



Helicopter Instructor Training Unit

STANDARDIZATION INSTRUCTOR GUIDE **(SIG)**



MAY 2016

Commander, Training Air Wing FIVE (CTW-5)

NAS Whiting Field, Milton, FL COMTRAWINGFIVEINST 3710.23

A guide provided for use by the Helicopter Instructor Training Unit.

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DEPARTMENT OF THE NAVY
COMMANDER
TRAINING AIR WING FIVE
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IN REPLY REFER TO:
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COMTRAWING FIVE INSTRUCTION 3710.23

Subj: HELICOPTER INSTRUCTOR TRAINING UNIT STANDARDIZATION
INSTRUCTOR GUIDE

1. Purpose. To publish a comprehensive "Best Practices" guide detailing policies, techniques, and recommended procedures for Standardization flight instructors within Training Air Wing FIVE.
2. Scope. This instruction promulgates standardized instructional practices applicable to the safe, effective, and orderly conduct of instructional flight operations in a single compendium. In no case shall the Standardization Instruction Guide (SIG) supersede directives of higher authority. It is not a substitute for the sound judgment of Instructor Pilots (IP).
3. Action. All Helicopter Standardization IPs shall be familiar with this instruction. Items annotated by "shall" are compulsory in nature. Provide this instruction to all TH-57 IPs conducting Helicopter Instructor Training Unit (HITU) flight events.
4. Review. Annual review of this instruction is mandatory. Recommended changes are encouraged and should be forwarded in writing to the TRAWING FIVE Standardization Officer via the squadron or HITU Standardization Department.
5. TRAWING FIVE POC is the TH-57 Standardization Officer, COMM 850-623-7522 or DSN 868-7522.


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TABLE OF CONTENTS

TABLE OF CONTENTS

SUMMARY OF CHANGES

ACRONYMS USED

1

CHAPTER ONE - COMMANDER'S INTENT

100. GENERAL	3
101. MISSION	3
102. INTENT	3

CHAPTER TWO - GENERAL GUIDANCE

200. STANDARDIZATION INSTRUCTOR EXPECTATIONS	5
201. IUT EXPECTATIONS	7
202. INSTRUCTION VS. EVALUATION	7
203. PROCEDURE VS. TECHNIQUE	8
204. SPECIAL SYLLABUS REQUIREMENTS (SSR)	8
205. AVIATION TRAINING FORMS (ATFs)	9
206. DEFENSIVE POSITIONING	9

CHAPTER THREE - CONTACT/NATOPS STAGE

300. OVERVIEW	11
301. MANEUVER CLARIFICATION (NATOPS VS. FTI)	13
302. NATOPS CONTACT STAGE EVENTS	13
303. INSTRUCTING THOSE INSTRUCTING THE EMERGENCY	14
304. C4300 BLOCK OVERVIEW	15
305. C4400 BLOCK OVERVIEW	15
306. C4500 BLOCK OVERVIEW	15
307. C4600 BLOCK OVERVIEW	15
308. C4700 BLOCK OVERVIEW	15
309. C4800 BLOCK OVERVIEW	16
310. C4990 BLOCK OVERVIEW	16

CHAPTER FOUR - INSTRUMENT STAGE

400. OVERVIEW	17
401. I4000/4100 BLOCK OVERVIEW	18
402. I4200 BLOCK OVERVIEW	18
403. I4490 INSTRUMENT CHECKRIDE	19

ACRONYMS USED

ADDU	Additional Duty - Squadron SIs assigned to supplement HITU flight schedule as needed
ASR	Airport Surveillance Radar approach
CNATRA	Chief of Naval Air Training
CTS	Course Training Standards
DME	Distance Measuring Equipment
FAMO	Familiarization 0 - initial introduction/walk around the aircraft prior to first flight
FIG	TH-57 Flight Instructor Guide
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IP	Instructor Pilot
IUT	Instructor Under Training
JMPS	Joint Mission Planning System
LOC	Localizer - lateral guidance for ILS approach
MDA/DA	Minimum Descent Altitude/Decision Altitude
MPTS	Advanced Helicopter Instructor Under Training Multi-Service Pilot Training System
NATOPS	The Naval Air Training & Operating Procedures Standardization
OPNAV	Office of the Chief of Naval Operations
RWOP	Rotary Wing Operating Procedures
SNA	Student Naval Aviator
TIMS	Training Integration Management System - program used to schedule and track both academic and flight training
SI	Standardization Instructor Pilot
VFR	Visual Flight Rules
VOR	VHF Omnidirectional Range

