

MAINTENANCE

6.1. MAINTENANCE SHOP ACCESS. The FTC/AERO Club maintenance shop and aircraft under maintenance are “OFF LIMITS” to all personnel, except the Manager, Chief Instructor Chief on Maintenance. 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.

6.2 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.

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

6.3.1 Twenty-Five Hour and Fifty-Hour Inspections:

- FTC/AERO Club 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.
- Twenty-five and fifty hour inspections are due within the “window” of five (5) hours prior to, or five (5) hours after due time.
- 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.

6.3.2. 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.**

6.4 MAINTENANCE OF MEMBER’S AIRCRAFT. FTC/AERO Club aircraft maintenance will be completed PRIOR to any work being accomplished on any member’s aircraft. All maintenance to be performed on a member’s aircraft will be coordinated with the Manager prior to accomplishment of work. Members may purchase parts from the center. Payment for parts and mechanics fees is through the FTC/AERO Club.

6.5 ASSIGNMENT OF MECHANIC DUTIES. All maintenance is performed after coordination with the Manager. Mechanic’s duties are assigned by the Manager or Chief Instructor. In their absence, an instructor pilot may ask the mechanic, if time and duties permit, to “check” or conduct repairs on another aircraft. Understand however, the mechanic may not be able to leave a job during a critical period of repairs.

6.6 NOTIFICATION OF MAINTENANCE DISCREPANCIES. FTC/AERO Club members and staff will notify the Manger 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/AERO Club answering machine. **AIR FORCE FORM 781 WILL HAVE ALL DISCREPANCIES ENTERED.**

6.7 AIRCRAFT DISCREPANCIES. Members observing aircraft discrepancies which constitutes a hazard to safe flight or a needed repair will:

- Notify the Manager, Chief Instructor or activity official immediately.

- 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.
- Annotate only one discrepancy per "block" on the AFTO Form 781A.
- While on a cross-country flight, maintenance required for the Safety of flight is authorized ONLY with the Manager's approval. Prior to paying any bill ask if the FTC/AERO Club GPC - VISA credit card will be accepted. The Manager will coordinate this. If GPC is not accepted then the pilot must pay the bill. Upon return to FTC/AERO Club present work order and paid receipt for reimbursement for approved expenses.
- NO MEMBER is authorized to obligate the FTC/AERO Club 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/AERO Club ASSUME ANY RESPONSIBILITY FOR PERSONAL EXPENSES INCURRED AS A RESULT OF AIRCRAFT DIFFICULTIES.

6.8 MAINTENANCE STATUS. 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.

6.9 FUNCTIONAL CHECK FLIGHTS (FCFs). All FTC/AERO Club FCF, are accomplished 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 for the mission). Passengers and students are not authorized on board an aircraft during an FCF. All FCFs will be performed during day light hours and VFR weather conditions. The route of the flight and expected maneuvers are established prior to the flight and noted on the FTC/AERO Club Flight Plan (FTC/AERO Club Form 1). A brief written report of the FCF is added to the aircraft squawk sheet to be retained in the aircraft's files. This report will include:

- Purpose of flight
- Maneuvers accomplished
- Any unusual characteristics or problems
- Statement of airworthiness acceptance of Aircraft

6.9.1. Aircraft with new/overhauled or rebuilt engines under-go the following FCFs and ground run ups.

- At least two ground runs will be made, followed by oil pressure and oil leak checks.
- High speed ground taxis may be accomplished.
- Only after the Chief Mechanic is satisfied that all systems are operating properly will the first FCF take place.
- 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.

6.10 GROUNDING AIRCRAFT. The following conditions will cause an aircraft to be grounded:

- Due inspection (Annual or One Hundred Hour)
- Any flight control problem
- Any abnormal landing gear operation or indication thereof
- Inoperative brakes or worn tires (cord showing)
- Propeller control malfunction.
- Low or high oil pressure (or when varied from the aircraft's norm)

- Any electrical malfunction affecting required systems
- Any fuel feed problems
- Any engine instrument malfunction
- Radio transmitter or receiver malfunction (in a "one" radio aircraft)
- 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, is placed on the Mechanics desk. The maintenance staff will retrieve the aircraft book from this location. The member will update the aircraft status board.

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

6.12 AIRCRAFT AVIONICS/INTERCOM PROBLEMS. For all avionics and intercom problems the Chief Instructor will inspect/ground or clear the problem as deemed appropriate.

6.13. CLEARING OF GROUNDED AIRCRAFT. Only the FTC/AERO Club 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.

6.14 PART ORDERING. The maintenance staff will provide the manager and/or office staff when parts are needed to be ordered. Parts ordering is authorized by manager approval by office staff and/or mechanic. Mechanic will provide manager and office staff with the correct part(s) number, part(s) name, quantity of parts needed, and aircraft tail number. If the part(s) is/are required immediately, the manager should be notified. The manager or specified individual will order all parts. Parts will be delivered to the office.

6.15. CHIEF OF MAINTAINENCE DUTIES The 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 oily rags, trash, empty cans, used oil, etc. are picked up and disposed daily, and 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 of Maintenance will supervise/oversee the maintenance staff, including volunteers, under the direction of the Manager.

6.16. MAINTENANCE PERFORMANCE. A licensed airframe/powerplant mechanic (or someone under the direct supervision of a licensed airframe/powerplant mechanic) performs all maintenance on FTC/AERO Club assigned aircraft. Exceptions to this policy are:

- Servicing of fuel.
- Servicing of engine oil.
- Filling of aircraft tires with air.
- Installation of missing screws and male cowl fasteners not requiring disassembly of aircraft.

6.17. 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/AERO Club 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.

6.18. CRASH/RECOVERY KIT:

The Chief of Maintenance maintains the Crash/Recovery Kit in the maintenance shop. Recovery of aircraft is accomplished with the supervision of the Manager and Chief of Maintenance. Recover aircraft with flat tires from the runway or taxiway with FTC/AERO Club dolly. The dolly is stored in the hangar.