VT-6 CONTACT SUPPLEMENTAL

This Contact FTI supplement will help you prepare for your first stage of primary flight training. You shall use it with existing publications (NATOPS, FTI, FWOP, etc.) and <u>not as the sole reference for contact events.</u>

Your On-Wing:

Your on-wing wants you to succeed and is going to do everything possible to help you. The reason you have an on-wing is to provide contact stage training continuity in the aircraft. Your on-wing is an experienced Naval Aviator who has been in your shoes and succeeded, so listen to him/her and soak in everything you can. Your dedication as well as the quality and amount of studying you do will determine the effectiveness of your instruction. If you're not putting in QUALITY study time, your IP will be forced to focus on getting you up to speed with your peers. If he/she is trying to get you caught up, they will not be able to cover as much information. **Your on-wing is not going to be able to teach you everything you need to know**, there are just not enough flights. The answer of, "my on-wing never told me that," should be removed from your answer bank, as well as "so and so's on-wing, doesn't require them to know that." It is your responsibility to learn the NATOPS, FTI and other publications, not your on-wing's. To be successful, you need to take ownership of your training.

FAM 0 (C1301)

1. Prior to FAM 0

You should meet your on-wing and introduce yourself. Your on-wing should not have to hunt you down. Find your on-wing at work prior to your FAM 0 and give them an opportunity to put a face with the name, they may also specify what they want you to study for FAM 0 in addition to the discuss items in the JPPT. If you've had no success after looking at the schedule and trying to find your on-wing at the work spaces, call them. If they don't answer, leave a message and let them know who you are and how to reach you. If you're meeting your on-wing for the first time on your FAM 0, you're already behind the power curve.

2. During FAM 0

Expect to talk about all discuss items located in the JPPT as well as the discuss items on your C4101 (you should always be two flights ahead). There are a lot of discuss items for the first flight and it's difficult to cover all of them and still takeoff on time. If you can, cover these during your FAM 0, this will help you get ahead in the C4100 block. Checklist execution in the aircraft tends to be very slow, this can result in late take off times and late land times especially if you spend extra time briefing. The IP's do as much as they can to keep to the schedule and this is one of the most common practices among VT-6 FAM 0's. Combining these briefs on the FAM 0 allows you to take your time on that first flight lets you get comfortable in the aircraft.

Your IP will walk you to the FWOC and show you the briefing spaces and go through how to set up your briefing board when you first arrive for an event, take notes and write down what your on-wing expects. In the pubs room you'll find a piece of paper in the cubbies with the proper layout of your briefing board. How you set up your board is a reflection of you. **Professionalism and neatness of your board says a lot about how you prepared for an event**.

Your IP will show you the Read & Initial binder, more commonly referred to as "R&I's." Read and Initials are essentially changes or amplifying information to aircrews that they need to know to operate safely in the T-6B. This could include changes to the FWOP, FTI, or NATOPS as well as changes to preflight procedures just to name a few. You are encouraged to read these ahead of time, and bring questions to the FAM-0. Signing your initials means that you understand all R & I's and you'll comply with them. If you've already read them and signed, this is one less administrative task your on-wing has to go over with you, allowing more time to answer any questions. **You cannot fly until you sign for all current R&I's in the binder**. R&I's are released from Training Wing 5 or by the Stan department. The FDO will be notified of the new release and it will be written on a board in the FWOC. Every time you fly, you must be current.

Please see the attached (or maintained in STUCON) Contact 1301 Guide for all the items to be covered during FAM-0.

3. Common Errors during FAM 0

Ejection Seats/Canopy: You will be opening/closing the canopy and strapping into a live ejection seat. The importance of knowing how to properly strap in and the safe operation of your seat cannot be stressed enough. You'll hear it repeatedly, "respect the seat." Only through proper knowledge of its operation and limitations can you truly respect the seat. You don't want to struggle with this on FAM 0 requiring you to study this the night before your first flight to get caught up. Start with the NATOPS. There is additional gouge in the STAN/NATOPS office regarding the ejection seat, and SSK but, start with the NATOPS. The gouge is simply amplifying information and not the sole reference. You don't need to know this information to get good grades; you need to know how to operate it for your <u>safety</u>.