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CHAPTER 1
COMMANDER'S INTENT

100. General. Training Air Wing FIVE (TW-5) provides all prospective Advanced Rotary-Wing flight instructors with NATOPS and instructor qualifications utilizing a Helicopter Instructor Training Unit (HITU). Manned with the highest quality Instructor Pilots (IPs) from within TW-5, the HITU provides robust, standardized ground and flight instruction that establishes the foundation for instructional excellence.

101. Mission. The HITU's mission is to provide TW-5 Advanced Helicopter Training Squadrons with well qualified flight instructors in order to facilitate the effective instruction of Advanced Rotary-Wing flight training. In addition, the HITU also provides post-HITU upgrade flights to include Bravo transition training to select IPs.

102. Intent. The TW-5 Rotary-Wing Standardization Instructor Guide (SIG) is an instruction designed to enhance instructor standardization within the HITU while serving as a companion document to COMTRAWINGFIVEINST 3710.14 (series): TH-57 Flight Instructor Guide (FIG). This guide amplifies the course of instruction set forth in CNATRINST 1542.91(series): TH-57 IUT MPTS syllabus by providing both specific direction and a collection of best practices designed to synchronize the efforts of TW-5 Standardization Instructors (SIs) engaged in the training of Instructors-Under-Training (IUTs).

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**CHAPTER 2
GENERAL GUIDANCE**

200. STANDARDIZATION INSTRUCTOR (SI) EXPECTATIONS

a. Lead, inspire and motivate the IUT to not only arrive to flights highly prepared but ready to fully grasp and understand the importance of the training being conducted. Lead the IUT so they will successfully lead the SNA.

b. Know what you teach. Impart to the IUT the best of what you know. Be as prepared as possible for the flight with the IUT. Take the time necessary to do your part to prepare the IUT for the flight line and flights with the SNA.

c. Be the subject matter expert in TH-57 instruction. SIs are expected to teach and discuss:

(1) The art of flight instruction: (FAA Flight Instructor Handbook);

(2) Within the bounds of: Advanced Helicopter Multi-Service Pilot Training System (MPTS); including SNA, IUT and Tilt-rotor syllabi;

(3) In compliance with one governing document: Training and Administration (TA) Manual;

(4) In accordance with the TH-57 Naval Air Training and Operating Procedures Standardization (NATOPS) Manual, Flight Training Instruction (FTI) and Flight Instructor Guide (FIG);

(5) Using a set of local procedures: Rotary-Wing Operating Procedures (RWOP); and to

(6) Evaluate using a detailed set of Course Training Standards (CTS).

d. Be efficient with the resources with which you have been provided. You have been entrusted with a finite amount of time and resources to accomplish the training objectives. Make the most of every minute. Efficiency demands detailed planning on your part.

e. Be effective in the delivery of your instruction. Making the best use of your time means fine tuning your own instructional techniques to best meet the needs of the IUT. Each IUT is different so you will need to tailor your specific teaching style to match their individual learning style. Effectiveness demands development of multiple teaching techniques on your part. Impart this instructional technique to the IUT, so that they will be able to effectively train the SNA.

f. Be tenacious and flexible in the execution of the entire flight event. While quality training is second in importance only to safety, rarely will you be presented with ideal training conditions. Seek ways to safely accomplish quality training. However, if you are unable to safely execute the flight due to circumstances beyond your control, ensure you still take the time on the ground to provide training. Always make the best of the situation and teach your IUT to do the same. A majority of what you teach, particularly in the instructor phase of the syllabus, is sound improvisation. If the weather is workable, try it. If you cannot complete the event, you have at least exposed the IUT to when weather works and when it does not work. Emphasize to the IUT that there is no undue pressure to complete a flight event, especially when the weather is unsuitable for training.

