



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

IN REPLY REFER TO

COMTRAWINGFIVEINST 3710.13N
Code N4
29 Oct 12

COMTRAWINGFIVEINST 3710.13N

From: Commander, Training Air Wing FIVE

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

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

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
(6) T-6B Minimum Required Equipment List

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 3710.13M.

3. Scope. The FCF Program is an essential element of the TRAWING FIVE mission to train student aviators. Through the FCF Program, the 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 in accordance with 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) Direct the training squadron Commanding Officers to provide dedicated FCPs, as required.

b. Government Flight Representative (GFR) shall:

(1) When requested by the OIC/AOIC/Ground Government Flight Representative (GGFR) 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) Coordinate all FCF upgrade syllabus flight requests with the Contractor 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) 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) Be a qualified FCP in either the T-6B or TH-57 series aircraft, as appropriate.

(5) 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 that 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) Appoint your Senior FCP as squadron Maintenance Representative to CTW-5.

(3) Ensure a minimum of three 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 that 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) Additionally, Squadron Senior FCPs shall:

(a) Be qualified FCPs.

(b) Be designated in writing by CTW-5. (See enclosure (2)).

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 in accordance with 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 IUT or 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. Maintenance Eval/Operational combination sorties may only originate from NAS Whiting Field.

(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 OPNAVINST 3710.7.

(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 OPNAV 3710.7 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 in accordance with 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 ref (f) for minimum required equipment for ferry flight for TH-57B/C. Consult encl (6) 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 (j). 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).

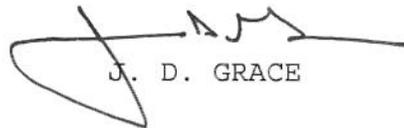
2. Aircraft remains disabled at the site. The original disabled Aircraft Commander will remain with the aircraft at an unsecured location or until one of the following occurs:

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

a. 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 (j). Written, verbal, or electronic approval is authorized.



J. D. GRACE

Distribution:
COMTRAWINGFIVEINST 5216.1S
Lists II(a-c,f,h,j,l-o,q-s) 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 3710.1F
(b) OPNAVINST 3710.7U
(c) COMTRAWINGFIVEINST 3710.13N
(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. Your responsibilities are set forth in references (a) and (b). In order to perform this position, you should be thoroughly familiar with references (a) through (d).

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.

COMMANDING OFFICER SIGNATURE LINE

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

**SAMPLE TRAINING AIR WING FIVE
SQUADRON SENIOR 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 SQUADRON SENIOR FUNCTIONAL CHECK PILOT
Ref: (a) OPNAVINST 3710.7U
(b) COMNAVAIRFORINST 4790.2A
(c) COMTRAWINGFIVEINST 3710.13N

1. As a designated Functional Check Pilot for full systems check of the (T-6B or TH-57) Aircraft per reference (a), and with the recommendations of the Commanding Officer of (VT-2/3/6 or HT-8/18/28), you are hereby designated the Squadron Senior Functional Check Pilot. Your responsibilities as the Squadron Senior Functional Check Pilot are listed in references (b) and (c). You will coordinate with Maintenance/CNATRA Detachment OIC (N4) on all matters concerning the overall operation of the Functional Check Flight Program.

COMMANDING OFFICER SIGNATURE LINE

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

**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 3710.7U
(b) COMNAVAIRFORINST 4790.2A
(c) COMTRAWINGFIVEINST 3710.13N

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.

COMMANDING OFFICER 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. Designation as FCP by Commander, Training Air Wing FIVE, per COMTRAWINGFIVEINST 3710.13N.
4. 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.

T-6B FUNCTIONAL CHECK FLIGHT SYLLABUS

EVENT	DESCRIPTION	HOURS
MA-1S 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

EVENT	DESCRIPTION	HOURS
MA-2	Maintenance Flight Two	1.8
PUI		

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	Maintenance Flight Three	1.5
PUI		

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.

EVENT	DESCRIPTION	HOURS
MA-4	Maintenance Flight Four	1.5
PUI		

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.

EVENT	DESCRIPTION	HOURS
MA-5X	Maintenance Flight Check	1.5
PUI	(with TRAWING FIVE Senior FCP)	

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 Commander, Training Air Wing FIVE, per COMTRAWINGFIVEINST 3710.13N.

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> <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 pasdown	_____	_____
(7) Aircraft recoveries	_____	_____
(a) Local training site course rules HT-8, HT-18, and HT-28 sites.	_____	_____
(b) Recovery procedures/precautions	_____	_____
(c) Airworthiness inspections	_____	_____
(d) Remote area procedures precautions	_____	_____

	<u>FCFCP</u> <u>Initials</u>	<u>Date</u>
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. <u>Check Flight Procedures (with FCFCP)</u>	_____	_____
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 FCFCPs. 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 FCFCP, within a reasonable time frame.

b. Flights

(1) FCFCP Training Flights may be accomplished in any order, to end with Training Flight 4X with the Squadron Senior FCP. All flights shall be flown with the MPUI in the right seat.

(2) TH-57C Flight Syllabus.

EVENT	DESCRIPTION	HOURS
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.

EVENT	DESCRIPTION	HOURS
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.

EVENT	DESCRIPTION	HOURS
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.

