



## DEPARTMENT OF THE NAVY

COMMANDER  
TRAINING AIR WING FIVE  
7480 USS ENTERPRISE STREET SUITE 205  
MILTON, FLORIDA 32570-6017

IN REPLY REFER TO:

COMTRAWINGFIVEINST 3710.13P

Code N4

17 Jun 16

### COMTRAWINGFIVEINST 3710.13P

Subj: FUNCTIONAL CHECK PILOT AND MAINTENANCE RECOVERY PROGRAM  
FOR TRAINING AIR WING FIVE

Ref: (a) COMNAVAIRFORINST 4790.2 Series  
(b) OPNAVINST 3710.7 Series  
(c) NAVAIR A1-T6BAA-NFM-100  
(d) NAVAIR 01-T6BAA-FCL-200  
(e) NAVAIR 01-H57BC-1  
(f) NAVAIRINST 3710.1 Series  
(g) COMTRAWINGFIVEINST 3710.2 Series  
(h) COMTRAWINGFIVEINST 3710.8 Series  
(i) CNATRINST 3710.39 Series

Encl: (1) Sample Training Air Wing FIVE Government Flight Representative  
Designation Letter  
(2) Sample Training Air Wing FIVE Squadron Senior Functional Check Pilot  
Designation Letter  
(3) Sample Training Air Wing FIVE Squadron Functional Check Pilot  
Designation Letter  
(4) T-6B Functional Check Pilot Syllabus  
(5) TH-57B/C Functional Check Pilot Syllabus

1. Purpose. To establish the minimum qualification requirements for Functional Check Pilots (FCPs) in Training Air Wing (TRAWING) FIVE aircraft per references (a) and (b), and to establish the policy and procedures for the organization and operation of the Functional Check Flight (FCF) and Maintenance Recovery Programs at Naval Air Station Whiting Field (NASWF).

2. Cancellation. COMTRAWINGFIVEINST 3710.13N.

3. Scope. The FCF Program is an essential element of the TRAWING FIVE mission to train student aviators. Through the FCF Program, Commander, Training Air Wing FIVE (CTW-5) is assured contractor-maintained aircraft are functionally ready and safe-for-flight. Per references (a) through (i), FCFs are performed to determine if the airframe, power plant, accessories, and subsystems are functioning per established standards. FCFs serve two important functions: first, to ensure aircraft are safe-for-flight and capable of safe mission performance; and second, to accurately determine the quality of performed maintenance. Maintenance Recovery Flights (MRFs) are conducted to retrieve aircraft that have executed precautionary emergency landings and/or incurred discrepancies that render them less than Full Mission Capable (FMC) and are now Partial Mission Capable (PMC) during normal operations at sites or airfields other than NASWF.

4. Action

a. CTW-5 shall:

(1) Designate a Government Flight Representative (GFR) to oversee Contract FCPs and serve as liaison between the contractors and TRAWING FIVE agencies. (See enclosure (1)).

(2) Designate a TRAWING FIVE Senior FCP for both the TH-57B/C and T-6B (see enclosure (2)).

(3) Direct the training squadron Commanding Officers to provide dedicated FCPs, as required.

b. Government Flight Representative (GFR):

(1) When requested by the OIC/AOIC/Ground Government Flight Representative (GGFR), shall coordinate with the squadrons and provide augment FCPs, as required, to assist in clearing backlog of aircraft on the Test Board. When the GFR is unavailable, the Maintenance/CNATRA Detachment OIC (N4) will liaise with squadrons to request additional FCP support.

(2) Shall coordinate all FCF upgrade syllabus flight requests with the Contractor Flight Operations Manager (FOM) to ensure FCF aircraft availability. The squadron Senior FCPs will coordinate with the GFR for use of FCF aircraft to conduct FCP syllabus upgrade flights. Squadron FCPs will act as FCF instructors for Instructor Pilots (IPs) in the upgrade syllabus.

(3) Shall be responsible for the oversight of all contractor flight and ground operations involving T-6B/TH-57B/C aircraft assigned to TRAWING FIVE. The GFR is responsible for all CTW-5 T-6B/TH-57B/C contractor crewmembers' training requests and qualifications, and approving those crewmembers for flight operations. (All contractor procedures involving flight operations of T-6B/TH-57B/C aircraft are subject to final approval by the CNATRA GFR.)