g. Be above reproach. Your strict adherence to governing documents is paramount during an IUT's training. Willful violation for convenience is unacceptable and ignorance is no excuse. Show the IUT where these governing documents are located and encourage them to refer to them when required. They in turn, will be able to use these same documents when operating with a SNA.

h. Be guarded. The safety of the aircraft and crew are the SI's paramount responsibility. Maintain the aircraft within safe parameters during every moment of the syllabus event. It is the nature of flight training that SIs routinely encounter errors that will demand swift and appropriate flight control inputs prior to entering an unsafe flight regime. A watchful SI never truly gives up control of the aircraft, and an IUT's failure to recognize an error does not absolve the SI from their obligation to remain in complete control of the training event at all times. Although IUTs are all winged aviators, the SI shall continue to ensure safe and effective flight training through effective defensive posturing.

i. Be demanding. Hold the IUT to the Course Training Standards. Ensure any training deviation is properly annotated on the IUT's grade sheet. In addition, ask the IUT what the SNA CTS are and to ensure they understand how to use these standards when instructing SNAs. Ensure they also understand the differences between a 2, 3, 4 and 5s when grading a SNA.

j. Be upfront. Call the IUT's performance like you see it. Keep in mind that while it may be unpleasant at the time, the only way an aviator improves is when they are provided effective feedback, good or bad. Our mission as SI's is not attrition, but to build quality instructors. Accurately characterizing areas of weakness early will allow the HITU to tailor an IUT's training in order to best correct any known deficiencies.

k. Be passionate about your work and instill your work ethic to your IUTs. Your passion will be contagious to the IUT and will motivate them to success.

1. Leave a legacy. As an SI, you have been given a sacred trust: the future of Naval Aviation. How you teach the next generation of Naval Aviators will have a long, lasting impact on the future of Naval Aviation.

201. IUT EXPECTATIONS

a. In preparation for success in the brief and in the aircraft, IUTs must:

(1) Demonstrate an instructional level of knowledge of the material for which they are responsible.

(2) Demonstrate professionalism which inspires both SNAs and fellow IPs to uphold the standard both in the air and on the ground.

(3) Come prepared mentally and physically to execute each event. To be successful, IUTs must arrive to every brief:

-WELL VERSED - knowing the material required for the event.

-WELL REHEARSED - having chair-flown the event.

-WITH A PLAN - knowing how they will execute the event.

-READY TO EXECUTE - all briefing materials (weather, Notice to Airmen (NOTAMS), and flight plans) prepared at brief time.

b. Own their training. An IUT must seize every opportunity, particularly early in the syllabus, to complete any events not requiring a simulator or an aircraft. An IUT is ultimately responsible for their own training progression and to continuously update the IUT tracking board (located in the OIC office) as events are completed. IUTs should be able to discuss any weak or neglected areas in their training and recommend a course of action (i.e. more KNDZ approaches to enhance home field comfort level). UNSAT areas, or those maneuvers that are not up to Maneuver Item File (MIF), must be discussed. If there is flexibility with the training, ask the IUT what they desire to work on so that you can tailor the event more effectively.

202. INSTRUCTION VS. EVALUATION

a. **Instruct** - To teach, train. Give order or command. To coach by providing verbal or non-verbal assistance to the IUT/SNA when executing a maneuver or task.

b. **Evaluate** - To determine or fix the value of; determine the significance or worth. To permit mistakes to be made by the IUT/SNA that will not affect the safety of flight.

c. Both instruction and evaluation are required by the SI to effectively transform an IUT into an IP. SIs should be instructing on all flights, however know when to allow the IUT to make mistakes as long as it will not affect the safety of flight. On NATOPS and standardization check flights, evaluation is the primary focus. During these flights, IUTs must demonstrate their knowledge, flying ability and instructional technique to the evaluator (SI) with minimum instructional assistance or coaching.

