

# NFOTS (1542.162A) PRI 2 Formation Stan Notes

24 AUG 2016

**\*\*\* WARNING: THESE STAN NOTES ARE MEANT TO SUPPLEMENT THE FTI. STUDENTS ARE STILL RESPONSIBLE FOR KNOWING FTI, NATOPS, AND OPNAV CONTENT \*\*\***

## Ground School:

Once you are issued the Formation FTIs, start to study them even if you haven't had Formation ground school yet! Use down time to study the FTI and **memorize** the checkpoints, comm and event flow, and EP contingencies so that when it comes time to brief the events you only have to practice the chair-flying of the briefs. There should be no excuse that you didn't have enough time to prep for these flights. These notes have been created to bridge the gap between the way we do things and the FTI. These notes are merely a supplement to the FTI.

## Preparation:

- Use all available source documents to prepare for formation stage. Information is available under the "Formation" section of the VT-10 Training Department webpage. Consult the Stan Notes, Briefing / Debriefing Guide, kneeboard cards, etc.

- Use the Formation Kneeboard Cards provided on the VT-10 Website for your planning and to use in the flight. Beware of old/outdated cards that might be floating around via other students.

- Briefing Board templates are posted online under the "Formation" section of the VT-10 Training website. Since each formation briefing room has a briefing binder in it, the templates will also be in the back of the binders in each briefing room. They are a **template** that you should tailor to your flight. Make sure your KBC matches your briefing board.

- For briefing practice and proficiency, students should share briefing responsibilities: the student flying Wing can brief Admin and Tac Admin, while the other student flying Lead briefs the conduct portion. These brief responsibilities will alternate with each event as students alternate roles as Lead and Wing. If a student does not have a form partner, they can expect to brief the entire event.

- Attention to detail is important in order to make a strong first impression! Brief preparation keys to success include:

- o Clean your whiteboard with a wet paper towel or whiteboard cleaner before every brief
- o Take time to write neatly and legibly with WORKING markers

- o Ensure you use a ruler or straight edge to draw straight lines and to keep handwriting neat
  - o Review your kneeboard card for errors, typos, etc. prior to the brief.
- Find IPs and ask them any questions you might have about the flight(s) prior to the briefs.
- **DD-175 Correction to FTI**: Per the General Planning publication, the Aircraft Designation and TD Code box should list the following: # of aircraft/Aircraft Designation/Navigation Equipment. For example, a section of T-6As with GPS should be listed as **2/TEX2/G** instead of 2xTEX2/G.

### **F3101 Simulator:**

- Bring a completed kneeboard card and your kneeboard with you to the event. Ensure you and your simulator instructor have copies of the KBC. Also, bring the approach plates for the RNAV GPS approaches into Bay Minette (1R8)
- The NATOPS Pilot's Pocket Checklist, CTW-6 Tri-Fold, and CTW-6 IFG shall be readily available during the brief, flight, and debrief. These documents will be used to conduct all checklists during the simulator event (i.e. there is no shortened Formation Simulator Ground Checklist).
- In the brief, expect to discuss all aspects of formation conduct including radio calls, hand signals, procedures, sight pictures, etc. Plan on using T-6 models in the brief to depict various formation positions and maneuvers.
- The sequence of events will be short pre-recorded segments showing various portions of the F4101 and F4102 conduct. The F3101 kneeboard card has all of the segments listed under the Conduct section.
- Conduct:
  - The CI will simulate the student's IP, the other aircraft's IP & SNFO, and all ATC agencies.
  - The student will conduct **Lead** SNFO responsibilities and communications during the ground operations demo.
  - The student will conduct **Wing** SNFO responsibilities during all other portions of the event. This includes communications, coordinating hand signals, assessing positional references, conducting required briefs (AFDDHABM), etc.
  - The CI will describe flow of events as each demo loads. This will provide the student with situational awareness prior to "unfreezing" the recording.

### Flight Briefs:

- Training Rules: Like the SOP, you're expected to know, understand, and abide by these even if we don't spend a lot of time explaining them. There are some fighter-specific terms that you haven't been introduced to, so ask questions if something is not clear. Do not show up to your brief reading the training rules for the first time!

- Generally you just read through these verbatim, with one exception: **Departure/Spin Procedures (Inadvertent Departure from Controlled Flight EP)**. Someone in the brief needs to recite the boldface, and it won't be an IP. Get used to this: in Large Force Exercises conducted at venues like TOPGUN and Red Flag, the FNG for each type/model/series represented stands up and will recite the procedure by memory without any pauses or hesitation for the audience.

### Time hacks:

- Practice the time hack (sync your own watches with GPS time or the Naval Observatory prior to the brief). Start the brief with the timehack:

- "In 30 seconds the time will be 0530 local... ten seconds... five, four, three, two, one, hack. The time is now 0530 local."

- GPS is the gold standard for timing, and it's used by everyone for a lot of different reasons. Two big ones:

- Synchronizing frequency-hopping radios so you can talk.
- Synchronizing fires (Close Air Support, artillery, mortars, naval guns, etc) so you can kill bad guys.

- You will plan on your jet already having GPS time loaded, but you'll expect it to dump when you need it most. Your watch then becomes the critical element in reestablishing comms and accomplishing your mission. Get in the habit now of hacking your watch accurately.