(4) Should be a qualified FCP and serve as TRAWING FIVE Senior FCP in either the T-6B or TH-57 series aircraft, as appropriate, to the maximum extent possible. When the GFR is not a qualified FCP, CTW-5 shall designate a highly-qualified government FCP to assist the GFR in the performance of their duties.

(5) Shall conduct FCF Pilot-Under-Instruction Syllabus upgrade flights and Final Check Flights for either T-6B or TH-57 series aircraft, as appropriate.

(6) Make recommendation to CTW-5 for Functional Check Pilot designation of TRAWING FIVE IPs and GFR approved civilian contract pilots.

c. Maintenance/CNATRA Detachment OIC/AOIC/GGFR (N4) shall:

(1) Request from GFR additional government FCPs, as required by FCF loads.

(2) Maintain a current copy on file of all authorized civilian contract in flight maintenance troubleshooters.

d. Squadron Commanding Officers (COs) shall:

(1) When FCF assistance is requested by the GFR, ensure squadron FCPs are made available as requested and not scheduled for other flights or duties that would interfere with clearing the FCF Test Board.

(2) Designate a Senior FCP tasked as the Squadron Maintenance Representative to CTW-5.

(3) Ensure a minimum of two FCPs are qualified and designated by CTW-5.

e. Squadron Senior FCPs shall:

(1) Report discrepancies and/or unauthorized maintenance practices to either TRAWING FIVE GFR and/or Maintenance/CNATRA Detachment OIC (N4) for follow-up and resolution.

(2) Maintain an effective FCF Training/Standardization/Qualification Program per references (a) and (b) and enclosures (4) and (5).

(3) Serve as liaison for the squadron COs, the Maintenance/CNATRA Detachment OIC (N4), and TRAWING FIVE GFR on maintenance-related issues.

(4) Recommend changes to FCF instructions, notices, and squadron Standard Operating Procedures (SOPs), as required.

(5) Be responsible to the TRAWING FIVE GFR/Maintenance/CNATRA Detachment OIC (N4) for the overall operation of the military FCF Program.

(6) Ensure FCPs are scheduled frequently enough to ensure mission proficiency. Squadron FCPs shall fly a minimum of one FCF flight per quarter. Failure to meet this qualification shall result in loss of FCP designation. Requalification shall consist of taking FCF Test and an FCF Check Ride.

(7) Coordinate with GFR for aircraft to conduct FCP upgrade training.

(8) Be qualified FCPs.

f. FCPs shall:

(1) Have demonstrated exceptional initiative and maturity.

(2) Comply with the requirements of this instruction and references (a) through (i), as appropriate.

(3) Be briefed by the Maintenance/CNATRA Detachment OIC (N4), Squadron Senior FCP, and GFR on pertinent maintenance issues.

(4) Perform FCFs per references (a) through (i), as scheduled. When hard scheduled, ensure FCF duties are the priority.

(5) Additionally, military FCPs shall:

(a) Be recommended by the squadron CO.

(b) Be designated in writing by CTW-5. (See enclosure (3)).

5. Administrative

a. Aircraft Mishap. In the event of a mishap involving a contract FCP during an FCF, CTW-5 will convene an Aviation Mishap Board and assume responsibility for reporting purposes.

b. Publications. The civilian contractor will supply all publications and assist with the maintenance and auditing of the maintenance technical library.

c. Program Changes. Changes to this instruction or its enclosures shall be routed through the chain of command.

d. Quality Assurance (QA). No FCF shall be flown until all safety-of-flight discrepancies have been cleared by the contractor QA. The FCP shall be briefed and debriefed by a contractor Quality Assurance Representative (QAR).

e. Flight Time Limitations

(1) Due to the short duration of maintenance flights and the large number of flights that may be required, FCPs are not restricted to a specific number of functional check flights that may be flown in a single day. However, during extended daylight hours in the summer with extreme heat and humidity present, consideration should be given to limiting the total number of FCFs flown, particularly when the onset of significant fatigue is noted.

(2) Maintenance and syllabus flights may be flown on the same day.

(3) In no case shall a government FCP fly more than 6.5 hours or exceed "crew day" limitations established by reference (b). Contract FCPs refer to Flight Operations Procedures Manual SOP for flight time limitations.

