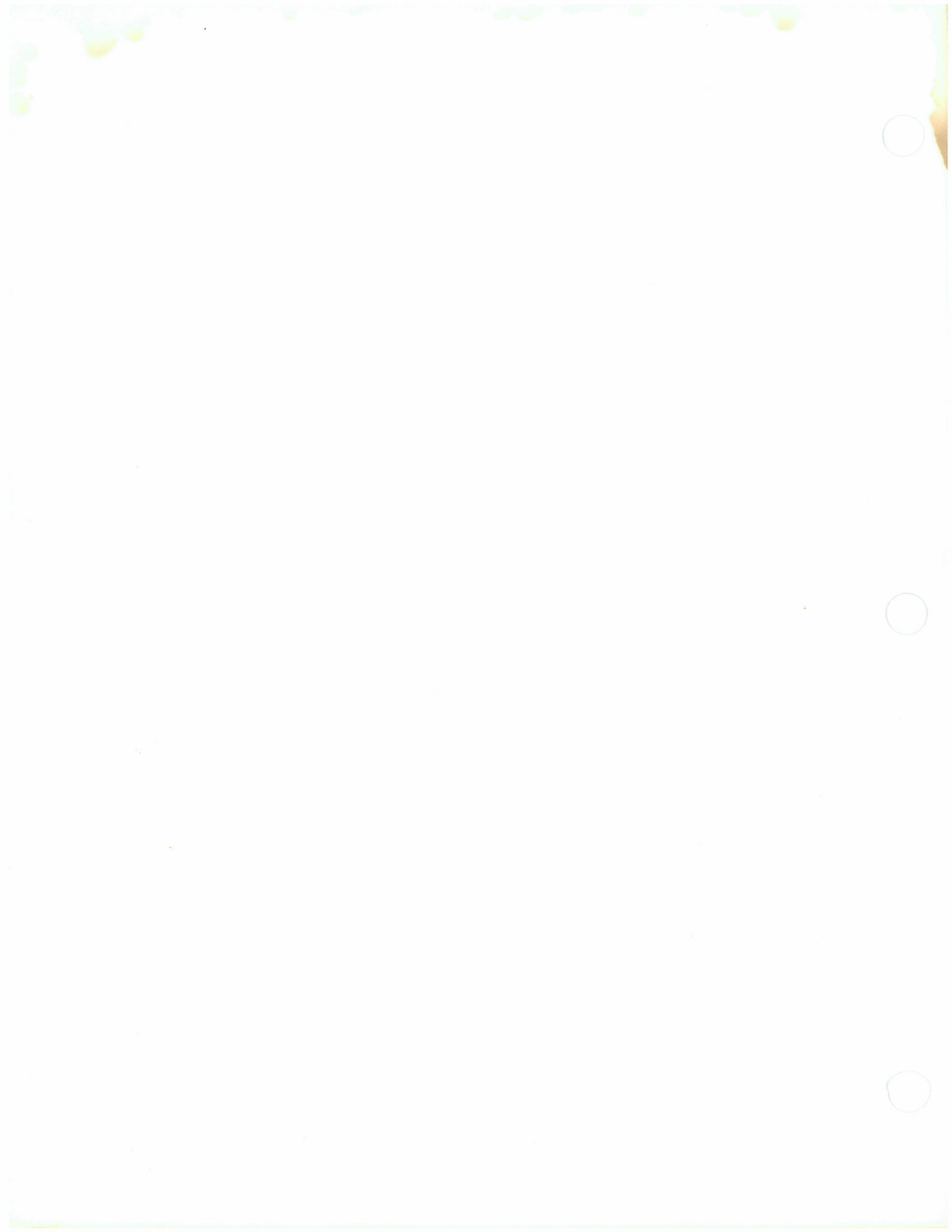


# OPERATING TIPS

Operating Tips . . . . . 8-1



## OPERATING TIPS

The following Operating Tips are of particular value in the operation of the Cherokee Arrow II.

