

01 Sep 2015

HELICOPTER INSTRUCTOR TRAINING UNIT (HITU) INSTRUCTION 3710.2D

Subj: UNIT STANDARD OPERATING PROCEDURES

Ref: (a) OPNAVINST 3710.7 Series (NATOPS General Flight and Operating Instructions)  
(b) COMTRAWINGFIVEINST 3740.5 Series (FIST)  
(c) CNATRAININST 1542.91H (Advanced Helicopter IUT MPTS)  
(d) COMTRAWINGFIVEINST 3710.8 Series (RWOP)  
(e) COMTRAWINGFIVEINST 3710.14 Series (FIG)

Encl: (1) HITU INSTRUCTOR CONTACT "B" ORIENTATION FLIGHT

1. Purpose. This instruction is intended to implement HITU Standard Operating Procedures (SOP) applicable to the safe conduct of flight operations.

2. Cancellation. HITUINST 3710.19C, dated 12 AUGUST 2011.

3. Scope. The regulations and instructions set forth are applicable to all flight operations conducted in TW-5 HITU aircraft and are intended, in part, to support and supplement references (a) through (e). In no case shall this SOP supersede directives from higher authority, including HT squadron instructions/regulations where applicable. This instruction is not to be construed as restricting pilot judgment or deviation in order to maintain safety of flight. Any deviations from this instruction shall be promptly reported to the HITU Officer-in-Charge (OIC).

4. Action. All pilots operating TW-5 HITU aircraft shall be familiar with and comply with the contents of this instruction.

5. Review. The HITU Standardization Officer is responsible for the maintenance, review, and update of the SOP. The HITU Operations Officer shall ensure a current copy of the SOP is incorporated into the Flight Duty Officer's (FDO) binder. Recommended changes are encouraged and should be forwarded to the HITU Standardization Officer.

6. Certification. Reviewed and approved this date.

D. E. LAWSON

Distribution:  
HITU (List I)  
CTW-5 STAN  
HT-8/18/28 STAN

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## CHAPTER I

## GENERAL INFORMATION

1-1 ADMINISTRATIVE REQUIREMENTS

1. Prior to initial flight in the HITU, all newly assigned staff instructor pilots (IPs) and Instructors Under Training (IUTs) shall report to the NATOPS Officer or Clerk with their NATOPS jacket. The NATOPS Officer or Clerk shall screen the jacket for any discrepancies.
2. All NATOPS jacket discrepancies shall be noted and the HITU Operations Officer shall ensure no personnel are scheduled for any flights or high-risk activities until all deficiencies are corrected or specifically waived by competent authority.
3. IPs shall complete ATFs within one working day of the flight. At a minimum, a "place holder" ATF (an ATF with intended grades entered for all maneuvers conducted) shall be entered into TIMS prior to departing for the day to the maximum extent possible.
4. All IPs and IUTs shall ensure an ASAP report is completed for every flight event, including flights without incident prior to departing for the day. One report is required per flight event (ex: one IP and two IUTs = two ASAP reports).

1-2 CURRENCY/PROFICIENCY/WARM-UPS

1. It is the individual IP's responsibility to maintain currency and proficiency and to meet the annual and semi-annual flight minimums as set forth by governing directives.
2. With the exception of the Instrument Ground School test, all tests should be completed by the end of the month prior to the month during which the qualification is due.
3. All IPs and IUTs shall ensure they are current in all columns of the Read and Initial Status Board in the duty office before each flight.
4. IPs shall maintain/regain currency and proficiency in accordance with reference (b).
5. For IUTs, after a break of seven or more days, an optional warm-up may be granted by the IP based upon performance. Additional warm-up flights may be awarded on a case-by-case basis as determined by the HITU OIC.
6. Upon check-in, all Contact "B" Standardization IPs assigned to the HITU shall complete a standardization flight with a current Contact "B" Standardization HITU IP before being scheduled for or flying any flights involving:

- simulated tail rotor emergency procedures
- simulated engine failures on take-off

This standardization flight shall focus on:

- mitigating risks and defensive posturing techniques for these maneuvers
- common IUT errors and proper control guarding
- proficiency and proper sight picture on maneuvers from the right seat (especially those that require proper skid alignment/landing attitude at touchdown).

This standardization flight is optional for designated ANIs or NIs at the discretion of the HITU OIC. Enclosure (1) shall be utilized for this flight and filed in the new IP's training jacket.

