked back.
- The flaps then extended and retracted after some time between.
- The “A” man started the process again for the preflight process.

- Pull chocks and the airplane taxied out.
- Nothing out ordinary after the flap issue.
- Clarified that the dive brakes were the speed brakes.
- Check hydraulic reservoirs.
- Covers the right side of the airplane after engine start.
- Visually saw slats extend and they extend again with the flaps. Saw the “A” man give signal for flaps and they did not extend.
- “A” man gave pilot several signals for flaps.
- Recalls that slats retracted multiple times.
- After Nathan did a visual inspection in the nose landing gear area, about minutes later (not certain) the flaps worked.
- After the flaps extended, multiple times the check was recycled. About two times from complete retraction to extension.
- Could only see the right side of the pilot. The pilot would signal to the left.
- No maintenance paperwork. The only thing Nathan touched was to open the gear door. Once he put the safety switches back on, the doors closed.
- He had not experienced the flap issue in the accident airplane before. Also had not run in the flap problem with other F-1 aircraft.
- Did not see the accident airplane in the pattern.
- Last communication he received from his supervisor that the airplane was code 1 (no maintenance issues) and 10 minutes out from entering the pattern.

Questions from others.

- Once the engine was started, it was never shut down.
- When pilot gets signal from “A” – man for flaps and does not see the flaps move. And Nathan was signaled to come over. Before Nathan walked over the nose landing gear doors were closed.

- Jason D'Amico, wanted to clarify on the safety switches; one safety switch is for the doors to prevent them from actuating with the engine running (3000 psi), and the other for the dive brakes.
- When notified the airplane was code one, he asked Nathan what he did down there. Said he did nothing just looked at the circuit breakers. Nathan was curious and was going to ask the pilot when he landed about the issue.
- He said he personally does not know the airplane as well as Nathan and could not speculate on what he would have done with the experience he has.
- The flaps did not extend during the initial part of the slats/flaps check and did not extend until after Nathan looked inside the gear doors.



MEMORANDUM FOR RECORD

Albert Nixon
Senior Aviation Accident Investigator
Western Pacific Region-Aviation Safety

Date: Jun 3, 2021
Subject: Record of Conversation with Nathan Wyatt, Draken International F-1 Flightline Lead)
NTSB Accident Number: WPR21FA203

In a conversation with Nathan Wyatt, the following is a summary of what he stated:

- In attendance (online) was John Waugh and Rich Ramirez—Las Vegas FAA FSDO, Harlie Bodine – Draken International Director of Safety, Thomas Garrett, Draken International F-1 Maintenance Lead, Jason D’Amico, Senior Tech Advisor Draken International, and Andrew Swick, NTSB.
- The witness chose to have attorney Jamie Rodriguez as his representative.
- Worked both commercial and general aviation previously. Worked for Draken since May of 2017. Started on the A-4 as a mechanic level 2, and then the F-1.
- Started working on the F-1 in February of 2020.
- Had 3 weeks of training with South Africa and then at OJT training at Nellis for the F-1. Fully qualified in F-1.
- Was on the dayshift flight lead position on the day of the accident.
- Will go through paperwork and visual walk around.
- About 1 hour prior to flight, do the walk around.
- No issues during the walk around of the accident airplane
- Airplane was released.

- Once pilot accepts airplane, then “A” and “B” man take it and I just overlook; standing in middle of flightline, in position to see everything.
- Directed by “A’ man that he had a problem. Pilot motioned combat flaps, recycled, and no issues. No maintenance actions.
- Pilot cycled system 5 times.
- Went to nose landing gear area to look at circuit breakers. Nothing was popped. About 50 circuit breakers in the wheel well.
- Did just a visual check.
- After pilot recycled gave a thumbs up.
- He did not know how many times the pilot had a bad flap indication.
- There were no other issues with the accident airplane.
- No leaks observed back at his position.
- No write ups on the flaps.
- A circuit break popped is not normal.
- The airplane did not have flap issues before.
- First time to see this.
- After system was reset no issues.
- If pilot needs to talk to maintenance, an engine shutdown is required.
- Did not know if they taxied on time.
- Yes, saw airplane in pattern but nothing of interest.

Other questions:

- If circuit breakers were popped then would shut down.
- Circuit breakers are only accessible with gear down and door open, he did not open panel – no maintenance action taken.

- If flap problem did not resolve itself, he said to shutdown and to cycle through back in the hangar.