

Solo Brief

SNA shall present their green card prior to receiving the Solo Brief. Verify the SNA has completed all required items and events prior to conducting this brief.

1. Currency: verify SNA conducted their check ride, and completed a spin (for initial contact checks), within the preceding 5 days.

NOTE:

FDO shall verify SAFE FOR SOLO on an ATF or verbally from check IP.

2. ORM

- a. IMSAFE
- b. Have the student complete an ORM worksheet.
- c. Verify Crew Day/Crew Rest
 - i. 10 Hour limit on Crew Day
 - ii. No less than 30 minutes away from squadron spaces between check-ride debrief and solo brief.

3. Weather

- a. Review METARs and TAFs, including all TEMPO lines. Ensure the current weather, forecast weather (\pm 1 hour T/O and Land), and the crosswinds are within limits at home field and in the working area for the solo. When able, obtain PIREPS from the working areas to determine whether suitable weather conditions exist.
 - i. Contact Solo Weather Criteria: 5,000' ceilings and 5 miles visibility
 - ii. Form Solo Weather Criteria: 3,000' ceilings and 1 mile visibility
- b. Ensure forecast winds are within limits.
 - i. Maximum crosswind component for launching and recovering solos is 10 knots. Use maximum gust value to determine the magnitude of the crosswind.
 - ii. Maximum total headwind is 25 knots.
 - iii. Maximum total tailwind is zero knots.
- c. All student solo sorties shall be on deck 30 minutes prior to sunset.
- d. Maintain VMC. If unable to maintain VMC, Solos should execute IIMC procedures and be prepared to contact ATC and declare an emergency with the intent to return to the nearest suitable field – KNSE or OLF, as necessary.

4. Preflight

- a. Review the ADB. When ready to accept the aircraft, print and sign your name. Include your rank and “6” to indicate VT-6 is using the aircraft. Block 10 should read, “Signature Last 6 Rank.”
 - i. Do NOT take an aircraft unless you understand all MAFs in the book.
 - ii. Do NOT accept or take an aircraft with
 1. Inoperative Trim Aid Device (TAD)
 2. Inoperative Air Conditioning
 3. Malfunctioning HUD. The HUD should be able to dim (turn off) completely.
- b. Conduct a thorough preflight of your survival equipment.
- c. Conduct a thorough preflight of the aircraft.
 - i. Methodically use the Securing the Rear Cockpit checklist. Maintenance will secure the rear cockpit, but you are responsible for verifying compliance and rear cockpit integrity.
 1. Ensure the rear cockpit UFCP HUD switch is in day mode and ICS Switch is in NORM.
 2. Ensure the rear cockpit OBOGS is off.
 3. Move the rear cockpit PCL and stick through their full range of motion to ensure no potential binding issues.
 - ii. If anything seems incorrect, immediately seek resolution on the potential conflict or deviation.
 1. Ask a plane captain for clarification. (Plane captains typically arrive with a ground power cart)
 2. Request a troubleshooter, if necessary. (Troubleshooters typically arrive in a golf cart)
 3. Find a VT-6 instructor or return to the FDO desk, as necessary.

NOTE:

Once strapped in, contact the FDO on base frequency (355.55) with any questions or for any assistance.

- d. Call sign: Append “Solo” to the end of your call sign for all calls - Shooter XXX Solo. Additionally, append “Z” to the end of your FMS call sign – SHXXXZ.
- e. Call base and report outbound: “Shooter XXX Solo, outbound, seat safety pin removed and stowed.”
- f. Maintain a good VFR scan throughout the flight. TCAS is a valuable tool but not a substitute for looking outside the aircraft to maintain separation from other aircraft.

5. Flight Profile

- a. Review the intended route including the working area (MOA/Pelican/Wahoo), OLF, and course rules.

NOTE

Evergreen (KGZH) OLF is the TW-5 PRIMARY solo field in Area 2. Students shall not plan to go to Brewton (K12J) unless weather, runway closure, or other operational necessity dictates.