203. PROCEDURE VS. TECHNIQUE

a. **Procedure** - A specific way of accomplishing a maneuver; a series of steps followed in a regular definite order; a traditional or established way of doing things.

b. **Technique** - A method of accomplishing a desired aim.

c. SIs must clarify to the IUT what is procedure and what is considered technique. Instructions such as FTIs, NATOPS, TA Manual, OPNAV 3710, FAR/AIM, etc. provide the SI the framework for instruction. SIs shall instruct maneuvers per the publications, utilizing techniques, when required, to explain different methods to accomplish the maneuvers. Teaching a method or technique is acceptable, provided that method or technique does not contradict the procedure outlined in the reference. As the IUT progresses through training, they need to have the freedom to either develop their own techniques, or simply adopt techniques utilized by the number of SIs that they have flown with in order to build their own collection of instructional practices. It is the SI's responsibility to ensure these techniques adhere to both the letter and spirit of procedure outlined in the publication.

d. The SI must ensure the IUT can not only perform all maneuvers per the FTI but also be able to provide the necessary verbal procedures ("talkies") as outlined in the FTI when demonstrating a maneuver to a SNA. In some cases the SI will play the role of the SNA and the IUT will have to be able to not only demonstrate FTI maneuvers but also be able to provide a verbal announcement of what they are doing so that the SNA can grasp an understanding of how to execute the maneuver. When demonstrating any maneuver to an IUT, use verbals so the IUT can pick up on the proper way to verbally discuss the maneuver, while flying at the same time.

e. It is imperative that SIs train IUTs per established and appropriate publications and standards. If SIs feel a procedure is unsafe, unclear, or unsatisfactory, they should make every effort to change the procedure instead of circumventing it. Set the example: teach the book or make the effort to change the book.

204. SPECIAL SYLLABUS REQUIREMENTS (SSRs). SSRs are supposed to be accomplished on the event specified in the MPTS. However, if the SSR

was not accomplished during that specific flight event, the SI shall note it on the ATF so that the SSR is not omitted on the next event.

205. AVIATION TRAINING FORMS (ATFs)

a. ATFs are to be completed by the SI within 24 hours of the completion of the event, or within 24 hours of return from cross country events. However, SIs should make every effort to complete the ATF immediately after the event. ATFs should accurately reflect the IUT's performance and grades for specific maneuvers shall be assigned per CTS as outlined in Chapter VIII of the MPTS. Take the time with the IUT to show them how to properly fill out an ATF.

b. ATFs provide follow-on SIs with a comprehensive picture of an IUT's performance in the syllabus. They enable the SI to tailor instruction to the needs of the individual IUT. It is not uncommon for an IUT to perform all maneuvers in an event to CTS, therefore, leaving the SI with very little to comment on. In this case, SIs should grade the items accordingly and comment on the IUT's overall performance in the "General Comments" section of the ATF. Additionally, a comment should be made regarding the flight profile (i.e. approaches, holding, stopover airport, training area, etc.).

206. DEFENSIVE POSTURING

a. Defensive posturing is the key to maintaining positive control of the training event and a means to avoid potentially dangerous situations. Like any instructional event, the SI must guard the controls at all times. SIs are instructing winged aviators, however they must be cognizant of the balance between learning and risk levels. A SI's overriding objective is to maintain the aircraft in a safe profile at all times.

b. An active defensive posture will help with safe control of the aircraft while allowing IUT development.

(1) A winged aviator presents a special challenge to the SI. They are often someone who, by their past experience, may lead you to let your guard down. Do not allow this to occur.

(2) The contact pattern can become a high threat area and the SI must be especially vigilant. The SI should strive to seek out common tendencies that are common within the IUTs respective fleet communities. Some of these common tendencies include over-controlling (back and forth movements), not monitoring torque during power application, "ship" takeoffs/landings, not using pedals, not leading approaches with power, rapid collective application, and poor energy management to name just a few.

(3) IUTs must have unwavering knowledge of FTI procedures to be successful. "Common student errors" should be a focal point during training to better prepare the IUT for upcoming SNA flight events.

The main purpose of this is to build IUT awareness of SNA poor maneuver execution and mishap prevention prior to an aircraft entering an unsafe flight regime.

c. Even if the aircraft is within safe parameters, an SI must not hesitate to take the controls when an IUT is deviating from the SI's personal comfort zone.