(4) In any case where aircraft decompression (depressurization) is conducted below 18,000 ft and recompression (repressurization) is conducted above 18,000 ft per FCF procedure, that FCF may be completed (provided there is no subsequent rapid decompression above 18,000 ft MSL on that flight event). After completing that flight, affected aircrew shall not fly above 18,000 ft MSL for a minimum of 12 hours. In any case where decompression (depressurization) occurs above 18,000 ft MSL, the aircrew shall immediately terminate the event, and shall not fly again for a minimum of 12 hours.

f. Weather Restrictions

(1) FCFs shall comply with the weather minimums imposed by references (b), (f), and (g).

(2) For TH-57 FCF flights involving discrepancies for engine, flight controls, or instruments affecting IFR capability: weather shall be 700 feet and 1 mile or greater.

(3) Hover checks, to include Compass Swings and Isolation Mount Checks (IMCs), may be performed when weather is less than 700 feet and 1 mile, but not less than 300 feet and 1 mile, provided visual references to the ground and obstruction clearance is maintained.

g. FCFs Combined with Operational Flights and Minimum Crew Requirements

(1) FCFs combined with Instructor Under Training (IUT) or Student Naval Aviator (SNA) syllabus training flights are prohibited.

(2) Maintenance "In Flight Eval (IFE)" flights are authorized for use with IUT or SNA Syllabus training flights with a designated FCP operating as Pilot-in-Command (PIC). Maintenance Eval/Operational combination sorties may only originate from NASWF.

(3) T-6. The minimum crew will be a single pilot, except when the mission dictates an additional qualified crewmember/non-crewmember. Single pilot IMC and night operations

(ferry flights) may be conducted when the forecast weather meets the ceiling and visibility requirements of reference (b).

(4) TH-57. The minimum crew shall be single pilot and a qualified crewmember/Non-Crewmember/In-Flight Observer. IMC and night operations (ferry flights) may be conducted when the forecast weather meets the ceiling and visibility requirements of reference (b) and the respective TRAWING Flight Operations SOP.

(5) Training, passenger and ferry flights. Passenger and ferry flights will not be conducted in check flight aircraft until the check flight has been completed, including required post-flight inspection and recorded entries. FCF/maintenance syllabus training flights are conducted with only the personnel necessary for the mission. Check flight aircraft may be used for crewmember and non-crewmember maintenance procedure training. When additional personnel are on board for training, they are not considered in excess of the minimum crew. The additional personnel must be properly authorized by the GFR per these procedures.

#### 6. Recovery of Aircraft Away From Home Field

a. The Maintenance/CNATRA Detachment OIC (N4) shall coordinate with the squadrons to facilitate the recovery of aircraft away from home field. Aircraft status and mission capability shall be determined utilizing the current T-6B and TH-57B/C Mission Essential Subsystem Matrix (MESM). When an aircraft's system(s)/condition(s) prevent the aircraft from being airworthy, (i.e., the aircraft is not capable of field flight operations under Visual Meteorological Conditions (VMC), cannot establish two-way radio communication, or does not meet required aircraft and crew safety provisions), the aircraft will be considered Not Mission Capable (NMC) and remain so until considered airworthy. When an aircraft's system(s)/condition(s) do not prevent the aircraft from being airworthy, the aircraft may be considered Partial Mission Capable (PMC) for ferry back to NASWF, but not Full Mission Capable (FMC) for issue and training. Consult reference (f) for minimum required equipment for ferry flight for TH-57B/C. Consult reference (g) for suggested minimum required equipment for ferry flight for T-6B. If an aircraft is considered NMC, it is vital the PIC remain in close contact with Maintenance and parent squadron to coordinate the return of the aircraft to home field. If a ferry flight may be accomplished, consideration should be made to all other risk factors in making the decision to fly back to home field or turn the plane over to Maintenance.

b. If the aircraft cannot be considered Partial Mission Capable or if the squadron is unwilling and/or unable to return the aircraft back to home field, Maintenance/CNATRA Detachment OIC (N4) shall coordinate with the contractor and the GFR to facilitate the recovery of the aircraft. The Chief Pilot or Flight Operations Manager must get GFR approval of recovery plan per reference (b). Written, verbal, or electronic approval is authorized.

c. In the event an aircraft must be recovered from a location other than NASWF, the following applies:

(1) If a maintenance troubleshooter is required to be flown to the site, the troubleshooter may be taken by any NATOPS qualified pilot.