1. Learn to trim for takeoff so that only a very light back pressure on the wheel is required to lift the airplane off the ground.
2. On takeoff, do not retract the gear prematurely. The airplane may settle and make contact with the ground because of lack of flying speed, atmospheric conditions, or rolling terrain.
3. The best speed for takeoff is about 65 MPH under normal conditions. Trying to pull the airplane off the ground at too low an airspeed decreases the controllability of the airplane in event of engine failure.
4. In high density areas where high traffic pattern speeds are necessary or when it is advantageous to extend the gear, it is permissible to extend the landing gear at speeds up to 150 MPH.
5. Flaps may be lowered at airspeeds up to 125 MPH. To reduce flap operating loads, it is desirable to have the airplane at a slower speed before extending the flaps.
6. Before attempting to reset any circuit breaker, allow a two to five minute cooling off period.
7. Always determine position of landing gear by checking the gear position lights.
8. Remember that when the panel lights are on, the gear position lights are very dim.
9. Before starting the engine, check that all radio switches, light switches, and the pilot heat switch are in the off position so as not to create an overloaded condition when the starter is engaged.
10. A high fuel pressure indication on the fuel flow indicator is a possible sign of restricted air bleed nozzles.
11. The overvoltage relay is provided to protect the electronics equipment from a momentary overvoltage condition (approximately 16.5 volts and up), or a catastrophic regulator failure. In event of a momentary condition, the relay will open and the ammeter will indicate zero output from the alternator. The relay may be reset by switching the "ALT" switch "OFF" for approximately 30 seconds and then returning the "ALT" switch to "ON". If after recycling the "ALT" switch the condition persists, the flight should be terminated as soon as practical. Reduce the battery load to a minimum. The ALT light on the annunciator panel\* will illuminate if the alternator fails. Recycle the ALT switch and check the ALT FIELD circuit breaker. If the failure persists after this action, reduce electrical loads and land as soon as practical.
12. On aircraft equipped with the backup gear extender, it should always be kept in mind that the system is intended to lower the gear during the approach should the pilot forget. However, the pilot should always lower the gear during normal operations by using the gear selector switch on the instrument panel.

\*Serial nos. 7535001 and up.

13. The vacuum gauge is provided to monitor the pressure available to assure the correct operating speed of the vacuum-driven gyroscopic flight instruments. It also monitors the condition of the common air filter by measuring the flow of air through the filter.

If the vacuum gauge does not register 5" Hg  $\pm$  .10" Hg at 2000 RPM, the following items should be checked before flight:

- a. Common air filter, could be dirty or restricted.
  - b. Vacuum lines, could be collapsed or broken.
  - c. Vacuum pump, worn.
  - d. Vacuum regulator, not adjusted correctly. The pressure, even though set correctly, can read lower under two conditions:
    - (1) Very high altitude, above 12,000 feet.
    - (2) Low engine RPM usually on approach or during training maneuvers.  
This is normal and should not be considered a malfunction.
14. The shape of the wing fuel tanks is such that in certain maneuvers the fuel may move away from the tank outlet. If the outlet is uncovered, the fuel will be interrupted and a temporary loss of power may result. Pilots can prevent inadvertent uncovering of the outlet by avoiding maneuvers which could result in uncovering the outlet.  
Extreme running turning takeoffs should be avoided as fuel flow interruption may occur.  
Prolonged slips or skids which result in excess of 2000 feet of altitude loss, or other radical or extreme maneuvers which could cause uncovering of the fuel outlet must be avoided as fuel flow interruption may occur when tank being used is not full.
15. The rudder pedals are suspended from a torque tube which extends across the fuselage. The pilot should become familiar with the proper positioning of his feet on the rudder pedals so as to avoid interference with the torque tube when moving the rudder pedals or operating the toe brakes.
16. Anti-collision lights should not be operating when flying through overcast and clouds, since reflected light can produce spacial disorientation. Do not operate strobe lights when taxiing in the vicinity of other aircraft.
17. In an effort to avoid accidents, pilots should obtain and study the safety related information made available in FAA publications such as regulations, advisory circulars, Aviations News, AIM and safety aids.