Pre-Flight: This is the first time you are going to go to the aircraft with your on-wing but, this should not be the first time you've gone out to the aircraft to preflight. Use the NATOPS flight manual, chapter 2, the first time you practice, with special attention to notes, warnings, and cautions, as well as any numbers. You learned the location of preflight aircraft during ground school. It is highly recommended that you utilize this aircraft with your classmates and preferably a solid student who is ahead of you in the syllabus. Another student who has already been out to the aircraft can walk you through a lot faster than if you were on your own, as well as provide information on typical knowledge questions asked by IP's during the preflight. If you do this, you will be prepared for your FAM 0. **You cannot practice strapping in without an IP,** but you can practice your exterior walk around which is just as important.

Knowledge

Your success in this program is directly correlated to your preparation. Being a great pilot is 2/3 knowledge, 1/3 stick skills. Knowledge first and foremost keeps you safe, it will also prevent your attrition, earns your wings, and enable you to complete the mission when others of lesser skill/knowledge cannot. Our job is not to teach you what can be read in the publications, but to translate the knowledge towards fine-tuning stick and rudder skills. The expectations are very high, and there is a lot learn, so you cannot start studying too early. Getting ahead now will pay dividends down the road.

The following are NON-NEGOTIABLE items you must learn now and retain for your entire time at VT-6:

- 1. **EP CRITICAL ACTION ITEMS** along with a working knowledge of all Notes/Warnings/Cautions related to any critical action item.
- 2. **FTI PROCEDURES** You must know these cold, you may not understand them exactly, but through discussion with IPs and demonstration, it will become clear. We don't have time to spoon-feed you in the aircraft.
- 3. **AVIATION SURVIVAL SYSTEMS** This stuff will save your life. Understand what is on your vest and how to use it, the ejection seat and procedures, and I-IROK-ADR.
- 4. **FWOP and VT-6 SOP** Critical for operation at or around NAS Whiting Field. These rules are in place to ensure we operate safely, with our FAA/civilian counterparts, in one of the busiest regions in the country.

Pre-Flight Brief

The expectation:

- 1. Be prepared to discuss any item in the NATOPS brief.
- 2. EP and QOD including notes/warnings/cautions and amplifying information regardless of critical action items.
- 3. All discuss items
- 4. All SSR's
- 5. All maneuvers applicable to the block of training
- 6. Anything previously discussed

There is no one single document (i.e. the FTI) that is going to contain all the information you need to know regarding each discuss item. In fact, one individual discuss item may be found in each one of the publications (FTI, NATOPS, FWOP etc.) you have been issued. Additionally, that one individual discuss item may actually be found

in multiple locations of one publication. Bottom line, make sure you really look through and read all publications in their entirety.

When you see the word "Discuss," read: Students shall thoroughly brief the procedure, all pertinent information from the FTI, NATOPS, FWOP, etc. You should be able to "discuss" each particular item in detail and apply the information to the "big picture" of flight and ground operations. You should be leading the discussion and not force the IP to draw that information out through question after question. This includes any "IP demonstrate" maneuver. "Discuss" or "Demo" does not mean the IP briefs the information to the student. If you haven't studied the maneuver you will not understand what the IP is trying to show you in the demo.

At the same time, we do not expect you to know what is not written in a publication. We are aware of the short comings of the FTI/NATOPS/FWOP and we expect you to have questions prepared. This shows that you have thought critically about what you are reading, rather than simple rote memorization.

Procedures:

Students are regularly told to CHAIR FLY and know the procedures in the FTI. This is not just to make the brief hard, but rather, if you can't explain the procedures out of the FTI sitting down in the brief, you'll never be able to execute them in the plane. Once you're in the aircraft, about half your focus will be used to keep the aircraft straight and level. If you're unable to recite procedures quickly and correctly, IP's will not take you flying.

What does it mean to "know" the procedures? If an IP asks, "How do we do landing pattern (approach turn) stalls?" We expect you to tell us exactly what the FTI says, period. You can't have too much detail. Include the **Description & General** information, **the Procedures** (this includes **the 3 C's)**, and additionally what the **common errors** are. Do not forget to include the P.A.T. principle! For example, we do not want to hear you say, "I'm going to climb," but rather "I will add power to max, raise the nose to 12-15deg nose high, capture 180kts and trim out the aircraft." The Approach Turn Stall and many other maneuvers in the FTI will require you to have an in-depth understanding of the **NATOPS Section VI Flight Characteristics.** Knowing just the **Configurations** from the FTI will not provide the foundation and understanding that you need to execute the maneuvers properly.

