

25 June 2021

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SUBJ: STATEMENT REGARDING N2143G MISHAP

I was an instructor employed by Trident Aircraft on 24 June 2021 and was the primary instructor for MIDN Shane Popko during the Naval Academy's Powered Flight Program (PFP). All statements from the flight are from memory, as my notes were on my kneeboard and destroyed in the aircraft.

Shane was an average to above-average student. He was able to perform all maneuvers during flight training. Initially, he did not learn procedures verbatim (identified as boldface in the PFP Flight Training Instruction [FTI]), but after receiving a "Marginal" Grade on the C3 flight, he dedicated himself to learning procedures on the ground and chair flying. He was consistently able to perform maneuvers in the aircraft at the level expected of his current progression..

I flew with Shane on C1, C2, C3, and C4 prior to his C590 Stage Check, and on C7 and C8. He flew C590 with CAPT Tom Wagener, C6 with Wasi Baset, and C990 with CAPT Byron Ogden. Typically, all flights except stage checks are conducted with "On-Wings." Shane flew C8 with Wasi Baset due to scheduling issues and limited instructor resources, specifically me flying C590 checkrides.

I taught all maneuvers in accordance with FAR 61.87(d) during C1-4, and continued practicing several maneuvers per flight for C7 and C8. During flights with Emergency Procedures from the PFP syllabus, I emphasized scenario based EPs, such as engine fires, electrical fires in the wing, rough engine/power loss. Included in the scenarios were landing site selection and emergency descent procedures. My personal emphasis on emergencies was based on my flight training with both the Air Force and the Navy with the boldface procedures of Maintain Aircraft Control; Analyze the situation and take the proper action; and land as soon as conditions permit (FTI page 100). During briefs, we discussed the differences between forced, precautionary and ditch landings. Shane appeared to understand all concepts. During EPs and landing site discussions, I emphasized the need to pick something close, with short discussions of high key and low key, specifically the concept of the relationship between "power off 180s" and emergency landings: 1000 feet was about 180 degrees of turn, and putting yourself in a familiar scenario so you could rely on your training to create a normal landing flare, while maintaining a good view of the landing site.

During C6-8 the emphasis changed from airwork to landing pattern. While we would continue practicing the "high work" such as basic airwork skills like trim, slow flight, stalls, ground reference maneuvers, etc, we spent most time trying to perfect landing pattern work in preparation for solo.

During preparation for solo, Shane progressed rapidly. Initially, he tended to create a deep base turn leading to a shallow final. After a demonstration, he began to understand power

management and make proper power corrections. I was never in doubt of his ability to progress to solo.

On 24 June, we were scheduled to brief at 0930. Shane and Brian arrived at approximately 0845. I discussed our plan for crew swaps at 0900 so they could incorporate into their brief. They were ready to brief at 0915, and they came to the instructor room and told me they were ready. We briefed the standard PFP brief. All parameters (weight and balance) were within limits and weather was good. During the discussion, I reviewed all required documents for solo (Temporary Airman certificate, Third class Medical, Photo ID, and Logbook with endorsements.) and ensured their documents were signed, and their pre-solo exam was graded and corrected. I endorsed the knowledge and aeronautical experience portions of the logbooks, filled out the solo endorsement with limits of 8 knot crosswind, weather better than 5000' ceiling and 5 miles visibility and a face to face checkout with instructor. I did not sign the final endorsement until we were complete with the first half of the flight.

We launched at approximately 1030. We flew .5-.6 hours. Shane and his on wing partner, Brian Hand, performed the preflight, with myself checking the engine and walk around spot checks, such as fuel and general condition of the aircraft. I specifically noticed the left tire was low on tread. I rolled the plane backwards to verify no thread was visible on the tire. Brian preflighted the exterior and initially left the tail tie down in place. I questioned Brian on the preflight and he noticed the error. I noticed no abnormalities with the engine. Oil was warm and right at 6 quarts (It was hard to discern because the oil was clean and warm, but I wiped the dipstick and measured at 6.). During preflight, Shane noticed that the fuel pressure gage "did not move and may be stuck." I explained that the line often remained pressurized and would move after we started the engine. It was approximately 7 PSI. During start and taxi, the pressure fell to 5 PSI (in the green range) as fuel was released into the engine. While preflighting, the previous crew came back to the aircraft to get a picture after their solo flight.