CHAPTER 3
CONTACT/NATOPS STAGE

300. OVERVIEW

a. The Contact stage (also referred to as the NATOPS Stage) is the first block of training in the aircraft for IUTs and serves not only to reintroduce IUTs to the TH-57 helicopter, but also emphasizes the basic fundamentals of rotary-wing flight. Further, it begins to rebuild an essential knowledge baseline for the IUT to safely perform and effectively instruct SNAs in the TH-57. The key focus areas during the initial phase include: hovering, low work, and basic air work. This block quickly transitions to advanced maneuvers including emergency procedures and prevention/recovery from common student errors. In addition, the Contact stage establishes important personal and professional expectations for the IUT and sets the tone for training while in the HITU.

b. RWOP and guidelines. Some of the RWOP language can be difficult for the IUT to visualize and understand, especially for those IUTs that never attended flight training at NAS Whiting Field. To the greatest extent necessary, HITU SI's shall make every effort to ensure IUTs have a thorough understanding and working knowledge of all local procedures and guidance as stipulated in the RWOP. Refer to the RWOP throughout the IUT's training so that they will become intimately aware of how TW-5 operates. Ensure the IUT also has an understanding of any active Read and Initials.

c. Expectations. The TH-57 NATOPS manual does not have a great deal of amplifying information about the maneuvers expected of the IUTs. IUTs are instead expected to use the Contact FTI and FIG to establish their knowledge base. PART III of the NATOPS covers Normal Procedures. IUTs are expected to have familiarized themselves with that section prior to their first flight event. Additional focus is located in Chapter 9 (Special Procedures), which contains critical information regarding autorotation training.

NOTE: The Contact Stage in the HITU DOES NOT and is NOT intended to create Bravo instructors. This training represents the beginning of this process.

d. Technique. The NATOPS qualification stage is designed to build fundamental helicopter pilot skills, instincts, and proficiency. At no point will instructional techniques be evaluated but rather evaluate the execution of the maneuver being flown. If a certain technique is not working, work with the IUT to adjust their techniques so that they can properly execute the maneuver. The NATOPS syllabus builds the foundation for Contact training. The IUT has three TH-57C events prior to being qualified as a Contact "C" IP; therefore, basic Contact instructional techniques must be introduced if whenever possible.

e. IUT Background. The purpose of the NATOPS Stage is to take fleet aviators from a wide variety of backgrounds and turns them into NATOPS qualified TH-57 pilots. Be prepared and mindful of the many different habits that an IUT's previous platform may have ingrained into their flying techniques. At no point should words such as "yank, snatch, or jerk" be descriptors on how to perform a maneuver to CTS; "smooth, precise, and controlled" more accurately describe successful maneuver completion. Some examples/tendencies include:

(1) IUTs may not have an appreciation for the torque limitations of the TH-57. Signs of this include (but are not limited to): aggressive power changes, not scanning torque during power changes, and/or over-controlling (pilot-induced increase in power required). Additional attention is required on the part of the SI until the IUT establishes a feel for the power limitations of the TH-57.

(2) IUTs from wheeled aircraft may approach the TH-57 with a degree of trepidation; it may take the IUT a while to gain the confidence in the skid landing gear.

(3) IUTs from aircraft with high sitting heights tend to hover at higher altitudes. Teach the IUT how to adjust their sight picture that will be better suited while operating the TH-57.

(4) TH-57 autorotation procedures/techniques may be significantly different than those of fleet aircraft (i.e. The IUT may want to "rock and pull" vice "pull, pause, level"). The SI shall maintain vigilant defensive posturing during all autorotation training and ensure proper procedures are being met.

(5) H-60 and H-53 pilots tend to have a nose high tendency, as Sikorsky aircraft typically have an approximately 5° nose-high attitude when "level." This tendency will require the most attention during power-off maneuvers. H-60/H-53 pilots with shipboard experience may tend to be overly aggressive on take-off (to "clear the deck"), and may have harder vertical landings due to shipboard landing habits. Demonstrate to the IUT the proper pitch attitudes necessary for safe take-offs and landings in the TH-57.