Systems Knowledge:

Regarding systems, students traditionally struggle with, "how much am I supposed to know?" If it's in NATOPS, it has been determined to be relevant information for us as Naval Aviators to know. IP's will explain why it's important to know what they just asked you, not just quiz you for the sake of quizzing knowledge. Additionally, to really understand EP's it's important for you to know how the system operates. YOU CANNOT KNOW TOO MUCH OF THE NATOPS. Remember the phrase you learned early on, "LIVE BY THE GOUGE, DIE BY THE GOUGE."

Now that you understand the expectation of knowledge, let's talk about "how" to brief the system. Briefing is a skill most pilots excel at by repetition and a worthwhile skill that will pay off for years to come. The purpose here is to give you an idea of **how you could brief it**. The manner in which you actually brief the system is up to you, this is only to help you with a good flow should you need/want it.

- You must prepare a diagram of the system, draw it on the board or on a blank sheet of paper. Either way, make sure it is neat and presentable. <u>DO NOT LABEL</u> the schematic that you drew. Presentation is important, make sure it resembles the schematic in the NATOPS; however, it doesn't have to match perfectly. After Primary you'll be expected to actually draw the system as you brief it. Here, you can do it the night before, take advantage of that. Drawing the system from memory during the brief "greatly surpasses CTS."
- **Start with the big picture about the system.** For example, if briefing the fuel system, start with how many tanks, how much usable fuel, and any limits associated with the system out of Section V (type of fuel used, etc.).

- Normal operation. Go to the schematic and brief the system keeping in mind the general operation. For example, start at the pressure refueling adapter and explain how fuel gets to the tanks, then from tanks to the engine. The key here is to brief normal operations. It's easy to get side tracked if you try to combine normal and emergency procedures.
- **Emergency Procedures** can be discussed after you've hit the big picture, limits, and normal operation. Discussing and reading about the EP's will actually help you understand the system better. **If there are any Critical Action EP's**, know them and brief them! Be prepared to discuss the EICAS and limits that may trigger said EP and when those lights will come on. If there are no Critical Action EP's, you still need to review them so you are familiar. There's a lot of additional information regarding an EP in the NATOPS that is not included in the PCL. Make sure you review the EP's in the NATOPS as well as the PCL for this reason. Since you won't be able to reference the NATOPS in the aircraft (only the PCL) it's a good idea to have a working knowledge of the EP, even if it's not Critical Action. Additionally, the PCL can be cumbersome to try and reference in the aircraft, knowing its layout and order can help reduce the time it takes to find the EP, which helps your task management and in turn your basic airwork.

Use the above information to help you study and prepare. There is a lot to learn. It's very easy for an instructor to tell in the first few minutes if a student understands the system. We don't expect you to explain how a pump's components work. We want to you to know why you need the pump and what happens when it no longer works. Questions are always encouraged during the brief; if you don't ask, we assume you know. If you are confused about specific information, provide the NATOPS reference, and we will discuss. This shows us that you're reading the information and trying to learn.

BOTTOM LINE: Show up with the knowledge; IPs will help you apply it in the aircraft.

Techniques:

Techniques are proven tools to help accomplish your FTI procedures smoothly and efficiently. Techniques **are not mandatory**, and your instructor might have his or her own techniques. When taught a new technique, you should at least try it, and continue building your own toolbox of techniques as you proceed through flight school. You will not be graded on using techniques, only procedures written in the NATOPS or the FTI. The following are some common "ditties" that pilots use to memorize and conduct procedures. Ditties can greatly improve SNA performance provided they are said and done at the right tempo and opportunity.

Common techniques:

- Departing NSE
 - o Clear clear visually above and behind you (in the break) and on TCAS
 - o Climb pitch for 180 kts
 - o Click ch. 6 departure
 - o Call "Pensacola Departure, Shooter 010, passing 1500"
 - o Change NAV to TSD
 - Check operations check
- Course Rules to NSE (ABCDONT)
 - o ATIS Select Ch.1 on VHF and copy ATIS. Switch to Ch.4 on VHF after ATIS is copied.
 - o Bingo Set
 - 285 = VMC and no weather
 - 310 = Marginal weather
 - o **CDI** Set CDI to the landing runway
 - o **Descent checklist** Execute
 - Operations check Execute
 - o Navigation Review navigation plan with IP if required

o **Talk/Transponder** – If traffic becomes a factor, make position calls and deconflict flight paths. Otherwise, make required radio calls in accordance with the FWOP.