EVENT	DESCRIPTION	HOURS
TH-57B/C FCFCP	TRAINING FLIGHT-4X (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

	Training Missions										NOTE																		
	Contact		INAV		F		Low Level		VNAV														Ferry Flight						
	Day	Night	Day	Night	Day	Day	Night	Day	Night	Local													CCX	Day VMC	Day IMC	Night VMC	Night IMC	NOTE	
Airframe	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X												
Windshield and Canopy	X	X	X	X	X	X	X	X	X	X	1	X	X	X	X	X	X												
Cockpit	X	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X	X												
Landing Gear	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X												
Brakes	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X												
Flight Controls	X	X	X	X	X	X	X	X	X	X	9	X	X	X	X	X	X												
Powerplant	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X												
Air Conditioning and Pressurization	X	X	X	X	X	X	X	X	X	X	3	X	X	X	X	X	X												
Electrical Power Supply	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X												
Position Lights	X	X	X	X	X	X	X	X	X	X						X	X					14							
Landing/Taxi Lights	X	X	X	X	X	X	X	X	X	X	4				X	X	X					15							
Strobe Lights	X	X	X	X	X	X	X	X	X	X			X		X	X	X												
Warning Lights	X	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X	X												
Interior Lighting		X		X			X	X	X	X	2				X	X	X												
AMLCD Display Lighting Controls	X	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X	X												
Hydraulic	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X												
Fuel	X	X	X	X	X	X	X	X	X	X	6	X	X	X	X	X	X												
Oxygen	X	X	X	X	X	X	X	X	X	X	2		X									16							
Fire and Overheat Detection System	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X												
IAC	X	X	X	X	X	X	X	X	X	X	11		X		X	X	X					17							
IRS	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X					18							
MFD	X	X	X	X	X	X	X	X	X	X	2		X		X		X					19							
Flight Instruments	X	X	X	X	X	X	X	X	X	X	14	X	X	X	X	X	X												
Accelerometer	X	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X	X												
Angle of Attack	X	X		X	X	X					2, 7																		

Clock			X		X	X	X	X	X	2, 8					X		X	20
Utility Instrumentation	X	X	X	X	X	X	X	X	X	2		X	X	X	X	X	X	
Fuel Quantity	X	X	X	X	X	X	X	X	X	2		X	X	X	X	X	X	
UFCP	X	X	X	X	X	X	X	X	X	2					X		X	21
UHF/VHF Comms	X	X	X	X	X	X	X	X	X	2, 10								22
ICS	X	X	X	X	X	X	X	X	X	2			X	X	X	X	X	23
XPNDR	X	X	X	X	X	X	X	X	X				X		X	X	X	24
DME	X	X	X	X	X	X	X	X	X	5					X		X	25
GPS			X	X		X	X	X		12, 13					X		X	25
ILS			X	X		X	X	X		12					X		X	25
VOR	X	X	X	X	X	X	X	X	X	12, 13					X		X	25
ELT	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	
TCAS	X	X	X	X	X	X	X	X	X									26
Emergency Equipment	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	
Egress System	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	
RAD ALT	X	X	X	X	X	X	X	X	X									26
TAD	X	X	X	X	X	X	X	X	X									9
Aux Btty	X	X	X	X	X	X	X	X	X						X	X	X	27
Flap Indicator	X	X	X	X	X	X	X	X	X									28

NOTES

Ferry flight is defined as one or more flight legs in order to directly return to local area (NSE, NDZ or PNS) with no training conducted en route unless specifically annotated.

Local flight is a flight that takes place within the confines of A-292 or a one-leg out/in destination.

CCX flight is any flight that takes more than one leg to recover back to local area.

14. Ferry flight with loss of one white Navigation Light is permissible at night.

15. With loss of one bulb, no restrictions on completing mission. With loss of two bulbs, aircraft is safe for aircraft ferry (Day/VMC only).

16. Ferry flights below 10,000 feet may be conducted with inoperative OBOGS.

17. One operable IAC is required for ferry flight (Day/VMC only).
18. Ferry flight with IRS DEGD message allowable. Message indicates precision navigation for tactical training not available. Basic student mode avionics will continue to work normally. Ferry flight prohibited with IRS attitude failure.
19. Loss of a single F/C MFD does not preclude ferry flight. Loss of a R/C MFD does not preclude solo flight.
20. If one of the three aircraft clocks is operable, aircraft is IMC capable for ferry flight.
21. All necessary UFCP functions have redundant entry methods.
22. UHF or VHF and backup VHF control head must be operable in order to maintain two-way radio communications.
23. ICS is necessary for effective CRM. A single ferry leg (DUAL) may be accomplished as long as intra-cockpit communications can be maintained. Discrete radio frequency (UHF/VHF) may be used for necessary communications. No restrictions on ferry flight (SOLO).
24. Maintain VMC at all times. Ferry flight of more than one return leg is prohibited.
25. At least one NAV system compatible with instrument approach required for IFR flight. Loss of NAV systems do not preclude VFR flight.
26. Not required for aircraft ferry.
27. Loss of Aux Battery does not preclude VFR or IFR flight. Maintain VMC at all times. Consider all external factors when making ORM decision for ferry flight.
28. Loss of a single Flap Indicator does not affect aircraft ferry. Flap failure denotes a non-PMC aircraft.

Multiple system failures or degradations, crew day, weather etc must all be taken into consideration when deciding whether to ferry a plane back to the local area. In no case should an IP who is not comfortable with a degraded aircraft ferry that aircraft back to the local area unless a thorough ORM assessment is conducted and the IP is satisfied the risks have been identified and can be managed.

Aircraft may be flown solo with discrepancies in the rear cockpit which do not affect safety of flight.

If cause of system degradation is known or suspected, consider consulting with maintenance on any basic troubleshooting that may be performed in order to provide maintenance with more information. Do

not troubleshoot without consulting maintenance. If a system can be isolated to a known mode of failure, it may indicate a ferry flight can be reasonably accomplished, or it may indicate maintenance action is necessary (ferry flight not recommended).