(2) When a FCP is sent on a recovery, the FCP shall:

(a) Review the Aircraft Discrepancy Book (ADB) for the on-site aircraft and the ferry aircraft and obtain at least two additional "A" cards.

(b) Sign for the aircraft to be flown to the recovery site.

(3) At the site, the maintenance troubleshooter will determine if the aircraft can be repaired. Disabled aircraft, away from home base, fall into the following categories:

(a) Aircraft Fixed. MAF Signed Off. No FCF Required.

1. If still on station, original crew has option to retain aircraft. If not, maintenance contractor is required to recover.

(b) Aircraft Fixed. Ground Turn Required.

1. TH-57 FCP will sign for "disabled" aircraft and perform ground turn. If the aircraft is up after ground turn, FCP will continue flight and have original disabled aircraft crew sign "A" Sheet for ferry aircraft.

(c) Aircraft Fixed. FCF required.

1. FCP will fly aircraft.

2. Aircraft passes FCF

a. FCP will give original crew the ferry aircraft to continue their mission.

b. FCP and "disabled" aircraft pilot will sign "A" sheets for their "new" aircraft.

(d) Aircraft Requires Additional Maintenance. There are two possibilities:

1. Aircraft may be flown to NASWF when determined Mission Capable (MC) by both the on-site maintenance contractor and pilot in command. If the aircraft is determined to be Non-Mission Capable (NMC), the pilot in command shall call the CNATRA Detachment OIC/Maintenance Officer (N4), Commercial: (850) 623-7140 or Cell: (850) 698-0960, and brief the aircraft status. Request for a "one time flight" of a NMC Aircraft for the sole purpose of returning the aircraft to NASWF, will not be considered. The following apply:

a. Aircraft will have minimum crew.

b. Original "disabled crew" will take the FCP's ferry aircraft.

c. Both FCP and "PMC" aircraft pilot will sign "A" Sheets for their "new" aircraft.

d. Maintenance personnel will be ferried home only in "up" aircraft. (TH-57 minimum crew requires two persons. A maintenance troubleshooter and FCP may be considered minimum crew).

2. Aircraft remains disabled at the site. The original disabled Aircraft Commander will remain with the aircraft at an unsecured location or until one of the following occurs:

a. Aircraft properly secured/hangared. In the local area, a Disabled Plane Watch will be posted. NOTE: Crash crews at an Outlying Field (OLF) may guard aircraft until plane watch arrives, but not outside of OLF operating hours.

b. Aircraft is trucked back to NASWF.

7. Maintenance Evaluation Flights. Occasionally, there are maintenance discrepancies that do not clearly fit an FCF profile. In these cases, it is prudent to obtain the evaluation of the discrepancy to determine if the discrepancy has been repaired. Contractor QA personnel will prepare these aircraft for flight and put them on the FCF Board to be flown by a qualified FCP. The flight shall be conducted under the same guidelines and requirements as an FCF, including the flight purpose code and minimum crew, with the exceptions noted in paragraphs 6(f)(2) and 6(f)(3) above. The GFR must approve all evaluation flights per reference (b). Written, verbal, or electronic approval is authorized.

  
M. T. MURRAY

Distribution:  
COMTRAWINGFIVEINST 5216.1U  
Lists II(a-c,g,i,k,m-p,r-t) III(g,h)

**SAMPLE TRAINING AIR WING FIVE  
GOVERNMENT FLIGHT REPRESENTATIVE DESIGNATION LETTER**

3740  
Ser N41/

**From:** Commander, Training Air Wing FIVE  
**To:** Rank First Name Middle Int. Last Name, Service

**Subj:** DESIGNATION AS TRAWING FIVE GOVERNMENT FLIGHT REPRESENTATIVE

**Ref:** (a) NAVAIRINST 3710.1 Series  
(b) OPNAVINST 3710.7 Series  
(c) COMTRAWINGFIVEINST 3710.13 Series  
(d) Contractor's Flight Operations Manual

1. As recommended by the Training Air Wing (TRAWING) FIVE Operations Officer, you are hereby designated the TRAWING FIVE Government Flight Representative. ). In order to perform the duties commensurate with this position, you should be thoroughly familiar with references (a) through (d). Your responsibilities are set forth in references (a) and (b).

