

13 Feb 2020

HT-18 ON-WING INSTRUCTOR PILOT PHILOSOPHY

1. **Our students are impressionable**, and the influence of an instructor on their onwing is momentous. Students will emulate your officership and airmanship long after you are gone... for better or worse. When you say one thing but do another, they might as well be down ICS. Be the aviator your fleet squadron needed in their darkest hour and by the time your student is winged, you will have created another.
2. **Our standards are high**. We teach from our flight training instruction and grade to course training standards. Leadership expressed in the way we do things is what elevates our craft. Decisionmaking, mental discipline and success under duress are the subtle, unwritten objectives of that syllabus.
3. **We uphold those standards**. Standardization team will monitor your progress to ensure you hold that standard. The checkride you will prepare your students for is an expression of your ability to ready an officer for the flight environment. Sharpen and maintain your knowledge to the point you can confidently correct the smallest mistake.
4. The enclosed is designed to help you create a methodical approach to the onwing progression. As you hone your craft by honing theirs. Good luck, and enjoy these moments with your onwings. Life's meaning comes from responsibilities, and you have just been entrusted with great one!

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CNATRA Contact Stage Manager

IP OnWing Guide

If your SNAs don't contact you, contact them, and lay out your expectations for FAM 0. Generally, the earlier you let them know that you exist and that a FAM-0 is waiting at the end of their CPT's, the better they will prepare.

In addition to everything you learned at the HITU and to supplement the pubs, keep the following in mind:

Before FAM 0

1. See STAN if you have questions.
2. Review SNA's ATJs.
3. Review the "SNA FAM 0 Guide", make it your own, and give a copy to your studs.
4. Inform studs of your FAM 0 expectations
 - a) I have them prepare:
 - 1) Course Rules: home field, to and from OLF, and OLF knowledge.
 - 2) Full Preflight.
 - 3) If FAM 0 is NOT coupled with their CPTs, I also have them prep FAM 1 briefing items.
5. Grab a FAM 0 sheet from NATOPS, it is how Stacia logs the Egress drill and 5' hover trainer, both of which need to be done on FAM0.
6. Reference the Wing FAM 0 guide so you are familiar.
7. **Review the FIG** prior to every set of On-Wings, you will be surprised at what you forget.

Things to go over during FAM 0 (Things we see on Off-Wing flights and checkrides)

1. Show students (in excruciating detail) how to open and close doors, strap in, connect ICS chords, hold the cyclic/collective, pedal position, etc. Basics covered now will have to be reinforced throughout FAM flights.
2. Weight and balance computations.
3. Squadron tour: FDO board and how to read it, pubs room, grade cards, expectations for setting up the briefing space
4. Flight line tour: Gear issue, A/C issue, Crew change area.
5. Go through the "SNA FAM 0 Guide" and lay out expectations up to and including checkride.
6. If you have time, and everyone has energy, start diving into FAM 1 briefing items

Things to keep in mind through the syllabus

1. The studs are going to be bad, at everything, and you don't have time to work on perfection. In most cases, **once progress has been made on any one maneuver, it is time to move on.** This is especially true with low work, don't spend too much time specifically dedicated to low work beyond the first 2-3 flights, they will still get exposure while doing other things.
2. Don't let bad habits form. You will have to repeatedly tell them the exact same thing flight after flight, and more often than not, multiple times on the same flight. They will require this constant reminding until it finally sinks in. At no point should you think, "I told them that last pass, I'll let it slide this pass, I'm sure they know".
 - Pot Stirring
 - Under or over-using trim button

- Constant cyclic or collective jockeying
- Poor posture
- poor grip (cyclic and collective)
- Staring at the gauges
- Not referencing gauges at all (mainly A/S and VSI relationship)
- Hot mike
- Lazy pedal control
- Improper nose attitudes
- etc.

3. Keep them honest and track their timelines concerning pre-reqs, course rules exam, open/closed book exam etc.

4. Try to get them offwing for C4102, then again shortly after. Getting the 2 Off-Wing flights is generally super helpful.

5. Stay relaxed and calm at all times. However, if your studs screw something up, corrections need to be immediate so they can fix it, specifically referring to briefing deficiencies. Research supports the most rapid learning occurs when:

- Feedback for errors is immediate and consistent.
- Reward for success is random (mix up the atta-boys).

Calm but Stern is a good motto to follow.

On-Wing FAMs

Rank, First, Last Callsign

XXX-XXX-XXXX (Call or Text at any time)

Work email

Personal

This supplements but does not replace COMTRAWINGFIVEINST 3710.14 (Series)

Pre-requisites

☐ System Exam ☐ Aero Exam ☐ CRM Class ☐ Safety Class ☐ FAM 0 Class

☐ HABD Training (Wednesday – SNIV as req) ☐ CPT 5? (not a pre-req)

Stuff on the horizon you need to set reminders for... right NOW!

