



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

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Attachment 5 – Collings Foundation LHFE Pilot Training and Qualifications Manual

OPERATIONAL FACTORS

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**COLLINGS FOUNDATION
LHFE
PILOT TRAINING AND
QUALIFICATIONS MANUAL**

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10 September 2017

CF LHFE
Pilot Training Manual
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COLLINGS FOUNDATION PILOT TRAINING AND QUALIFICATIONS MANUAL

Pilot Certification & Experience Requirements

Pilots must meet the conditions of the CF Pilot Policy found in the General Operations Manual as set by the board of directors. Currently, all CF pilots must hold a commercial license. Pilots must comply with the CF medical class requirements as well. This manual is only applicable to LHFE operations, all other operations are determined by the Executive Director and Chief Pilots.

Flight Time Requirements:

(All aircraft require 3 T/O's and Landings within proceeding 90 days)

The PIC of the **B-24, B-25, and B-17** must have:

4,000 TT, 100 Multi, 25 in type.

2,500 TT, 1,000 Multi, 25 in type

1,000 TT, 500 Multi, 100 in in type/or accumulatively between the B-17, B-24, B-25 due to the similarity of the aircraft.

The PIC of the **F-100, A-4, T-33, and F-4** must have:

2,500 TT, 1,000 (Single/Multi as appropriate), 25 hours and 15 landings in type, and 100 hrs and in jets with an over 20 degree swept wing.

1,000 TT, 200(Single/Multi as appropriate), 100 hours and 50 takeoffs and landings in type.

The PIC of the **G-TBM, A-1E, and F-156** must have:

2,500 TT, 1000 Single, 5 in type.

1,000 TT, 200 Single, 25 in type.

The PIC of the **UH-1** must have:

2,500 TT, 500 Rotorcraft, 5 in type.

2,500 TT, 100 Rotorcraft, 25 in type.

The SIC of the **B-24, B-25 and B-17** must have:

1,500 TT, 250 Multi

500 TT, 100 Multi, 25 type

TRAINING

General - The preservation and operation of our collection of flyable historic aircraft requires that aircrews maintain the highest standards of proficiency. The limited availability of airframe and engine hours dictate that most of our training occurs during relocation flights between cities. CF will notify Orlando/Houston FSDO prior to conducting training.

Basic Indoc Training –

- (A) **Indoctrination Training**
- 1 Each CF pilot will receive familiarization training as soon as possible. This training will include:
- a CF policies and organization;
 - b FAA rules and regulations;
 - c CF General Operations Manual;
 - d CF General Maintenance Manual;
 - e CF SMS;
 - f CF Pilot Training and Qualifications Manual
 - g Maintenance Reporting Procedures
 - h Special topics as directed by CF management

Ground Training - Before being assigned to flight duty on any type of aircraft, all pilots will receive training in that aircraft's construction, maintenance, and operation. Additionally, all pilots will receive annual ground training on all CF aircraft they are certified to fly. A record of this training will become a part of each pilot's training file.

Required Ground Training Tasks

- a. General information and description of the airplane;
- b. Aircraft limitations;
- c. Aircraft servicing;
- d. Airspeeds;
- e. Fuel system;
- f. Electrical system;
- g. Hydraulic system;
- h. Engines;
- i. Instruments and avionics;
- j. Landing gear, brakes, controls, and flaps systems;
- k. Propeller;

1. Emergency procedures, including—

(i) Instruction in emergency assignments and procedures, including coordination among crewmembers;

(ii) Individual instruction in the location, function, and operation of emergency equipment, including—

A. First aid equipment and its proper use; and

B. Portable fire extinguishers, with emphasis on the type of extinguisher to be used on different classes of fires;

(iii) Instruction in the handling of emergency situations, including—

A. Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in cabin areas; and

B. Illness, injury, or other abnormal situations involving passengers or crewmembers;

m. Weight and balance;

n. Performance planning;

o. Airplane's checklist; and

p. Differences in type

Flight Training – All pilots will receive an annual CF check ride in each LHFE aircraft they fly. Pilots may receive flight instruction from the Chief Pilot or his designee. The purpose of this training is to ensure that the pilot group maintains the highest standards of proficiency. Additional training will be given as necessary or desirable. A record of this training will be made a part of each pilot's training file. Training will be in accordance with a CF Training Guide published for each aircraft.

Required Flight Training Tasks For PIC Pilots

a. Preflight Preparation

(i) Aircraft exam (oral or written)

(ii) Aircraft performance & limitations (oral or written)

b. Ground Operations

- (i) Preflight inspection
- (ii) Cockpit resource management
- (iii) Powerplant start procedures
- (iv) Taxiing
- (v) Pre-takeoff checks

c. Takeoffs & Departures

- (i) Normal & crosswind takeoffs
- (ii) Powerplant failure
- (iii) Rejected takeoffs

d. In-flight Maneuvers

- (i) Steep turns
- (ii) Approach to stalls
- (iii) Powerplant failure
- (iv) Specific flight characteristics

e. Landings & Approaches to Landing

- (i) Normal & crosswind approaches & landing
- (ii) Maneuvering to a landing with a simulated powerplant failure
- (iii) Rejected landing
- (iv) Landing from a no flap or a nonstandard flap approach

f. Normal & Abnormal Procedures

- (i) Powerplant
- (ii) Fuel system
- (iii) Electrical system
- (iv) Hydraulic system
- (v) Environmental & pressurization system (as appropriate and if equipped)

- (vi) Fire detection & extinguishing system
- (vii) Navigation & avionics system
- (viii) Automatic flight control system, electronic flight instrument system, & related systems (as appropriate and if equipped)
- (ix) Flight control system
- (x) Anti-ice & de-ice system
- (xi) Aircraft & personal emergency equipment

g. Emergency Procedures

- (i) In-flight fire & smoke removal
- (ii) Rapid decompression (as appropriate and if equipped with a pressurization system)
- (iii) Emergency descent
- (iv) Ditching
- (v) Emergency evacuation

h. Postflight Procedures

- (i) After landing procedures
- (ii) Parking and securing aircraft

REQUIRED TRAINING TASKS FOR SIC PILOTS

- a. Operational procedures applicable to the power plant, equipment, and systems;
- b. Performance specifications and limitations;
- c. Normal, abnormal, and emergency operating procedures;
- d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;
- e. Engine-out procedures and maneuvering with an engine out while executing the duties of pilot in command;
- f. Crew resource management training; and
- g. Familiarization with the aircraft flight manual, placards, and markings

Currency - CF pilots will retain currency in accordance with the appropriate FARs.

Collings Foundation Check Airmen

A Collings Foundation Check Airmen is defined as a PIC that:

- Rated in the aircraft he/she is designated in
- Is designated by a Chief Pilot or the Executive director.
- Has 100 hours in type/or is a CFI