- b. Discuss working area contingencies.
 - i. If all working blocks in the NMOA/Pelican OR SMOA/Wahoo are full, remain in the transition layer and fly the perimeter of the working area until a block becomes available or until reaching Joker.
 - ii. Set the TCAS to “above” while performing aerobatics in the Pelican or Wahoo.
- c. Discuss OLF considerations.
 - i. If the OLF is full, consider going to an alternate OLF, if able, otherwise continue to the initial point but be prepared to execute discontinued entries until either another aircraft departs or you reach your bingo.
 - ii. Monitor both UHF and VHF frequencies while in the landing pattern.
 - iii. Expect to complete no more than four passes at the OLF.
- d. Review fuel planning considerations.
 - i. Joker: no less than 700 pounds. Proceed to the OLF for T&Gs, as necessary.
 - ii. Bingo: Plan to arrive at NSE with no less than 350 pounds. Consider a BINGO of no less than 550 pounds.
- e. Review the MEF (Maximum Elevation Figure) for the intended working area.
- f. Discuss return contingencies.
 - i. If weather precludes returning on course rules at the correct FWOP altitude then consideration should be given to stepping down to the next available course rules altitude or returning to the nearest field (OLF) with acceptable weather. **DO NOT DESCEND BELOW MEF.**
 - ii. If weather (smoke/haze, IMC conditions, etc.) precludes returning on course rules along the prescribed FWOP ground track then, with coordination from ATC, vectors deviating around weather may be used to avoid isolated obstacles. Otherwise return to the nearest field (OLF) with acceptable weather.
 - iii. If KNSE is not accepting landing aircraft, due to an emergency or unexpected runway closure, consider available landing options based on fuel and weather. Contact the FDO for guidance if

able. Remember, diverting to land will likely cause a min or possibly emergency fuel situation; continue to say Solo for all radio transmissions and consider declaring an Emergency in order to get priority handling. Be prepared to be directive about what you need – direct vectors to, a break, etc.

1. OLF: Proceed to the nearest OLF with suitable weather, likely Brewton, and conduct a full stop landing. Follow RDO guidance at all times. Ensure landing checklist is complete with flaps at the desired setting, preferably LF, and ensure the landing is within point of intended landing +500' (first 1000' of runway) to ensure stopping distance. Do not accept landing long, execute an immediate wave-off, due to reduced runway length. Apply smooth braking action, taxi clear of the runway, and follow RDO instructions.
2. KNDZ: When directed, contact South Whiting Tower on UHF CH 34. Request break entry. Ensure landing checklist is complete with flaps at the desired setting, preferably LF, and landing is within point of intended landing +500' (first 1000' of runway) to ensure stopping distance. Apply smooth braking action, taxi clear of the runway, and follow taxi instructions from South Whiting Ground on UFH CH 33.
3. KPNS: When directed, contact Pensacola Tower on VHF 54. Request break at the upwind numbers. Ensure landing checklist is complete with flaps at the desired setting, preferably LF, and landing is well within the first third of the runway to ensure stopping distance. Apply smooth braking action, taxi clear of the runway, and follow taxi instruction from Pensacola Ground on VHF 53.

g. Area 1 Threats:

- i. Parachute jumpers in the vicinity of Perdido Winds. Be alert for jumpers in WAHOO 2B and while transiting for NBJ RWY27 and RWY33 initials.
- ii. Banner towers west south west of NBJ operating out of Roscoe (82J) over Perdido Bay and beach line. May be operating 2000' MSL and below.
- iii. Jack Edwards Class D airspace. Stay north of Keller road and climb at 140-160 until reaching 2,000 MSL on departures from KNBJ.

h. Flight violations or interactions with ATC:

- i. Always be courteous and respectful on the radio.
- ii. Do not say your name.
- iii. If you get a phone number, politely copy the number to your kneeboard.
- iv. Do not call the number upon return to base. INFORM THE FDO. Let the Command handle the matter.

6. Restrictions

- a. Back taxi: Do not back taxi except to avoid a fuel truck or similar obstacle.
- b. Rolling checklists: Do not conduct a checklist while the aircraft is moving except the Taxi Checklist.
- c. Come to a complete stop prior to calling for take-off.
- d. NF Landings: Do not conduct a NF landing except IAW an emergency procedure.
- e. TAD Failure in flight: Do not conduct T&Gs. Return to KNSE.

- f. Straight in approaches: Do not conduct a straight in approach except IAW an emergency procedure.
 - i. If directed to extend off the 180, comply with tower instructions but plan for a wave-off from pattern altitude. When cleared to land, reply with “wave-off”, maintain pattern altitude, turn initially to overfly the runway and comply with tower instructions while rejoining downwind. Conduct a normal landing from the 180 on a subsequent pass.
 - ii. Do not confuse the clearance to “continue” with extending. Continue means fly your normal pattern checkpoints and expect clearance to land or direction to wave-off prior to the landing threshold.
- g. Landing rollout: Use the full length of the runway with the intent to get off on the last available taxiway. Do not back taxi except for obstructions on the last available taxiway.
- h. Maneuvers: Spins, PPELs, PPEL/Ps, AOA landings, Split-S, Combo Maneuvers, Immelmann, inverted flight, slow flight, stalls, and any other non-introduced item are prohibited. **DO NOT DO THEM.** If you have any doubt – don’t do it. **ANY BLATANT VIOLATION OF NATOPS LIMITS OR DISREGARD FOR STANDARD PRACTICES MAY BE GROUNDS FOR IMMEDIATE ATTRITION.**
- i. All cameras and electronic devices are prohibited.