2. You will coordinate and serve as liaison between Maintenance/CNATRA Detachment OIC (N4), the Contract Flight Operations Manager, and the squadron COs on matters concerning the overall operation of the Functional Check Flight Program and the utilization of the Functional Check Pilots.

COMMODORE SIGNATURE LINE

Copy to:  
CTW-5 N4  
NATOPS Jacket  
TW-5 GFR

Enclosure (1)

**SAMPLE TRAINING AIR WING FIVE  
TW-5 FUNCTIONAL CHECK PILOT DESIGNATION LETTER**

3740  
Ser N41/

**From:** Commander, Training Air Wing FIVE  
**To:** Rank First Name Middle Int. Last Name, Service

**Subj:** DESIGNATION AS TRAWING FIVE (TH-57B/C OR T-6B) SENIOR FUNCTIONAL  
CHECK PILOT

**Ref:** (a) NAVAIRINST 3710.1 Series  
(b) OPNAVINST 3710.7 Series  
(c) COMNAVAIRFORINST 4790.2 Series  
(d) COMTRAWINGFIVEINST 3710.13 Series  
(e) TW-5 Government Flight Representative Recommendation

1. As recommended by the Training Air Wing (TRAWING) FIVE Government Flight Representative, you are hereby designated the TRAWING FIVE (TH-57B/C or T-6B) Senior Function Check Pilot (FCP). In order to perform the duties commensurate with this position, you should be thoroughly familiar with references (a) through (d). Your responsibilities are set forth in references (b) through (d).

2. You shall manage the TRAWING FIVE FCP qualification program and support the TRAWING FIVE Government Flight Representative for issues involving contract supervision and squadron FCP support.

COMMODORE SIGNATURE LINE

Copy to:  
CTW-5 N4  
NATOPS Jacket  
TW-5 GFR

Enclosure (2)

**SAMPLE TRAINING AIR WING FIVE  
SQUADRON FUNCTIONAL CHECK PILOT DESIGNATION LETTER**

3740  
Ser N41/

From: Commander, Training Air Wing FIVE  
To: Rank First Name Middle Int. Last Name, Service

Subj: DESIGNATION AS A SQUADRON FUNCTIONAL CHECK PILOT

Ref: (a) OPNAVINST 3710.7 Series  
(b) COMNAVAIRFORINST 4790.2 Series  
(c) COMTRAWINGFIVEINST 3710.13 Series  
(d) GFR Recommendation

1. Having fulfilled the requirements of references (a), (b) and (c), and with the recommendations of the Commanding Officer, (VT-2/3/6 or HT-8/18/28), you are hereby designated a Squadron Functional Check Pilot (FCP) for full systems check of the (T-6B or TH-57) Aircraft. You will coordinate with Maintenance/CNATRA Detachment OIC, via the Squadron Senior FCP, on all matters concerning the overall operation of the Functional Check Flight Program.

COMMODORE SIGNATURE LINE

Copy to:  
CTW-5 N4  
NATOPS Jacket  
TW-5 GFR

**T-6B FUNCTIONAL CHECK PILOT SYLLABUS**

1. Required reading (*prior* to MA-1)
  - a. NAVAIR A1-T6BAA-FCL-200 (T-6B Acceptance and Functional Check Flight Procedures)
  - b. OPNAVINST 4790.2 Series
    - (1) emphasis on Chapter 12.1.4
    - (2) emphasis on Chapter 12.1.5
  - c. OPNAVINST 3710.7 Series
    - (1) emphasis on Paragraph 3.8
  - d. COMTRAWINGFIVEINST 3710.13 Series
2. MA-1 through MA-5
  - a. FCF Open Book Test *prior* to MA-5X
3. PUI may fly with contract maintenance pilots to build experience, but contract maintenance pilots are not authorized to sign as FCP Instructor Pilot during this syllabus. FCP PUIs are encouraged to observe extra FCF flights with contract maintenance pilots as part of the syllabus.
4. Designation as FCP by CTW-5, per COMTRAWINGFIVEINST 3710.13 Series.