(6) H-53 pilots may exhibit a tendency to terminate approaches forward of what would be considered the center due to their past position well ahead of the rotor mast.

(7) H-65 pilots may initially have difficulty coordinating pedal inputs due to the H-65's clockwise rotating main rotor.

f. Knowledge. Academic and general knowledge expectations is very high during the NATOPS stage. Although IUTs are not expected to be subject matter experts after only 15 hours in the aircraft, but they shall know all critical action Emergency Procedures (EPs) verbatim (memory items) and have a functional knowledge of non-memory

items. IUTs must take the time necessary to establish a NATOPS manual level understanding of the aircraft systems and be able to brief all areas of their flight. Set the bar high for the IUT and instruct them to stay in the books especially when their knowledge level is not within standards. Emphasize to the IUT the importance of knowledge as they will soon be briefing and executing these same procedures with SNAs.

301. MANEUVER CLARIFICATION (NATOPS VS. FTI)

a. Power-On Maneuvers. The IUT Syllabus directs the IUT to reference the Contact FTI for normal power-on maneuvers. While the NATOPS discusses power-on maneuvers (that the IUT must be familiar with), the Contact FTI describes the maneuver in much greater detail with accompanied amplification and techniques, including common student errors, and verbal procedures that an IUT shall be well versed in. IUTs must be able to learn to "talk and fly" at the same time. These verbal procedures (i.e. "power, pedal, pause, ...") build muscle memory, provide the SI a check on learning, and help determine weak points which require additional instruction.

b. Power-Off Maneuvers. The syllabus directs the IUT to reference the Contact FTI for power-off maneuvers (autorotations). While the NATOPS includes an in-depth discussion on engine failures (that the IUT must be familiar), the Contact FTI and Appendix A of the FIG contain the granular step by step procedures necessary to develop a solid foundational knowledge that ensures maneuver standardization. Verbal procedures from the Contact FTI must be used by the IUT to aid the SI in determining weak points which may require additional instruction.

302. INSTRUCTING THOSE INSTRUCTING THE EMERGENCY

a. In addition to teaching the IUT the basics of flight, SIs must also teach and emphasize to the IUTs how to safely and effectively introduce a wide range of ground and airborne emergencies to the SNA. SIs shall introduce simulated emergencies per the RWOP and FTI utilizing common sense and keeping safety in mind at all times. Where, when, and how the IP introduces emergencies is key to effective training and shall be emphasized by the SIs to the IUTs. One of the more challenging events an IP will be teaching is how to deal with an engine malfunction or power loss. This challenge becomes even more complicated when the requirements of an appropriate landing site are mixed with aircraft control and proper handling of the simulated emergency.

b. Simulated emergencies should be presented anywhere the RWOP and common sense permit in order to expose and prepare the IUT for running these same emergency scenarios with a SNA. Understanding the EP shall also be presented, emphasized, and evaluated.

303. NATOPS CONTACT STAGE EVENTSa. C4001-C4004.

(1) Brief. The brief is typically scheduled two hours prior to departure. The discussion items primarily focus on the individual aircraft systems as well as any related emergencies. This discussion will build upon the IUT's knowledge already gained while in the ground school and during the cockpit trainer (CPT) phase. Course rules at home field and all Outlying fields (OLFs) will be discussed. It is important to study all publications related to each discussion item to determine if an IUT is struggling with gathering knowledge from different sources. Emphasis will be on learning the airframe and area course rules for the IUT. This block also introduces the beginning methods of instructing SNAs on particular discussion items and maneuvers.

(2) Flight. Four flights will be flown to a planned maximum total of 8 flight hours. With the primary emphasis of re-introducing most winged aviators to the TH-57, plan on utilizing Site 8 on C4001 to maximize at altitude practice prior to conducting low work. Transit times tend to allow sufficient opportunity for IUTs to get more comfortable flying the TH-57B in a wings level, forward flight regime before practicing low work. After IUTs have built proficiency with each maneuver, time should be devoted to introducing common SNA errors. This is an opportunity for the SI and IUT to discuss instructional techniques used during IP-SNA flights. By the end of C4004, the IUT should have seen all OLFs and had some (or all) simulated tail rotor malfunctions demonstrated to them.

b. C4101-C4102.

