

## MAINTENANCE

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### A. MAINTENANCE SHOP ACCESS:

The Rocky Mountain Flight Training Center (FTC) Maintenance Shop and aircraft under maintenance are "OFF LIMITS" to all personnel, except the Manager and Chief Instructor. If a member needs to visit the maintenance area, they must coordinate this with either the Manager, Chief Instructor or Chief of Maintenance. Ground School class tours will be scheduled in advance with the Manager or Chief of Maintenance.

### B. MAINTENANCE RECORDS:

All aircraft maintenance records are legally "secure" documents, according to FARs. When a student is preparing for a FAA Check Ride and needs to review or present the records to the FAA Designee, the Manager or Chief Instructor must be notified in advance. Maintenance records are not permitted outside of the office building. They are to be kept under the control of the Chief of Maintenance and Manager. The Manager or Chief Instructor will acquire the log books and have the student "sign" for the records. Immediately following the oral portion of the Flight Exam the student will return the aircraft records to the Manager or Chief Instructor. They will NOT be left in the Ground School room or any other area. The Manager may approve special requests.

All aircraft inspections will be in accordance with all FAA Directives and Regulations, all pertinent Air Force Instructions and FTC SOPs. There will be no deviation from these directives on FTC aircraft.

#### 1. Twenty-Five Hour and Fifty-Hour Inspections.

- a) FTC aircraft will have 25 hour (Continental engines, T-41s) and 50 hour inspections. If an oil change is not required, the inspection may be performed on the ramp.
- b) Twenty-five and fifty hour inspections are due within the "window" of five (5) hours prior to, or five (5) hours after due time.
- c) An entry on the AF 781 A "25/ 50 hour due at \_\_\_\_" (time) will be entered at due time if the aircraft is anticipated to over fly the inspection. This is to allow for weekend flights to extend the inspection to Monday.

#### 2. One Hundred (100) Hour Inspections.

**One Hundred hour inspections will not be deliberately over flown. Any flights having Airworthiness Directives due will have those items complied with prior to a anticipated over**

**flight. ADs CANNOT BE OVERFLOWN. CROSS-COUNTRY FLIGHTS WILL BE PLANNED TO RETURN AT LEAST 2 HOURS PRIOR TO THE 100 HOUR INSPECTION DUE TIME.**

#### **C. MAINTENANCE OF MEMBER'S AIRCRAFT:**

FTC aircraft requiring maintenance will be completed PRIOR to any work being accomplished on a member's aircraft. All maintenance to be performed on a member's aircraft will be coordinated with the Manager prior to the accomplishment of the work. Members may purchase parts from the Center. Parts and payment of mechanics will be through the FTC.

#### **D. ASSIGNMENT OF MECHANIC DUTIES:**

All maintenance is performed after coordination with the Manager. All mechanic's duties will be assigned by the Manager or Chief Instructor. In their absence, a designated Instructor may ask the mechanic if time and duties permit a "check" or conducting repairs on another aircraft. However, the pilot must accept that a mechanic may not be able to leave a job during a critical period of repairs. Mechanics will not order parts. Parts must have Management approval and IBPS documentation prior to ordering any parts.

#### **E. NOTIFICATION OF MAINTENANCE DISCREPANCIES:**

FTC members and staff will notify the Manager or Chief Instructor of any aircraft maintenance requirements. If the Manager or Chief Instructor cannot be contacted, the Maintenance staff can be notified by leaving a message on the FTC answering machine. **AIR FORCE FORM 781 WILL HAVE ALL DISCREPANCIES ENTERED.**

#### **F. AIRCRAFT DISCREPANCIES:**

Any member observing an aircraft discrepancy which they believe constitutes a hazard to safe flight or a needed repair will:

1. Notify the Manager, Chief Instructor or activity official immediately.
2. Make an appropriate entry, under the supervision of a CFI or staff member, on the aircraft Maintenance Form which will include date, pilot's name and the nature of the discrepancy. Clearly print all information. Give the aircraft book and aircraft keys to a Club official.
3. Annotate only one discrepancy per "block" on the AFTO Form 781A.
4. While on a cross-country flight, maintenance required for the Safety of flight is authorized ONLY with the Manager's approval. The pilot must pay the bill, and will be reimbursed for those approved expenses upon presentation of the work order and a paid receipt. Prior to paying any bill ask if the FTC GPC - VISA credit card will be accepted. The Manager will coordinate this.
5. NO MEMBER is authorized to obligate the FTC in anyway, unless authorized by the Manager. All maintenance (with the exception of tire servicing, etc.) must be authorized. IN NO CASE WILL THE FTC ASSUME ANY RESPONSIBILITY FOR PERSONAL EXPENSES INCURRED AS A RESULT OF AIRCRAFT DIFFICULTIES.

#### **G. TELEPHONE CALLS TO THE MAINTENANCE SHOP:**

Telephone calls to the Maintenance Shop interrupt the safe maintenance program of our activity. When a mechanic is interrupted in his repairs, it not only delays the quick turn return of aircraft to service, but could cause additional maintenance problems. If a member wants to know the status of an aircraft, they should first check the Aircraft Status board, if insufficient information is available; ask the Manager or Chief Instructor.