T-6B FUNCTIONAL CHECK FLIGHT SYLLABUS

| <u>EVENT</u> | <u>DESCRIPTION</u>               | <u>HOURS</u> |
|--------------|----------------------------------|--------------|
| MA-1S<br>PUI | Maintenance Simulator Flight One | 1.5          |

Ref: T-6B Acceptance and Functional Check Flight Procedures Manual (NAVAIR 01-T6BAA-FCL-200)

Prereq: All required reading.

OFT

1. Discuss:

- a. OPNAV 3710 Series guidelines for Post Maintenance Check Flights
- b. OPNAV 4790 Series guidelines for Post Maintenance Check Flights
- c. Operating areas/procedures
- d. Local instructions
- e. Safety of flight items
- f. Local maintenance organization
- g. Administrative requirements (FCF documentation)
- h. FCF profile requirements

2. Demonstrate: Takeoff and climb to high key (local course rules)

3. Demonstrate/Introduce: Power out to touchdown/landing

4. Introduce "A" profile items:

- a. Performance charts/CG/Weight and balance
- b. Interior inspection
- c. System checks
- d. Engine performance
- e. Flight performance
- f. "Post flight" walk-around

| <u>EVENT</u> | <u>DESCRIPTION</u>     | <u>HOURS</u> |
|--------------|------------------------|--------------|
| MA-2<br>PUI  | Maintenance Flight Two | 1.8          |

**REAR COCKPIT****1. Discuss:**

- a. Performance data charts/Maintenance records/QA brief
- b. "A" profile requirements

**2. Introduce "A" profile items:**

- a. Before Exterior inspection
- b. Exterior inspection
- c. Interior inspection
- d. Engine start/Emergency firewall shutoff handle procedures
- e. Before taxi checks
- f. Taxi checks
- g. Climb to FL250 checks
- h. Pressurization system checks
- i. Climb power engine acceptance checks
- j. AOA checks
- k. Engine performance checks
- l. Environmental system checks
- m. FL310 checks
- n. MMo/VMo overspeed warning checks
- o. PMU operations check
- p. Spins/Aerobatics checks

- q. AOA and stall speeds
  - r. Low speed trim check
  - s. Landing gear warning system check
  - t. Speed brake check
  - u. Propeller check
  - v. TAD checks
  - w. Pattern checks
  - x. Emergency landing gear/flaps checks
  - y. After landing and postflight procedures
3. Practice:
- a. "B,C,D" profile items

| <u>EVENT</u> | <u>DESCRIPTION</u>       | <u>HOURS</u> |
|--------------|--------------------------|--------------|
| MA-3<br>PUI  | Maintenance Flight Three | 1.5          |

**FRONT COCKPIT****1. Discuss:**

- a. Flight requiring "A" profile
- b. Airspace requirements

**2. Introduce "A" card items**

**3. Practice:** All previously introduced items on "A" profiles, and power out to touchdown/landings.

| <u>EVENT</u> | <u>DESCRIPTION</u>      | <u>HOURS</u> |
|--------------|-------------------------|--------------|
| MA-4<br>PUI  | Maintenance Flight Four | 1.5          |

## FRONT COCKPIT

1. Discuss: NAVAIR A1-T6BAA-FCL-200 (Acceptance and Functional Check Flight Procedures)
2. Practice: All items covered by MA profile and power out to touchdown/landing.

| <u>EVENT</u> | <u>DESCRIPTION</u>   | <u>HOURS</u> |
|--------------|--|--------------|
| MA-5X<br>PUI | Maintenance Flight Check<br>(with TRAWING FIVE Senior FCP) | 1.5          |

Prereq: FCF Open Book Test

## FRONT COCKPIT

1. Discuss:
  - a. Possible flight emergencies
  - b. Troubleshooting techniques
2. Review: All items covered by "A" profile and power out to touchdown/landing.