During starts, all start checks were normal. We received ATIS information India, winds 070@005 (approx), weather better than 5000/5, Altimeter (approx) 30.40. When we called for taxi, Comm 1 would transit but not receive when calling Easton Ground. We switched radios and Ground confirmed they heard our initial calls. We were cleared to taxi to runway 04 via Bravo-Alpha, cross runway 04 at Alpha. Shane correctly read back all clearances. While taxiing, I cycled power on Comm 1, which then worked, and arranged the radios so he would have all three Easton frequencies available without tuning, only switching the Comm Panel. All radio arrangements are slightly different, so I ensured he understood the Comm Panel function. During run-ups, Shane performed all run up tests correctly. He delivered a takeoff brief for a normal takeoff with max power, Vr of 55 kias and Vy climb of 79 kias. He briefed that in case of a power loss he would look for a landing site forward of the wings. We proceeded to the hold short line and Tower cleared us for takeoff. During the flight, Shane appeared in control of the aircraft. The first two landings were touch and goes that were smooth, safe, and passable, although both were left of center line. While on upwind after the second touch and go, I told Shane to request a full stop and to taxi clear at Delta Taxiway for crew swap at Easton Jet. While on downwind, Tower cleared Shane for a short base and a touch and go due to traffic.

Shane requested the full stop landing and to taxi via Delta to Easton Jet. I intervened and accepted the short approach. During the turn, Shane was clearly going to land long, so I told him to aim for the runway intersection as his touchdown point since ESN 04 is a 5500 foot runway and the intersection would leave him over 3000 feet of runway, explaining that the length mitigates the risk and if he received that clearance on solo, to waveoff. He performed a touch and go nicely and requested a full stop on the next landing, with taxiing to Easton Jet's ramp for crew swap. His final pattern with me was extended downwind to approximately three miles. I allowed him to correct on his own to see how he reacted to unexpected changes. He began descent when cleared for base turn, and corrected the final glideslope by holding altitude when on final. He performed a good landing and taxied clear.

Upon reaching the Echo Ramp, I signed the solo endorsement in Shane's logbook and placed it in the back seat. I got out of the aircraft with the engine running and met other instructors there. Brian Hand brought a handheld radio as I had asked him to.

Shane's taxi to runway 04 was uneventful. He took off, performed a pattern to a touch and go. While on final, Tower asked him if he had performed a 360 on downwind, to which he responded "No" but could if they needed. He sounded in control of the aircraft and not stressed. Tower said they did not need him to, but it looked like he had on their scope. Shane performed a standard touch and go.

While upwind, I heard a series of pops. My initial assumption was that a car on US50 backfired. The aircraft began to turn and stopped climbing. I assumed that he had stopped climbing due to airwork (a standard student mistake in the turn to crosswind). In the turn, I heard "43G, I have zero RPM." As I watched the aircraft continue to remain level, I heard another call to the effect of "Tower, 43G, my engine is out, I'm going down. Help."

I keyed the handheld radio and told him "Look for an open field. It's just a normal landing." As he descended, he maintained a nose down attitude until shortly before descending behind the nearby hangars and trees. Then the aircraft pitched nose up and I assumed he was stalling. Before I could say anything else on the radio, the aircraft pitched nose down again and disappeared behind the trees.

I told the other students (Brian Hand and Adrian Schalk) to run back to the hangar and let the PFP Officer in Charge, CDR Bernard know. I paused and tried to decide the best place to be not to interfere and lend the most assistance. I decided to inform Trooper 6. The hangar door was open, so I went through the hangar, told them I was a flight instructor, Navy SAR Pilot and we just had an aircraft go down behind Easton Technology Center, and they should expect a call shortly. At least one (maybe two) officers immediately departed in their patrol vehicles to the scene.

I returned to Trident hangar and offered assistance where possible while awaiting more information. We could see the black smoke over the trees from Trident's hangar. After about 10

minutes I went to Trooper 6 and asked one of the pilots if they had heard anything. One Officer returned from the scene and told us he was OK with a hurt leg.

At that point, I remained at Trident as we gained more information on Shane's condition, saw that Trooper 6 had departed with him on board. I discussed with other instructors and students not to put information out to other midshipmen until proper notifications were made. In addition, most of us spoke to each other and the midshipmen about ensuring they were able to maintain mental health, such as speaking with a chaplain or Midshipman Development Center therapists at USNA.



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