### Flights (F4101/4102):

- Call your IPs the night prior to find out where they want to go (Area 1 / MOA). If working Area 1, use two adjacent section lines to the maximum extent practical. **R-2908 is no longer available.**

- Make your briefing board professional looking (straight lines, correct colors, etc). Use available rules to write in straight lines, and use all capital letters. A sloppy board is the fastest way to make a bad first impression!

- The kneeboard card should be correct and applicable to that day's flight - names, timeline, frequencies, type of take-off, etc.

- Practice using the models and make sure that the IPs can see what you are demonstrating. The models should accurately depict how the aircraft is flying. Do not point out features on the airplane with models. Instead, point them out with a pen or your finger. If you are not using the models to demonstrate something, return them to the table or hold them separately by your sides.
- Think about hand signal cadence and coordination during the flight with IP. Know what cadence to use to pass signals simultaneously.
- After a lead change the new wingman says on tac: "good hit" to the new lead to let him know his transponder is working. The new wingman will not squawk STBY until he gets a TAS hit from the new lead to ensure someone in the section is squawking ALT.
- The lost sight exercise will happen in a turn into or away from wingman, so have a plan to brief either scenario because in flight it will be dictated by area management.
- During the tail chase exercise, the FTI states that students will call out every 500' interval within 1500' of an altitude boundary. These altitudes will simply be reported by calling out the appropriate MSL altitude (i.e., "7,500").
- Practice all the radio comms with your form partner
  - Check in on aux/NAV check/clearance
  - Radio frequency changes and procedures via Pri/Aux
  - FENCE In/out - squawk 4700 when VFR in Area 1
  - G-Warm prep call
  - Terminate/KIO
- Typically you will conduct an RNAV approach to your destination with your IP giving you simulated vectors or you vectoring yourself. Following the RNAV approach on the F4101 you will depart and re-enter for the break to a full stop. Keep in mind runway requirements for centerline and staggered landings.

### **F4102 Specifics:**

- Typically you will conduct a section approach to a LLWT&G at the beginning of the flight. If VMC, expect your IP to give you vectors to final over the ICS. (This will usually be at Bay Minette airport (1R8) when scheduled for an NPA 633/633R.)
- Once you are fenced-in and ready to begin your called/uncalled tac sequence you will preface with the following statement on the section tac frequency: "(Tac C/S), the following will be a series of called/un-called tac turns". When the training objectives are complete you will terminate the sequence.

- If executing a lead change while the formation is deployed in combat spread, call for the lead change over the section tac frequency. When -2 accepts the lead, the new lead will descend to the old lead's altitude, and the new wing will climb to set 200' above the new lead's altitude in the appropriate combat spread position.

### Admin / Tac Admin Specifics

#### Comm checks (on deck):

- Get used to doing these. In the future, not only will you check multiple radios, you will also check different functions of the radios (frequency hopping and crypto).
- As the FNG in a Hornet/Growler squadron, you'll be flying with a senior pilot. That means he'll be the section lead, and *that* means you'll be doing comm checks on Day 1 in the fleet.
- Conducted as a roll-call for the same reasons as in grade school: so you know who is missing.
- Pass the numbers for the nav check in bearing, THEN distance: "(Tac C/S) Nav check, (waypoint name), (bearing), (distance)."

#### Section vs. Interval takeoff:

- Section takeoff: typically done with low ceilings. Although counterintuitive at first, a section takeoff is pretty much your only shot at joining in parade prior to hitting a 520' ceiling.
- Be familiar with limitations of a section takeoff and be ready to adjust real time to either. Weather, winds, runway condition, etc. may be such that you have to deviate from your briefed takeoff game plan.

#### FENCE out and area exit

- In the fleet, fencing out will safe up weapons systems and other things that could deploy from your airplane and hurt people on the ground. With that in mind, be sure to FENCE out within the confines of your operating area and before joining on lead! If squawking 4700 in Area 1, be sure to reset squawk to 1200 upon the FENCE out.

#### Emergency Procedures:

Brief these up from the section standpoint. Don't get into how individual aircraft will execute boldface- that will be briefed in the singles brief. Instead brief how the section will work together to handle the situation. We all know how to perform an aborted takeoff: PCL-Idle, Brakes-As required. The important thing for our briefing purpose is what happens as one of the aircraft aborts and the other continues (or not, as appropriate).

## **Section Missed Approach**

Replace Paragraph 604.5 of Chapter 6 - Section Recovery in the 2013 Formation FTI with the following:

During an approach, if either decision height or minimum descent altitude is reached and the field is not in sight, Lead should initiate a missed approach by smoothly increasing power to arrest the sink rate and gradually rotating the nose to commence a climb. It is not required for Lead to pass the parade signal to Wing. If the flight has to execute a missed approach, then the aircraft never broke out of the weather, and the wingman shouldn't be in any position other than parade. Once a rate of climb is established, the Lead SNFO will report "aircraft climbing, above 110 knots, Wingman in position" to the Lead pilot. The Lead pilot will then pass a head nod signaling both aircraft to simultaneously raise their gear and flaps. Wing will give Lead a thumbs up to signal that their gear and flaps are up and they are ready to proceed past 150 KIAS.