(1) Brief. The brief includes an expanded discussion of aircraft systems, FTI maneuvers, and an introduction to TH-57 tail rotor malfunction procedures. The discussion should also focus on the differences between how to practice procedures as an IP and how to handle actual Emergency Procedures as outlined in NATOPS. Continue to point out trouble areas for SNAs and offer any lessons learned from your own IP-SNA flights.

(2) Flight. The emphasis should be on conducting practice power recovery and full autorotations, including energy management principles. This is also a good opportunity to discuss common SNA errors, Nr management, and self-preservation following an actual loss of power. As IUTs become more comfortable in the TH-57B, SIs should continue to discuss common SNA mistakes and offer advice as to how to correct them. IUTs should feel encouraged to conduct an honest self-assessment and point out any weak areas that may have become a source of anxiety that can be focused upon.

c. C4290.

(1) Brief. The brief is a standard NATOPS evaluation brief. The discussion should focus on one or more aircraft systems, limits, and emergencies. IUT's are to arrive to the brief with a completed NATOPS evaluation kneeboard packet.

(2) Flight. SIs should utilize Spencer or Santa Rosa OLF (per MPTS) to take advantage of paved surfaces required for tail rotor malfunctions. It should be emphasized that the purpose of this check ride is two-fold; to ensure proper standardization per the FTI and MPTS and also serves as a NATOPS check per Chapter 21 of the NATOPS manual.

304. C4300 BLOCK OVERVIEW. The C4300 block introduces IUTs to the TH-57C and emphasizes preflight differences and changes to flight characteristics. Mini stab flight control system, electrical system, and avionics (COMM/NAV checklist) are vastly different from the Bravo and should be heavily discussed.

305. C4400 BLOCK OVERVIEW. The purpose of the C4400 block is to develop air work skills during basic maneuvers in the TH-57C while operating at night. Night course rules, local area orientation, proper lighting configurations, and organization of SNA night flight events are the primary emphasis.

306. C4500 BLOCK OVERVIEW. This block of instruction is facilitated at the squadron level following successful completion of the HITU syllabus. Primary emphasis is on error detection/correction, defensive posturing, and instructional technique.

307. C4600 BLOCK OVERVIEW. This block of instruction is facilitated at the squadron level following successful completion of the HITU syllabus. Primary emphasis is on night error detection/correction, defensive posturing, and instructional technique.

308. C4700 BLOCK OVERVIEW.

a. This block of instruction is the first part of the Advanced Helicopter syllabus for instructors transitioning to become TH-57B instructors and is facilitated at the squadron level.

b. IUT's will fly three training flights in this block to refine all Contact Bravo "B" coded events with special emphasis on power-off maneuvers, energy management principles, tail rotor malfunctions, and defensive posturing.

309. C4800 BLOCK OVERVIEW

a. This block of instruction is the second part of the Advanced Helicopter syllabus for instructors transitioning into becoming TH-57B instructors and is facilitated at the HITU.

b. IUT's will fly three training flights with HITU instructors. Heavy emphasis is on power-off maneuvers, proper autorotational technique, energy management principles, tail rotor malfunctions, and common errors during critical phases of dynamic maneuvers.

310. C4990 FLIGHT OVERVIEW. The C4990 evaluates the IUT's knowledge and ability to present maneuvers to SNAs while simultaneously executing the maneuvers within CTS. Furthermore, this end of stage check ride emphasizes and evaluates the IUT's ability to detect and correct errors before they become hazardous to the aircraft and crew (mishap prevention techniques).

**CHAPTER 4
INSTRUMENT STAGE**

400. OVERVIEW

a. Goals. The four goals for the IUT Instrument Stage portion of the syllabus are to:

- (1) Develop IUT instrument flight proficiency.
- (2) Develop IUT proficiency in TH-57 flight planning.
- (3) Ensure the IUT attains the minimum number of precision and non-precision instrument approach procedures, and instrument flight hours to be eligible for a NATOPS Instrument Evaluation.
- (4) Ensure the IUT is fully qualified to instruct the Instrument Navigation (INAV) Stage of flight.