T-6B FCF SYLLABUS

Name of FCP under training \_\_\_\_\_

Required Reading: \_\_\_\_\_ Date: \_\_\_\_\_ FCPUI Initials: \_\_\_\_\_

MA-1 Date: \_\_\_\_\_ Flight Time: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

MA-2 Date: \_\_\_\_\_ Flight Time: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

MA-3 Date: \_\_\_\_\_ Flight Time: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

MA-4 Date: \_\_\_\_\_ Flight Time: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

FCF Open Book Test Date: \_\_\_\_\_ FCPUI Initials: \_\_\_\_\_

MA-5X Date: \_\_\_\_\_ Flight Time: \_\_\_\_\_

Signature of FCP Instructor: \_\_\_\_\_

Comments: \_\_\_\_\_

TOTAL TIME \_\_\_\_\_

**TH-57B/C FUNCTIONAL CHECK PILOT SYLLABUS**

1. Required Reading
2. Discussion Topics
3. Check Flight Procedures
  - a. Functional Preflight
  - b. Functional Ground Run
  - c. Functional Flight Tests
    - (1) Hover Checks
    - (2) Forward Flight Checks
    - (3) After Landing Checks
4. Specific flight requirements
5. Designation as FCP by CTW-5, per COMTRAWINGFIVEINST 3710.13 Series.

1. Required Reading

a. The Maintenance Pilots-Under-Instruction (MPUI) will read and become familiar with the following publications. The military Functional Check Flight Check Pilot (FCFCP) will initial and date the completed line items:

|   | <u>FCFCP</u><br><u>Initials</u> | <u>Date</u> |
|---|---------------------------------|-------------|
| (1) NAVAIR 01-H57BC-1 (NATOPS TH-57B/C)   | _____                           | _____       |
| (2) OPNAVINST 4790.2 Series   | _____                           | _____       |
| (3) OPNAVINST 3710.7 Series   | _____                           | _____       |
| (4) Functional preflight, ground run, and flight procedures for Bell 206B/TH-57 (Technical Library).  | _____                           | _____       |
| b. The MPUIs will become familiar with the airframe, engine, and avionics publications located in the Functional Check Pilot Library (Technical Library). | _____                           | _____       |

2. Discussion Topics (with FCFCP)

a. Introduction to Maintenance

|   |       |       |
|---|-------|-------|
| (1) Aircraft check out and check in                                   | _____ | _____ |
| (2) Daily routine   | _____ | _____ |
| (3) Trouble-shooter/pilot working relationship.                       | _____ | _____ |
| (4) Maintenance analysis daily log                                    | _____ | _____ |
| (5) Maintenance Course rules  | _____ | _____ |
| (6) Phase checklist and passdown                                      | _____ | _____ |
| (7) Aircraft recoveries   | _____ | _____ |
| (a) Local training site course rules<br>HT-8, HT-18, and HT-28 sites. | _____ | _____ |
| (b) Recovery procedures/precautions                                   | _____ | _____ |
| (c) Airworthiness inspections   | _____ | _____ |
| (d) Remote area procedures precautions                                | _____ | _____ |

FCFCP  
Initials    Date

b. Systems and Adjustments

(1) Hydraulic boost system pressure at low rpm, rate limiting, servo shimming, motoring servos, slop link bolts. (BJR-III M/M Vol 1.)

\_\_\_\_\_

(2) Trim damper unit and mini stab system (TH-57 MSM)

\_\_\_\_\_

(3) Torque values (idle, 100%) (FCFCP)

\_\_\_\_\_

(4) Carbon lock of Nf turbine (FCFCP)

\_\_\_\_\_

(5) Vibrations (BJR-III M/M)

\_\_\_\_\_

(6) Track and balance (BJR-III M/M)

\_\_\_\_\_

(a) RADS

\_\_\_\_\_

(7) Max power check (FCFCP)

\_\_\_\_\_

(8) Max power charts (FCFCP)

\_\_\_\_\_

(9) Governor/fuel control problems (Bendix book Tech Library)

