SOLO PREP GUIDE

Bring your green card to the FDO for your solo brief at least 1.5 hours prior to planned takeoff. Before you hand in the green card, ensure all items have been checked off; if missing any items due to extenuating circumstances let the FDO know.

Be prepared to discuss the following with the FDO. While your solo flight is meant to be enjoyable and build confidence in your abilities as a pilot, you can UNSAT the event, so come prepared with a positive attitude and the flight will be much more gratifying.

- ☐ Know your crew day and currency requirements from SOP/JPPT.
- ☐ Ensure you do a thorough and proper preflight of your ALSS.
- ☐ Weather
  - o Know and understand WX limitations to include ceilings, visibility, and winds (how does gust factor apply)
  - o Review WX to include DD-175-1 to ensure requirements are met (including all tempo lines).
  - o What will you do if WX deteriorates while flying?
- ☐ Preflight
  - o Be prepared to review and sign the ADB. Bring any questions you have to the FDO.
  - o Do not take a plane with TAD (Trim Aid Device) or Air Conditioning inoperative.
  - o Do a normal preflight and know who to contact if you find something on pre-flight or during start-up.
  - o Know how to pre-flight the rear cockpit using the quad-fold.
- ☐ Ground Ops
  - o Which checklists may solos execute on the roll?
  - o When can solos back taxi?
  - o Outbound Call: "Shooter _____ solo, strapped in, pins removed and stowed."
  - o All solos shall come to a complete stop prior to calling to departure.
  - o How does your callsign and FMS flight no. change?
- ☐ In-Flight
  - o Bring a planned route of flight and profile for high work.
  - o When must you depart high work? What should your fuel be on deck KNSE?
  - o What are our minimum and emergency fuels?
  - o What do you plan to do if the RDO calls 6 in the pattern?
  - o Monitor both UHF and VHF frequencies while in the landing pattern.
  - o How many touch and goes can you do?
  - o How does your scan pattern change?
  - o What are your prohibited maneuvers on solo? What if you have a doubt about whether or not you can do a maneuver?
  - o What are you going to do if you over speed the gear?
  - o What is squelch and how do you turn it off?
  - o What is guard and how do you turn it off?
  - o What do you do if asked to extend from the 180 position by tower?
  - o Can you exit the runway early?

- o How would you handle being diverted to PNS or NDZ?
- o How do you configure the TCAS prior to doing aerobatics?
- o What do you do if you over-G the aircraft?
- ☐ Emergencies
    - o In any emergency, fly the aircraft first. Aviate/Navigate/Communicate. Use the procedures and don't panic. If you have an engine failure or a fire that won't extinguish, you still have the ejection option. If you have time to use your pocket checklist, do it.
    - o Who can you talk to during an EP?
    - o How do you troubleshoot lost COMMS? How do you recover at KNSE NORDO?
    - o Where do you find frequencies if you need to tune them in manually?
    - o What if you can't maintain normal course rules (speed limited, smoke, lost)?
    - o How do you use the CO routes?
    - o When do you Wave-off?
    - o Solos are required to remain VMC. Solo aircraft unable to maintain VMC due to deteriorating weather or smoke should return to a NOLF or declare an emergency.
    - o If you do go inadvertent IMC execute the 'Solo IIMC Procedures' on page 3.
- ☐ Post Flight:
    - o When you call base after landing give the following report "Shooter (XXX) solo, return, departed runway (XX) NSE, went to (Pelican, NMOA) block (XX), break into (NOLF) runway (XX), CR (Pt Jay or 5 Lakes) to PT (Easy or Waldo), landed runway (XX) NSE, # Landings and type. Use Flight Log for T/O and Land times (if required by FDO).
    - o Conduct good post flight and don't leave FOD in the aircraft. The plane captain will un-secure the rear cockpit from the solo configuration.
    - o Go straight to the FDO after securing your aircraft. The FDO will take your flight data and generate an NAVFLIR for you.
    - o Once you have your NAVFLIR from the FDO, go turn in your aircraft and write up any MAF's that you may have. If you have questions, ask the folks that work there.
    - o Post solo, complete the contact stage critique using the QR codes found around the squadron spaces.
    - o Sign up for your tie cutting ceremony and buy squadron solo merch!

SOLO INADVERTENT IMC

Prior to flight review the MEF (Maximum Elevation Figure) values for the intended working area. Add 1000' to this number; this will serve as your **safe altitude**. This value would be close to the instrument chart off route clearance altitude (OROCA).

1. Establish an instrument scan- recover from extreme nose high or nose low unusual attitude using Instrument FTI procedures. If not in an extreme unusual attitude, remember: level the wings, level the nose, center the ball, adjust power to maintain level flight, and TRIM!

2. Check altitude
    a. IF BELOW your **safe altitude -** immediately climb to get above it while turning away from any known obstacles.
    b. IF ABOVE your **safe altitude** - get out of IIMC the way you went in to it.
        NOTE: in all cases- make any turns with shallow angle of bank to prevent any unnecessary descent rates or unusual attitudes. Your instrument scan will be slow.
    c. If you choose to use the published DCON FTI IIMC procedures, do not try to use the clock...exact timing is insignificant and it could lead to an unusual attitude. By the time you have established your instrument scan...30 seconds will have elapsed.

3. If clear of IMC remain VMC and proceed to KNSE or OLF w/FDO concurrence.

4. If you cannot escape IMC:
    a. Squawk 7700 (if not already in contact with ATC).
    b. Contact ATC in your area.
        i. N of Brewton, contact JAX CENTER on VHF ch. 16.
        ii. Brewton and S, contact Pensacola approach on UHF ch. 6.
        iii. Area 1/WAHOO, contact Pensacola approach on VHF ch. 11.

Example call: JAX CENTER, Shooter 123 solo in the vicinity of Evergreen at 4,500. I am a VFR pilot in IMC conditions declaring an emergency. Request radar vectors back to Whiting at your minimum altitude.
    c. ATC will give you a squawk and ask you to IDENT.
    d. Comply with ATC instructions.

5. If you break out of IMC and can continue back on course rules, tell the controller you are clear of IMC and can resume own navigation.

6. If you break out of IMC, inform ATC you are in visual conditions. If you don't know where you are, continue to receive vectors back to KNSE.

7. Once you contact Pensacola approach if handed off from JAX center and you still don't know where you are, request a random recovery with negative information (or ATIS code if you have it).

Note: These procedures are based on the idea that solo minimums were met prior to launch. ATC has a decent idea of where VMC may be based on METAR's etc, but they cannot see clouds on radar. By asking for the minimum altitude, you will descend to the safest altitude the controller can vector your aircraft and most likely break out of anything at or above 2000' MSL. If Whiting is not an acceptable destination based on conditions, the controller may provide other alternatives. Request to proceed to an OLF if the weather there is VMC.