NOTE: Low levels of stabilization, large windscreen, small aircraft size, and low levels of in-flight automation make the TH-57C a difficult aircraft to fly in IMC, especially with an SNA. SIs should focus on this fact and instruct IUTs on procedures and techniques to maximize skill in this flight regime.

b. Flight Planning. Since IUTs come from all different backgrounds, some may not be familiar with the flight planning tools most commonly utilized by IPs and SNAs. In addition to the OPNAVINST 3710.7(series), NATOPS, RWOP, and JMPS, IUTs should become familiar with all the comprehensive flight planning tools which are available at the following websites:

- (1) fwb.metoc.navy.mil
- (2) adds.aviationweather.gov
- (3) baseops.net
- (4) flightplan.com
- (5) airnav.com
- (6) skyvector.com
- (7) airseacard.com

c. Airfield Exposure. IUTs will be scheduled for out-and-in flights to the maximum extent possible. SIs should attempt to expose them to the airfields they will utilize while training SNAs. Some common destinations are Bay Minnette (1R8), Monroeville (KMVC), Mobile Downtown (KBFM), Mobile Regional (KMOB), Gulf Shores-Jack

Edwards (KJKA), Tallahassee (KTLH), Montgomery (KMGM), Andalusia (79J) and Florala (0J4).

d. Approach Requirements. With segmented approaches at South Whiting Field (KNDZ), heavy emphasis should be placed on building proficiency at flying these more challenging procedures into home field. The SI should emphasize where to expect to be ATC vectored and discuss the different techniques when switching NAVAIDS on the ILS Z 32 and the ILS Y 32.

401. I4000/4100 BLOCK OVERVIEW

a. General. The one flight in each of these blocks will focus on the SNA Basic Instrument (BI) event. Emphasis on these flights will focus on general VFR orientation in the instrument working areas and proper procedures for checking in and out. The two flights must be flown to the opposite working areas. I4001 is typically flown to the Western operating area and I4101 flown to the Eastern operating area. However, these can be reversed.

b. Discussions on these flights should center on how to safely and effectively conduct a SNA BI flight event.

402. I4200 BLOCK OVERVIEW

a. General. For most IUTs, the I4201 flight represents the busiest IFR flight probably since flight school. IUTs must continuously monitor approaches flown and/or needed to: successfully complete the I4200 block and also meet all NATOPS instrument rating requirements. IUTs shall arrive at each brief with a completed DD-175 flight plan for the route of flight; even if the intent is to file an NDZ stereotype flight plan. Discuss common student errors on the DD-175 and ensure the IUT is aware of the location of base operations and the weather office.

b. I4201. Sample Profile: NDZ303 flight plan, Holding CEW, VOR-A KCEW, ILS 17 KCEW, ASR 32 KNDZ, PAR 32 KNDZ.

c. I4202. Sample Profile: NDZ406 flight plan, NAVIE departure, PTP EAGLE, Holding EAGLE, Failed Gyro TACAN 33 Gateswood, PTP JORDN, Failed Gyro TACAN 24, ILS 32 KNDZ, Failed Gyro PAR 32 KNDZ.

d. I4203. Sample Profile: DD-175 flight plan, Holding PENSI or LOXLY, two approaches at KBFM followed by two approaches at KMOB. One RNAV and one LOC approach in order to satisfy block requirements.

e. I4204. Sample Profile: DD-175 flight plan, Holding PENSI, ILS 17 KPNS, VOR 8 KPNS, ILS 27 and RNAV 9 KJKA.

403. I4390 INSTRUMENT CHECKRIDE

a. General. Before conducting this flight, ensure the IUT has successfully completed the I0390 exam within 60 days of the check ride. IUTs are required to show up to the brief with a completed instrument check packet and ensure that they have met all OPNAV 3710.7(series) requirements. Similar to standardization checks in the syllabus, the purpose of this flight is to evaluate if the IUT can accomplish all the flight maneuvers within CTS.