\_\_\_\_\_

3. Check Flight Procedures (with FCFCP)

\_\_\_\_\_

a. Functional Preflight

\_\_\_\_\_

(1) Throttle rigging

\_\_\_\_\_

(2) Fuel shutoff valve

\_\_\_\_\_

(3) Governor rigging

\_\_\_\_\_

(4) Flight control rigging

\_\_\_\_\_

b. Functional Ground Run

\_\_\_\_\_

c. Functional Flight Test

\_\_\_\_\_

(1) Hover Checks

\_\_\_\_\_

- (a) Control rigging and response \_\_\_\_\_
- (b) Hover stability and coupling \_\_\_\_\_
- (c) FCS mini stab operation \_\_\_\_\_
- (d) Pedal creep \_\_\_\_\_
- (e) Isolation mount \_\_\_\_\_
- (f) Hovering autorotation \_\_\_\_\_
- (g) Engine response \_\_\_\_\_
- (h) Low rpm vibration \_\_\_\_\_
- (2) Forward Flight Checks \_\_\_\_\_
- (a) Control rigging and response \_\_\_\_\_
- (b) Boost off control response \_\_\_\_\_
- (c) 60 KIAS autorotation \_\_\_\_\_
- (d) Normal cruise \_\_\_\_\_
- (e) Governor operation \_\_\_\_\_
- (f) Maximum power check \_\_\_\_\_
- (g) Fast cruise (vibrations, handling) \_\_\_\_\_
- (h) Mini stab operation, altitude hold \_\_\_\_\_
- (i) Flight instruments \_\_\_\_\_
- (3) After Landing Checks \_\_\_\_\_

4. Specific Flight Requirements

a. In order to ensure standardization and quality, as well as to decrease time-to-train, MPUI will complete the FCF Flight Syllabus with qualified FCFCs. The syllabus objective is to provide a specific program through which a pilot can gain the knowledge and experience necessary to perform the duties of an FCFC, within a reasonable time frame.

b. Flights

(1) FCFCP Training Flights may be combined in no less than two separate flights and accomplished in any order, to end with Training Flight 4X with the TRAWING FIVE Senior FCP. If the TW-5 Senior FCP is unavailable, the Squadron Senior FCP may conduct the Training Flight 4X with TW-5 Senior FCP approval. All flights shall be flown with the MPUI in the right seat.

(2) TH-57C Flight Syllabus.

| <u>EVENT</u> | <u>DESCRIPTION</u> | <u>HOURS</u> |
|--------------|--------------------|--------------|
| TH-57C FCFCP | TRAINING FLIGHT-1  | 1.0          |

1. Discuss and Demonstrate:
  - a. Maintenance Course Rules
  - b. Post Phase Pre-Flight Check
  - c. Post Phase Ground Check
  - d. Post Phase Flight Check
  - e. Course rules for unfamiliar OLFs

| <u>EVENT</u>   | <u>DESCRIPTION</u> | <u>HOURS</u> |
|----------------|--------------------|--------------|
| TH-57B/C FCFCP | TRAINING FLIGHT-2  | 0.5          |

1. Discuss: FCF Procedures for post Phase checks. Differences between TH-57B and TH-57C FCF Procedures. Maintenance Recoveries both at and away from Site.
2. Introduce:
  - a. Post Phase pre-flight check
  - b. Post Phase flight check

| <u>EVENT</u>   | <u>DESCRIPTION</u> | <u>HOURS</u> |
|----------------|--------------------|--------------|
| TH-57B/C FCFCP | TRAINING FLIGHT-3  | 0.5          |

1. Discuss: Engine performance and troubleshooting. Max power checks. Governor and fuel control malfunctions.
2. Practice: All previously introduced items.

| <u>EVENT</u>   | <u>DESCRIPTION</u>  | <u>HOURS</u> |
|----------------|---|--------------|
| TH-57B/C FCFCP | TRAINING FLIGHT-4X<br>(With TRAWING FIVE/Squadron Senior FCP) | 0.5          |

1. Discuss: Vibrations. Track and balance of main rotor and tail rotor systems. Tab and pitch link adjustments. RADS. Dynamic balancing of main rotor and tail rotor systems.
2. Review: All Previously discussed and introduced items. All aspects of the Post-Phase Check. System Troubleshooting.
3. Practice: All previously introduced items.

**TH-57C FCF SYLLABUS**

FCP Under Training: \_\_\_\_\_

FCFCP FLIGHT-1      Date: \_\_\_\_\_      Flight Duration: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

FCFCP FLIGHT-2      Date: \_\_\_\_\_      Flight Duration: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

FCFCP FLIGHT-3      Date: \_\_\_\_\_      Flight Duration: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

FCFCP FLIGHT-4X      Date: \_\_\_\_\_      Flight Duration: \_\_\_\_\_

FCP Instructor Signature: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

TOTAL TIME: \_\_\_\_\_