### 1-3 SCHEDULING GUIDANCE

1. All IUTs should expect to complete at least one training event every day and shall check the flight schedule daily to include the front page for any notes. If there is an issue viewing the schedule on-line, the IUT should call the HITU FDO. If the HITU FDO is not available, the IUT should call his/her parent squadron's duty office (each squadron gets a hard copy of the HITU Schedule).
2. IUTs shall ensure all prerequisites outlined in ref (c) are satisfied and shall be proactive in completing them prior to the associated training event.
3. IUTs may be scheduled to stand the TW-5 CDO watch while in the HITU syllabus. IUTs shall not fly or be scheduled to fly while standing CDO. However, IUTs assigned CDO may be scheduled for CPTs/simulators or other ground training events in accordance with the Wing CDO Responsibilities instruction, COMTRAWINGFIVEINST 1601.2 Series.
4. To the maximum extent possible, all snivels shall be entered no less than two days prior and should include a specific time period and reason. Resolution of any scheduling conflicts will be made by the OIC or HITU Operations Officer as necessary.
5. ADDU Instructors should receive a HITU orientation in-brief from the HITU OIC or OPS O prior to conducting their first flights at the HITU.
6. Any changes or additions to the signed flight schedule shall be approved by the OIC or the HITU Operations Officer.

1-4 FLIGHT TIME LIMITATIONS

1. IPs shall not exceed the daily or periodic flight time limits listed in ref (d).
2. A waiver shall be obtained before a limit is exceeded. Likewise, a new waiver shall be obtained whenever any additional limit is expected to be exceeded, even if a current waiver exists for another limit.
3. The HITU Operations Officer is responsible for ensuring no time limits are exceeded without waiver approval and shall coordinate with the HITU Administrative Clerk to verify flight times. In addition, all staff instructor pilots and IUTs are expected to monitor their own personal flight time. If flight time limits are in question, the pilot shall verify flight time with the HITU Administrative clerk and notify the HITU OPS O if a waiver is required.
4. The HITU Administrative clerk shall check the flight time summary for all staff personnel daily and notify the HITU OPS O if a limit is being approached.
5. A waiver requires an evaluation from a flight surgeon and an interview with the HITU OIC. If unavailable, the interview may be conducted by the HITU OPS O.
6. The OIC's flight time waiver is valid up to the maximum flight time limits listed in reference (d). Specific approval from CTW-5 is required to exceed maximum flight time limits.

1-5 TRAWING FIVE COMMAND DUTY OFFICER (CDO) DUTIES

1. All IUTs O-3 and below are eligible to stand Wing CDO and will be notified in advance by the OPS O if slated for the duty.
2. All IUTs assigned TRAWING FIVE CDO duties shall contact the HITU Senior Watch Officer for training prior to assuming the duty.

## CHAPTER TWO

## NORMAL PROCEDURES

2-1 WEIGHT AND BALANCE

1. The PIC shall ensure a proper load computation form (either for the actual aircraft being flown or for the heaviest/most forward CG aircraft (see below)) is completed and filed with the FDO prior to launch.
  - a. If an aircraft has not been assigned by briefing time: The left column of the weight and balance form shall be completed using the heaviest aircraft to determine the maximum allowable fuel load. The center and right columns of the weight and balance form shall then be completed using the most forward CG aircraft and the planned takeoff fuel load, not to exceed the maximum fuel load permitted for the heaviest aircraft.
  - b. If an aircraft is assigned: The center and right columns of the weight and balance form should be completed using the data associated with the assigned aircraft.
  - c. Multiple IUTs (or others planning to sit in the front seat opposite the PIC) can be included on a single computation form as long as the heaviest of those candidates is used for calculations. The same applies for multiple passengers riding in the back seat at separate times.

2-2 BRIEFING REQUIREMENTS

1. The IP shall ensure a proper ORM and NATOPS brief is conducted prior to commencing all flights. It is the responsibility of the individual crewmembers to remove themselves from the flight schedule if unable to safely and effectively accomplish all flight duties due to fatigue, stress, or other non-medical grounding reasons.
2. At the scheduled brief time, IUTs shall have a completed weight and balance form, have a kneeboard card for the event to be flown, have a copy of the IUT MPTS, and be prepared to thoroughly brief all discussion items for that event. In addition, the IUT shall be prepared to draw any systems listed in the discussion items onto the dry-erase board in the briefing space.
3. IUTs shall take ownership of their training. It is the responsibility of the IUT to make known to the IP what maneuvers are yet to be flown to MIF within the current training block during the brief. If there is a maneuver or

working area where the IUT would like to focus additional training, he/she should make it known in the brief and the IP will make reasonable efforts to accommodate such a request if it lies within the scope of that training event and does not conflict with other required training.