#### **H. FUNCTIONAL CHECK FLIGHTS (FCFs):**

1. All FTC FCF, will be made by the Chief Instructor or another instructor as designated by the Manager. Crew members may include Manager, a mechanic, or other individuals designated by the Manager (as required by the mission). Passengers and students are not authorized on board an aircraft during a FCF. All FCFs will be performed during day light hours and VFR weather conditions. The route of the flight and expected maneuvers to be accomplished will be established prior to the flight and noted

on the FTC Flight Plan (FTC Form 1). A brief written report of the FCF will be added to the aircraft squawk sheet to be retained in the aircraft's files. This report will include:

- a. Purpose of flight
  - b. Maneuvers accomplished
  - c. Any unusual characteristics or problems
  - d. Statement of airworthiness acceptance of Aircraft
2. Aircraft with new/overhauled or rebuilt engines will all under go the following FCFs and ground run ups.
- a. At least two ground runs will be made, followed by oil pressure and possible oil leak checks.
  - b. High speed ground taxis may be accomplished.
  - c. Only after the Chief Mechanic is satisfied that all systems are operating properly will the first FCF take place.
  - d. Prior to all FCFs the FAA Tower will be notified by phone that a FCF will take place.
  - e. For initial FCFs and FCFs that are to remain in the pattern, notify the Tower via phone that the FCF will remain in the pattern.
  - f. Prior to taxi and take off, state that the aircraft is undergoing a FCF and request any special instructions prior to take off. If the Tower is unable to accommodate the aircraft's FCF requirements, abort the FCF.
  - g. At a minimum, the first ten (10) flight hours will be accomplished by a designated Instructor (no students or passengers are permitted) on a newly installed or overhauled engines.

#### **I. GROUNDING OF AIRCRAFT:**

The following conditions will cause an aircraft to be grounded:

1. Due inspection (Annual or One Hundred Hour).
2. Any flight control problem.
3. Any abnormal landing gear operation or indication thereof.
4. Inoperative brakes or worn tires (cord showing).
5. Propeller control malfunction.
6. Low or high oil pressure (or when varied from the aircraft's norm).
7. Any electrical malfunction affecting required systems.
8. Any fuel feed problems.
9. Any engine instrument malfunction.
10. Radio transmitter or receiver malfunction (in a "one" radio aircraft).
11. Any other reason not listed above, which, in the opinion of the pilot, Clearing Authority or staff, prevents safe flight.

When an aircraft is "Grounded" the aircraft book, with key placed inside the book in the binder ring, will be placed on the Manager's desk. The maintenance staff will retrieve the aircraft book from this location. The member will ensure that the aircraft status board is updated.

#### **J. COLD WEATHER STARTING PROCEDURES:**

When aircraft have been parked in cold weather and are to be initially started at cold temperatures (below 25° F), preheating is required. A FTC pre-heater is available. **Prior to operation of the pre-heater the member must have a checkout by an Instructor or Mechanic.**

**K. AIRCRAFT AVIONICS/INTERCOM PROBLEMS:**

For all avionics and intercom problems the Chief Instructor will inspect/ground or clear the problem as he deems fit.

**L. CLEARING OF GROUNDED AIRCRAFT:**

Only the FTC Chief of Maintenance or mechanic may clear a "grounded" aircraft. Consequently, it is essential that the aircraft be "grounded" by staff or members who properly understand the maintenance situation of the aircraft.

**M. PART ORDERING:**

The maintenance staff will provide the Manager with the "Parts Form", completed with the correct parts number, parts name, number of parts needed, and aircraft tail number. If the part is required immediately, the Manager should be notified. The Manager or specified individual will order all parts. The Chief Instructor will act in the Manager's absence. Prior to all inspections the maintenance staff will provide the Manager with a list of all estimated parts needed to complete the inspection. Parts will be delivered to the office (Manager or Ops Clerk) for inventory and logged in prior to the mechanic's receiving them.

**N. CHIEF MECHANIC DUTIES:**

The Chief Mechanic/Chief of Maintenance is responsible to ensure the maintenance facility and hanger meets all Safety, OSHA, Fire Department and other AF directives. He will ensure that oily rags, trash, empty cans, used oil, etc. are picked up and disposed daily, and that the area is clean, neat and orderly.

The Chief Mechanic is responsible for the organization, filing and currency of all aircraft maintenance materials (ADs, Service Bulletins, Adlogs, etc.). He will ensure all aircraft and shop documentation is accurate and up to date.

The Chief Mechanic will supervise/oversee the maintenance staff, including volunteers, under the direction of the Manager.

**O. AIRCRAFT WASHING:**

The FTC's Maintenance Officer is responsible for organizing and supervising all Membership "Wash Days". No one may wash an aircraft until briefed by the Chief Mechanic or his assigned assistant. This briefing will cover:

1. Protection of Pitot/Static System.
2. Correct use of wash materials.
3. Correct use of tools and brushes.
4. Protection of all windscreens/plastic parts.
5. Safety precautions.
6. Only authorized wash materials will be used.
7. Hotsy washer training.

PAFB does not have a "wash rack". Aircraft may be washed inside the maintenance hanger during colder months or on the Flight Line tie down area during warmer months.

**P. MAINTENANCE:**

1. All maintenance, minor or major, performed on FTC assigned aircraft will be by a licensed airframe/powerplant mechanic or under the direct supervision of a licensed airframe/powerplant mechanic.
2. The only exception to the above statement is the following:
  - a. Servicing of fuel.

- b. Servicing of engine oil.
- c. Filling of aircraft tires with air.
- d. Installation of missing screws and male cowl fasteners that do not require disassembly of aircraft.

**Q. FLIGHT LINE VEHICLES:**

All Flight Line vehicles and operators are required to have a Flight Line License. The Chief Instructor is the OPR for FTC licenses and training. All vehicle operators must have a photo ID, driver's license and PAFB Flight Line license in their possession during vehicle operations.

**R. CRASH/RECOVERY KIT:**

The Chief Mechanic will maintain the Crash/Recovery Kit in the maintenance shop. Recovery of aircraft will be accomplished with the supervision of the Manager and Chief Mechanic. The shop has a dolly to recover aircraft with flat tires from the runway or taxiway. This dolly is usually stored in the hanger.