• Break

- **Flop** 45 degrees AOB
- \circ **Chop** 0-10% torque
- o **Pop** speed brake out (as required)
- o Level maintain level turn
- o Check Airspeed and downwind spacing (30deg AOB for second half of turn)
- **Drop** below 150 kts, drop gear, raise speed break

Transition (180)

- o **Power** set the appropriate power consistent with the flap setting
- o Attitude/Pitch level speed change to appropriate airspeed, then lower the nose to maintain AS.
- o **Trim** up and left
- o Turn Abeam intended rollout point on final; adjust transition point on future patterns as necessary
- o **Talk** "010, 180, gear down"
- Torque recheck torque set appropriately and adjust as necessary

• Crossing the threshold:

- o **Power** slight reduction of power to avoid balloon or float
- o Level bring the aircraft to a level attitude as numbers disappear under the nose
- o Eyes transition scan to the end of the runway, use peripheral cues for centerline
- o **Idle** slowly pull PCL to idle
- o Flare 'flare, flare' control the rate of descent to a smooth mains first nose up touchdown

Touch and go / waveoff

- o **Power up** smoothly add max power
- o **Spool up** allow engine to spool up and anticipate left yaw
- o **Rudder up** Add right rudder as required to keep aircraft aligned with centerline.
- o Nose up if holding neutral elevator throughout the touch and go, the nose should lift itself off deck.

• Leveling off at pattern altitude

- o **Power-** 50' prior to pattern altitude, reduce power to 31% torque
- o **Attitude** as power comes out set attitude to 4 deg nose up, level VSI.
- o Stabilize- re-check torque, attitude, and wing tip distance ensuring proper ground track on downwind.

• High area maneuver setup (3 C's)

- o Configuration gear, flaps, airspeed, power setting, sufficient altitude above / below
- o Checklist pre-stalling/spinning/aero checklist, operations check if needed
- o Clearing Turns use FTI limits
- o TCAS Place TCAS in "ABOVE" mode if conducting aerobatics in the PELICAN/WAHOO

• Descent from the working area (ABCDONT)

- ATIS/Advisory Determine the duty runway by contacting the Brewton or Evergreen RDO
- o **Bingo -** Set Bingo to briefed Bingo fuel for departing the OLF (e.g. 450 lbs.).
- o **CDI** Set CDI to the landing runway.
- Descent Checklist Execute
- Operations Check Execute
- Navigate verbalize intended plan to get from working block to the initial for active runway
- o **Talk** Contact Jacksonville Center on Ch. 16 on VHF.

• Proceeding to OLF initial (Triple A, F)

- o **Altitude** maintain break altitude
- o Angle join the runway course within 45 degree angle per FWOP
- Airspeed

- o **Frequency** be sure to make initial call on proper frequency and not area common!
- Forced Landing
 - o Critical Action Items in accordance with NATOPS
 - Lock harness locked
 - o Talk transmit distress call
 - o **Squawk** transponder to 7700, ELT ON

iPad, Chart, and HUD Use

iPad Use

Students must have a working understanding of ForeFlight and CloudSync2 iPad apps. In the contact stage, students must be able to use ForeFlight for VFR charts and the TW-5 combined electronic checklist. Reading and complying with COMTRAWINGFIVEINST 3710.19 (series) is essential.

Starting on C4201, SNAs are permitted to use their EKB for all charts and checklists. At VT-6, all students SHALL have their iPad in the aircraft and appropriately mounted in the front cockpit with required paper charts per COMTRAWINGFIVEINST 3710.19. Ask your instructor how to mount the iPad without breaking the aircraft's Grimes light mount. SNA's shall fly with ForeFlight's VFR chart and have the latest combined checklist in the ForeFlight documents tab for swift reference.

Chart Use

The VFR chart is extremely valuable for area orientation and in the event of an emergency. If you know how to read it, it can quickly give you frequencies, runway length, and field elevation. With ForeFlight, it is even more powerful with airport diagrams. In order to understand VFR charts, students **shall** read the VNAV FTI chapters 2, 3, and 6 prior to first flight. Study the chart legends!

HUD Use

The HUD is a fantastic piece of equipment. Learn how to use the HUD from NATOPS, specifically the symbols and how they relate to the PFD information. Use the HUD on every flight if you wish, but remember it is not a required item and could be failed on check ride day. HINT: most new HUD users set the intensity too bright; you should be able to read the symbols while looking through them.