4. Preflight planning and flight filing shall be done in accordance with references (a) and (d).
5. Brief-In-Aircraft (BIAC) evolutions should be used only when scheduling constraints require it. The OPS O should evaluate the use of BIAC on a case-by-case basis considering such things as IUT experience, type-of-flight, length of brief, etc.

#### 2-3 PASSENGER MANIFESTING REQUIREMENTS

1. The PIC shall ensure all crewmembers and passengers are manifested regardless of the point of pickup.
  - a. All crew names (except the Pilot In Command) will be listed on the back of the acceptance sheet in the ADB for routine flights departing NDZ. For hot seats at NDZ, the oncoming pilot will add his/her name when walking to the aircraft and line out the returning pilot.
  - b. The outbound call to base shall include the names of all aircrew on board.
  - c. IPs shall ensure that any passengers embarked at outlying fields are manifested by aircraft side number at the site.
2. When at a location other than home field or an OLF, if no other means are available, a verbal manifest shall be filed as soon as practical via radio with base or the appropriate FSS.

#### 2-4 FLIGHT GEAR

1. It is the responsibility of each crewmember to maintain all items of personal flight equipment in serviceable condition and stored in proper locations (assigned locker or in the aircraft). Flight vests are prohibited from being left unattended or transported in POV's. It may be transported in a duty vehicle. When away from home field, survival gear shall be stored in the aircraft's cargo compartment.
2. Helmets with visor down shall be worn within 100 feet of operating/turning aircraft. As a reference, parking spaces are 100 feet apart.
3. Additionally, helmets shall be worn with chin straps fastened when climbing on any part of the aircraft.

4. Rings shall be removed before entering the flight line. Personnel shall have gloves on and sleeves down when entering, within, or exiting the rotor arc of an operating aircraft.
5. Cell phones may be carried by aircrew for use during a PEL/emergency situation or for flight-related purposes at stopover locations. However, the device must be carried in the silence/off position and stored in a location that does not interfere with flight duties.
6. Due to lack of availability of anti-exposure suits, overwater flight (defined as outside of autorotative capability to land distance) is prohibited when water temperature is below 60 °F or the outside air temperature is 32 °F (wind chill factor corrected) or below.

#### 2-5 C4001 FLIGHT

In addition to completing an egress drill and the hover height trainer, IPs should afford the IUTs an opportunity to re-familiarize themselves with their survival gear, especially if the IUT has been away from flying for an extended period or if the gear type/location is different from their previous tour.

#### 2-6 ENROUTE PROCEDURES

1. Only maneuvers listed in the FTI and listed on the kneeboard card for the scheduled flight are authorized in flight. All training shall be in strict accordance with applicable FTIs and other governing directives.
2. Flights with doors removed are prohibited for all HITU events unless specifically approved by the HITU OIC.
3. The HITU FDO shall provide flight following for all local aircraft events on the HITU flight schedule. Prior to taxi, all aircraft shall check out with base via radio with side number, working area, estimated time enroute, and names of all personnel on board.
4. The PIC shall ensure copies of all filed DD-175 flight plans and associated weather brief (if not using an "On-Top" brief) for instrument and navigation flights are left with the HITU FDO prior to departure. For return legs on out-and-in flights (if not utilizing a stereo flight plan or if different than what is indicated on the DD-175 left with the FDO), all reasonable efforts shall be made to provide the HITU FDO with the intended route of flight via phone prior to departure.
5. The PIC shall ensure the HITU FDO is contacted when safe on deck at all intermediate stops and at the final destination and shall provide the FDO with an estimated time of departure (ETD), approximate time in route, and destination for the next leg as applicable. All reasonable efforts shall be made to

contact the FDO with an updated ETD or actual takeoff time if it varies +/-15 minutes from the original ETD.