- Course Rules Exam – Prior to C4004
 - Phone Calendar reminder set
- Open Book NATOPS Exam – Prior to the Closed Book NATOPS Exam
 - Phone Calendar reminder set
- Closed Book NATOPS Exam – Prior to C4390 (check ride)
 - Phone Calendar reminder set

Publications- All except NATOPS are available at Factory hand university Website

- **NATOPS**
 - Chapter 2- Systems This is the backbone you will strap you knowledge to.
 - Compare it with the Systems book, come with questions
 - Goal is to present depth of operations and functions of systems, don't just give a laundry lists of information
 - Know how a system interacts with other systems... ask yourself:
 - What is the purpose of this system?
 - How does it accomplish that?
 - Where is the part on preflight?/What are we looking for?
 - What cockpit indications does it send us?
 - What EP's involve this part?
 - What limits involve this part?
 - Is this splined to, or powered by another system?
 - Plan on having an unlabeled system drawn on the board OR bring a neat unlabeled drawing to the brief
 - Team effort is allowed and expected through the system
 - Have detailed knowledge – I.E. know what each component does and its characteristics, not just its name.
 - Chapter 3 Servicing
 - Read through to know what is there.
 - For check rides: Fluid quantities and types, and fuel information

- Chapter 4 Limits
 - Know all parts of all limits COLD – Start with systems and work through the rest
 - Always fair game at any time during brief or flight
 - Especially polish limits related to your briefing items (System, maneuvers, aero, EP)
- Chapter 7 Normal Procedures
 - You probably got through CPT's with just the Hollywood checklist. It's not enough.
 - Pop out your yellow Pocket Checklist and go through it with CH.7 to beef up Preflight/prestart/start checklists etc. for with N/C/W and expanded steps
 - Also can help with FTI maneuvers
- Chapter 11 Aero
 - Check for information relating to EPs and briefing items when appropriate
 - Mainly applies to tail rotor, retreating blade stall, vortex ring state, mast bumping and a few others
- Chapter 12 Emergency Procedures
 - First read procedures and understand what you're doing and how
 - **Memorize indications!**
 - **Memorize all CMIs including Charlie steps**
 - If a briefing item EP includes non-CMI steps – be prepared to talk through in detail
 - Memorize your N/W/C in the order they appear in the procedure – Verbatim not required, but thorough understanding **in your own words**
- NATOPS Brief
 - Less of a monster than you think- it's fairly similar to the VT brief with some tweaks. Apply common sense and tailor your brief to "What's different today".
- **FTI- CONTACT**
 - Be able to recall steps of your maneuvers verbatim, ESPECIALLY IF IT'S BOLD-FACED!
 - Do not need to memorize amplification steps, but read and understand
 - Know **all** of the maneuvers in the MPTS for your event, use grade card to help keep track
 - Stay away from gouge – Read and study FROM THE SOURCE, memorize, and ask questions.
 - Know your Acronyms COLD – Practice them for rhythm and for muscle memory
 - Chair Fly, Chair Fly, Chair Fly!
 - If it's a "+" item, I will expect you to be able to talk through the procedures for any given block, even if it's C4001. If it's not a "+" item we can still fly the maneuver **if** you know it.
- **RWOP**
 - Weather Minimums
 - Course rules – Work on NOLFs first (prioritize yours) and remember
 - There is a .zip file for google earth that has all course rules on it. Would recommend you get a copy and practice flying course rules
 - Your backup option is to pull up google maps and turn on satellite mode.
 - Home field ops you need to know KNDZ ops as well, not just how to get to and from NOLF
 - Solo Rules
 - For **C4002** know all **SVFR** local area course rules, not just to solo field (possible RRU)
 - Know your Right of Way rules, and where to look for traffic conflicts

- Lost Comms
- **SOP**
 - Crew Day
 - Crew Rest
 - Weight and Balance
 - Hot Seat / Refueling
 - Solo guidelines
 - GPU starts
 - Visor / Helmet requirements
 - Closed Flight line

General Preparation Rules

- **Sunday night** have your next two flights ready to go, and next three ready with minimal studying.
- At first review your basics **every day** as you progress you need to review at least once per week (recommend Sunday night), they are:
 - Preflight
 - Checklists
 - EPs
 - Limits
 - Basics Systems
 - Course Rules
- Balance group and individual study, they each have strengths and weaknesses. You must do both!
- Before Checkride:
 - Make sure to review the ADB in person – Know what each item is in detail. Use the online University for some great ADB gouge that is free game for C4390
 - Practice your preflight with your partner with your PCL and systems pubs open, then quiz each other

Brief Conduct

- Prior to IP arrival have: Weight and Balance, Grade Card, SNA ATJ, and white board filled out
- Know the EP, NATOPS, and RWOP questions of the day
- Fill out any paperwork necessary for the flight, leave nothing blank
- Weight and Balance Rules: If you have questions, ask! Refer to the W&B guide prior to asking
 - Fill out ENTIRE card
 - Review all performance charts
 - Max GW is always 3,200 lbs (except for Externals), make sure your numbers make sense
- On the white board have:
 - Names
 - Event Numbers
 - EP, NATOPS, and RWOP questions of the day
 - Discuss items
 - Room to draw system (check with me for off wing flights)
 - Any questions that you have from studying
- Discuss Items