7. Emergencies

- a. In any emergency, fly the aircraft first. Aviate/Navigate/Communicate. Remain calm and use your procedures. Maintain control of the aircraft, assess the situation, and take the appropriate action. If able, use your pocket checklist to ensure completion of critical action memory items as well as non-memory checklist items.

NOTE:

The option to eject remains a viable egress option for any unsalvageable emergency situation - e.g. a fire that won’t extinguish, an engine failure with no chance to successfully restart or intercept ELP, etc.

- b. Use your radios to minimize cockpit workload and maximize support, if able. Coordinate with any RDO, FDO, or airborne Instructor Pilot. (e.g. “Any dual aircraft, this is Shooter 123 Solo with emergency...”)
- c. NORDO
 - i. Check all cords, switches, circuit breakers, and volume knobs.
 - ii. Check both radios (including the standby VHF) as well as other frequencies.
 - iii. Squawk 7600, make all calls in the blind, and comply with the applicable FWOP scenario.
- d. Discuss landing irregularities and wave-off considerations.
 - i. When do you wave-off? High/Low, Fast/Slow, off centerline, bounce, porpoise, etc.

- ii. If you encounter tire failure, brake failure, or drifting laterally during landing rollout: Sacrifice braking to maintain directional control, if necessary. The runway is longer than it is wide.
 - iii. Wave-off remains an option immediately following touch down, if control is in doubt.
 - iv. Do not accept an unsafe condition.
- e. Gear (or flap) over-speed.
- i. Leave the gear down (or flaps at current position) and discontinue all subsequent touch and go landing attempts.
 - ii. Reduce speed below 150 knots. (Recommend no faster than 140 knots and no slower than 120 knots.)
 - iii. Fly course rules at a non-standard altitude (e.g. 1900, 2400, etc.) and offset/parallel to the course rules ground track. On check-in, notify approach and tower that you are speed limited.
 - iv. Considering the speed differential between your aircraft and other normal course rules aircraft, be prepared to receive subsequent heading vectors further away from course rules.
 - v. With clearance from tower, execute a standard straight-in approach. If the approach, doesn't look safe, wave-off over the numbers and request the downwind for standard landing from the 180.
- f. G-Limit Exceedance.
- i. Discontinue all maneuvers.
 - ii. Join course rules and return to home field for a normal full-stop landing.
- g. Inadvertent IMC. If unable to maintain VMC, Solos should execute IIMC procedures and be prepared to contact ATC and declare an emergency with the intent to return to the nearest suitable field – KNSE or OLF, as necessary.
- i. Maintain aircraft control and establish an instrument scan.
 - ii. Initiate a climb above MEF, as necessary.
 - iii. Attempt to exit IMC by reversing the aircraft's path. (e.g. If a right hand turn caused IMC then turn back left. Or, if a descent caused IMC then climb back up.)

WARNING:

If a climb caused IMC, do not descend below MEF to regain VMC.

- iv. If unable to exit IMC conditions, contact ATC. Inform ATC that you are a VFR ONLY student pilot on an initial Solo flight and request an inadvertent IMC clearance. Comply with ATC instructions.
- v. Declaring an emergency, as necessary.

- h. In the event the Solo encounters other malfunctions or emergencies – contact the FDO on base or any other instructor pilot for guidance as necessary.
8. After landing and Post-Flight:
- a. Once parked in the line, record take-off and landing times from the FMS flight log prior to calling base.
 - i. On the left MFD, using either of the top upper buttons, return to the menu page.
 - ii. Select “INIT REF” via R6.
 - iii. Select page 2.
 - iv. Select “FLIGHT LOG” via L6.
 - b. Call base and report, “Shooter (XXX) Solo return, seat safety pin installed.”
 - c. Conduct a good post flight of the aircraft; don’t leave gear adrift or FOD in the aircraft.
 - d. Return to the FDO in order to complete the NAVFLIR and discuss any discrepancies that may require a MAF.
 - e. Complete the grade sheet and update their green card.
 - f. Direct the solo to complete the end of stage critique and log an ASAP entry if required.
 - g. Return their completed green card.
9. Have the student conduct a NATOPS Brief and carry out the above plan.