6. In the interest of IUT training, battery starts are encouraged at home field. IUTs shall be proactive in communicating with IPs during their training to ensure they meet the requirement in ref (c) to complete at least four cold starts (two "B" and two "C") during the syllabus.
7. All aircraft should contact the HITU FDO at least 10 minutes prior to return with aircraft status and ETA.
8. Hot-seating PICs shall conduct a face-to-face brief to communicate any updated aircraft status information.
9. For HITU weekend cross country flights/operations (unless the HITU duty office is manned), the PIC shall utilize his/her parent squadron's duty office for flight following and shall comply with all applicable regulations of that command. The HITU OPS O shall coordinate with the respective squadron to ensure flight following expectations are understood.

#### 2-7 GUARDING THE CONTROLS

The IP shall guard all controls (including twist grip) in a manner that will allow timely and effective corrections by the IP to keep the aircraft from entering an unsafe/unacceptable regime at any time.

#### 2-8 INSTRUMENT/NIGHT FLIGHT

1. For the purposes of instrument approaches and flight planning, the TH-57C may be considered multi-piloted when manned by two pilots qualified in model (PQM). IUTs that have successfully completed a NATOPS Check and are officially designated a PQM meet this requirement.
2. Recommended procedures to simulate an attitude gyro failure are to turn the STBY ATT IND switch off, recage the gyro while in a turn, or to cover the gyro completely.
3. The recommended procedure to simulate directional gyro failure is to pull the HSI Circuit Breaker or to cover the gyro completely.
4. The "failed directional gyro" Radio Instrument flight (I4202) shall not be scheduled or flown at night. On other night flights, failed directional gyro instrument flight shall only be attempted by covering up the gyro (e.g., using the partial panel card) where reference to the gauge can be returned immediately if necessary.

5. Intentional degradation of any aircraft equipment in IMC conditions or at night (excluding night autorotations) is prohibited.

2-9 FUEL PLANNING AND USE

1. Aircrew shall depart NOLFs with no less than 20 gallons (25 gallons from Site 8) or a steady low fuel light, whichever occurs first.
2. Unless otherwise specifically approved by the OIC, hot refueling is authorized only at military airfields, authorized OLFs, Florida, or Andalusia and shall be conducted per the NATOPS manual and RWOP. Hot refueling with the aft doors removed is authorized.
3. When checking out a fuel packet, HITU aircraft are assigned a packet from HT-8 by default. PICs shall ensure the squadron's accounting data is legibly printed on any fuel receipts. Turn in fuel receipts along with the entire fuel packet to the maintenance tool room immediately upon return.

2-10 CREW DAY/CREW REST/ORM POLICY

1. It is the individual's responsibility to adhere to crew day and crew rest restrictions in accordance references (a), (b), and (c).
2. It is the individual's responsibility to remove themselves from the flight schedule if unable to safely and effectively accomplish all flight duties due to fatigue, stress, or other grounding reasons.
3. Individual's are obligated to proactively resolve crew day and crew rest conflicts at the soonest opportunity. To the maximum extent possible, it is recommended that IUTs discuss conflicts with the last IP that provided training or any other available IP. If unable to contact an IP, the IUT is expected to arrive at the earliest opportunity that maintains crew rest. (Ex: If scheduled to brief the next day at 0830 and the IUT lands at 2200 the night prior due to a weather delay, the IUT should arrive no earlier than 1000 the following day.)
4. IPs shall make all reasonable efforts to notify an IUT if a change in briefing times becomes necessary.

2-11 CROSS COUNTRY PROCEDURES

1. Cross countries are not typically executed in the HITU due to resource limitations (aircraft, staff, funding, etc.) and syllabus design. However, if the need arises (as dictated by the HITU OPS O and/or OIC), the following procedures shall apply:

2. A fully completed CCX request needs to be turned into the HITU OPS O NLT COB the Monday prior to the CCX weekend.
3. The IP shall ensure their destination and stopover airfields have, at a minimum, contract fuel and an appropriate power cart.
4. A copy of the route of flight, initial weather brief, fuel plan, and weight and balance shall be given to the ODO prior to departure. (See section 2-5, Para. 8 of this instruction for details concerning duty office support for HITU CCXs.)
5. Upon completion of each leg of a cross country flight, the PIC shall make a "Safe on Deck" call to the appropriate ODO/SDO.
6. If a deviation from the planned flight or route of flight is necessary and known before takeoff, the HITU OIC (or OPS O in his absence) shall be contacted for approval. Any deviation from the planned flight or route of flight that occurs in flight shall be reported to the HITU OIC or HITU OPS O immediately upon landing.
7. Proper security of the aircraft at the final destination is the responsibility of the PIC. A secure ramp area is mandatory.
8. If at any time there is a period of uncertainty or question regarding aircraft status, the PIC shall contact the HITU OIC or HITU OPS O.