- If an EP is a discussion item, know the entire EP IAW NATOPS, even if the steps are Non-CMI (e.g., Main Generator Failure) including N/W/Cs.
 - If non-CMIs are included with an EP, they do not have to be memorized, but you must be able to intelligently talk through the EP.
 - Have related publications in ready standby just in case there is question
- Memorize procedures for SSRs and Demo items (especially for tail rotor flight)
- Your goal is to know the material well enough that you have confidence in your delivery- THE BRIEF WILL SET THE TONE FOR THE ENTIRE DAY
- NATOPS Brief:
 - Start memorizing the example provided in the RWOP, adjust as necessary
 - Will make adjustments for IP technique once you have the standard down
 - Use it to direct as set up your flight – multi-crew concept and practice
 - CRM foundation
 - Use your PCL as a briefing guide

Flights

- Come prepared at the brief and I will get you through the flight
- Don't worry about a rough start, take your time and stay positive
 - Mistakes will happen, stay engaged, we all make mistakes
- Let me know when you need a break or another example/demo, no shame in a water break

Major things that can help you for success

- ACTUALLY CHAIR FLY – let me tell you how
 - Visualize Situation, Verbalize Procedures, Practice Control Inputs
 - Types
 - Close your eyes / in your head
 - Sit in front of your cockpit poster
 - Get a model helicopter and fly it
 - Walk through course rules, literally
 - Combine the above as necessary
- Think through each flight from beginning to the end each time – Don't count on yesterday's information and experience to be there tomorrow (Winds, DA, etc.)
- Always be looking for an EP field
- Rotary Advanced CRM Goal: You need to run the flight and task other crew members to help you out as necessary (this is like your future HAC training)
- All EPs should progress as follows in the air, NOW AND FOREVER:
 - Recognize the indications
 - Put the correct NATOPS name to the malfunction
 - Complete the applicable CMIs (PAC or PNAC)
 - Direct your copilot as needed
 - ID landing criteria and set up as appropriate
 - Call for the PCL
 - PCL shall be stowed by 200 ft AGL
- Stay relaxed on the controls

- Remember flying a helicopter is like balancing a broom on your hand, or standing on top of a ball. Small corrections are best
- Cyclic – “Fly Like a Frenchman” with your arm on your kneeboard and your pinky finger in the air
- Collective – move your arm from your elbow, and not your shoulder. Remember to “show some cork” with your hand so as to not inadvertently depress the twist grip pushbutton
- Pedals – Heels on the deck, balls of your feet on the pedals, push with toes and not your leg
- HOW TO TRIM – in a helicopter its “apparent” not actual trim
 - Press, Move/Adjust, Stabilize, Release, Observe, Repeat
 - Failure to follow the above will result in an incorrect trimmed cyclic position, or “machine gunning” the force trim button
 - Generally, I have the button in when transitioning between steady state flight profiles
 - VFR integrated scan – we will work on balancing an outside scan while cross referencing the gauges (mainly VSI and Airspeed)
 - Helos are inherently unstable and require a quicker scan than you are used to

Required items for SMAs to have for flight (bring every time)

- FL Approach Plates
- “Blue Brains”: ORM Guide, On-Scene Cmdr, Hard Landing/Tail Strike, Carbon Lock, and PEL
- New Orleans VFR Sectional
- Low Level IFR chart
- PCL

General Notes

- Contact “Bravo” Stage flow:
 - C4001 - C4004: Basic skills
 - C4101 - C4103: Skill building, EPs, normal approaches and autorotations
 - C4201 - C4203: Skill refinement, EPs, and Checkride preparation
 - C4390: Checkride day
 - C4401: Solo
 - C4501 - C4503: Fine tune (Super Fams)
- C4004 will be EP heavy – Know all of your EPs by this point
- C4202 will be tail rotor malfunctions and demos – Make sure you study everything related
- C4501 will be course rules heavy – Know all of your NOLF course rules

Flight Schedule

- Check on line or call SDO (850-623-7418)
- Be prepared to fly every day, expect delays for weather/MX
- If we don’t fly one day, be prepared to brief the next event the following day
- If there is a problem, let me or the SDO/CDO know ASAP
- If you think you are going to ORM out a flight, STILL BE PREPARED TO BRIEF IT
- If you need to see medical call Aviation Medicine at 623-7151 for an appointment for sick-call
- ORM if you need to, and be prepared to talk about why you need it in a professional manner
 - If we can implement adequate controls, we will still fly

“To Do” list

- Ensure you have your blue brains and TW-5 In-Flight Guide squared away (get from pubs issue)
- Grab the “Student Approach Plates”
- Ensure NATOPS/PCL Interim Changes (aka ICs) are incorporated
- Read the “Read and Initials” binder in the duty office
- Recommend purchasing a Camelback for use in flight as opposed to a water bottle. You will need a carabineer to latch it on to the seat, either a really small one or an obnoxiously big one
- Purchase dry erase markers and bring to the brief.
- Recommend preflight gloves