Additional Brief Items/Guidance

The following items listed for each event need to be read and studied for the respective event. At any point your on-wing can deviate from this document, it is ultimately up to them. Until instructed otherwise by your on-wing, expect that these items are in addition to your "DISCUSS" items. These may be discussed during the brief or during any portion of the flight. For example, while walking to your aircraft, your on-wing may ask about parking areas or while taxiing they'll ask about rules taxiing to the run-up. The included items are absolutely things you need to know at Whiting Field. Unfortunately, we can't control the weather. You may have to draw Area 1 for an event, and then the weather does not support your training in that area so you go somewhere else. Study ahead the best you can so you're ready for changes.

C4101

VT-6 SOP

Outbound/Inbound Taxi (FTI/FWOP)

-You must know how to comply with the FWOP and get to either run-up from any spot, then to the runway and back to your parking line after landing. Don't forget to study ground COMMS.

T/O and Departure Procedures (FTI/FWOP)

- -Chair fly all runways, ATC communications, HDG/ALT/IAS rules and requirements.
- -Be familiar with VFR departure procedures to the North and West.

Discuss Area 1 / Wahoo (FWOP)

Draw Figure 3-6 Course Rules from Area 1 (FWOP)

-Use google maps satellite of the course rules and go through how each checkpoint looks from the air. **TCAS operation** (NATOPS page 1-125)

C4102

Naval Outlying Landing Fields (OLFs). FWOP & FTI

-You need to know how to get in and out of OLFs. This includes procedures to set up for the initial, how and why to execute discontinued entry, flying in the Delta pattern, and how to intercept CR from each OLF.

DRAW The Landing Pattern Figure 6-1 (FTI)

-Draw the geometric racetrack-shaped course on your drawing of Barin and label all checkpoints, i.e. crosswind, abeam, and groove etc.

Appendix A Sample Voice Procedures (FWOP)

-You must practice these radio calls on your own at home and in a study group. Know when you are going to make your calls and what you expect to hear from ATC in return.

Discuss Area 2 / Pelican (FWOP)

Draw Figure 3-7 Course Rules from North (Point Jay)

C4103

SNA shall complete NATOPS brief from abbreviated guide

NMOA and SMOA Entry and Exit Procedure

-Including what the stereo routes actually mean

OCF/Spin/Anti-Spin Recovery Procedures

-You are responsible for everything in chapter 6 of NATOPS as well as FTI procedures.

FWOP Emergency Procedures – Chapter 7

-Emphasis on IIMC and NORDO procedures

Draw Figure 3-8 Course Rules from North (Conecuh River Bridge)

C4104

Discontinued Entry at KNSE

Home field wave-off and non-standard tower COMMs

What's next?

At some point during the contact phase of training you may find yourself scheduled with another IP. These are referred to as off-wing flights. This is to provide you an opportunity to see different techniques and styles while ensuring that you receive consistent and high-quality instruction. Per the JPPT in regards to Instructor Continuity:

Students shall fly contact syllabus events C4101-C4403 with their on-wing. Exceptions:

- (1) Students SHALL fly four events (minimum) within the C4201-C4303 off-wing.
- (2) The Commanding Officer, Executive Officer, Operations Officer, Flight Leader, or any DCON "S" qualified instructor may substitute as on-wing in the event the on-wing is not available.

This is an excellent example of the information that is in the JPPT regarding **YOUR** training. A lot of questions students ask are answered in the JPPT (Warmup criteria, CTS grading, course flow, discuss items etc). In addition to flying the aircraft, we are teaching you to be officers. There were/are many times in your instructors' careers where they were left with little guidance to solve a problem. Only through their ability to reference publications, were they then able to come up with a solution. We are trying to get you to learn that. You will not be spoon fed everything here at VT-6. In fact, you'll find in your career that the "fire hose" is the traditional method; get used to it.

After you've completed the C4100 block you'll be going to the simulator. Reference the JPPT course flow and you'll see what events you are now opted for. You should be two flights ahead. This means night before your C4103 event you should've already been reading and preparing for your C3201 simulator event. If you continue to have this mentality of staying ahead, you'll never find yourself cramming the night before.

Contacting Your "Off-Wing" Instructor

IPs will expect you to reach out to him/her the night before your event. Your instructor may need to change the brief time/flight for crew rest, weather, ops deviations, or other reasons. Contact your instructor with a simple "Good afternoon Sir/Ma'am, this is ENS Jones. We are briefing at XXXX tomorrow. Here's my number in case you need it." They do not need to know what your plan is or what you need. Track your syllabus, know the requirements, and formulate a plan for the briefing. IP's may change it and will always explain why, but that in itself is a great training opportunity.