2-12 GROUND HANDLING WHEELS

1. While installing/removing ground handling wheels, all HITU IPs and IUTs shall wear a helmet with the chin strap fastened and the visor down.
2. This requirement also applies during the Cross Country Procedures class (G0701) when the IP is demonstrating and the IUTs are practicing installing/removing the wheels.

2-13 PRE-POSITIONING PROCEDURES

The HITU OIC shall be briefed on intended procedures and facilities to be utilized before attempting pre-positioning operations.

2-14 STATIC DISPLAY PROCEDURES

1. Only those events sanctioned by the Chief of Information (CHINFO) are authorized, unless specifically approved by CNATRA or TW-5.

2. At least one crewmember shall be stationed at the aircraft at all times during display hours.
3. Unqualified personnel who wish to examine or sit in the aircraft shall be monitored at all times. Aircraft preparation shall include the following prior to any unqualified personnel examining the aircraft:
  - a. ENG START and ENG IGN circuit breakers pulled.
  - b. Battery disconnected.
  - c. STBY BATT circuit breaker (baggage compartment) pulled.
  - d. Grounding wires used, if available.
4. Crew day commences when the aircrew first arrives at the aircraft for the static display.
5. Prior to departure, the PIC shall conduct a thorough FOD check of the aircraft and immediate area and a detailed preflight of the aircraft.

#### 2-15 PEL PROCEDURES

1. Following a PEL, no further flight shall be attempted until all applicable checklists are complete and approval has been granted by qualified maintenance personnel AND the HITU OIC or, in his absence, the HITU OPS O.
2. Outside the local area, the PIC shall initiate a maintenance recovery through the HITU FDO. The PIC shall not authorize local civilian maintenance efforts but should report the availability of local Bell 206 licensed mechanics to the ODO/CDO.
3. Environmental and personal safety conditions permitting, at least one crewmember shall stay with the aircraft until it is turned over to maintenance recovery personnel or appropriate security has been established. An NOLF crash crew shall NOT be used for aircraft security (i.e., after the NOLF closes).
4. Upon return to base, the PIC shall complete a Maintenance Incident Report (available from Aircraft Issue) and assist the FDO with the PEL checklist/report as necessary.

#### 2-16 AUTHORIZED PASSENGERS, FLIGHT PERSONNEL AND QUALIFIED OBSERVERS

1. No personnel shall be flown in HITU aircraft without prior approval of the HITU OIC or, in his absence, the HITU OPS O. This excludes properly manifested personnel needing a ride back to base (i.e., a PEL aircrew, SNAs awaiting a ride after training at an OLF, etc.).
2. Only designated TH-57 aircrewmen shall fly in the back of a HITU aircraft with the doors removed. IUTs, SNAs, flight surgeons, etc. are prohibited from doing so.

2-17 HOT SEATING PROCEDURES

1. Personnel shall not enter or exit the rotor arc when either front seat pilot is entering the cockpit/strapping in or unstrapping/exiting the cockpit.

<b>HITU INSTRUCTOR CONTACT "B" CHECK-IN FLIGHT</b>	
PILOT _____	DATE _____
EVALUATOR _____	BUNO/SIDE # _____ / _____
FLT TIME _____	
- BAW	- VERBAL PROCEDURES
- COURSE RULES	- QUICK STOP FROM HOVER
- NORMAL APPROACH	- MAX LOAD TAKEOFF
- STEEP APPROACH	- NO HOVER TAKEOFF
- NO HOVER LANDING	- SLIDING LANDING
- SIMULATED EP'S	- HYD BOOST-OFF APPROACH
- SIM ENG FAIL IN HOVER / TAXI	- POWER RECOVERY/FULL AUTO
- SIM ENG FAILURE AT ALTITUDE	- WAVEOFF (POWER ON/OFF)
<b>- Defensive Posturing</b>	<b>- SIM ENG FAILURE ON TAKEOFF</b>
<b>- SIM LOSS OF T/R THRUST &amp; STUCK PEDALS IN HVR</b>	<b>- SIM STUCK PEDALS AT ALT</b>
<b>- Common IUT errors</b>	
Pilot's Signature _____	
Evaluator's Signature _____	
01 September 2015	