

AIRPLANE FLIGHT MANUAL SUPPLEMENT
FOR
CESSNA 152
REG. NO.
SER. NO.

SECTION I: No Change

SECTION II: No change.

OPERATING PROCEDURES:

General:

The Union Aviation hand Control enables the pilot to have full rudder, nose wheel and brake control of the aircraft. The control arm extends from the rudder pedals upward and rearward on the pilot side. The control ring is mounted on the control arm at the upper end and is adjustable for the pilot's requirements. The pilot with his arm inserted through the ring may position his hand on the throttle and move the control left or right as required with forearm and wrist movement. Movement of the control arm to the left deploys the left rudder. By raising the bar in the left position left rudder is still deployed and the left brake is activated. Movement to the right attains the same results with right rudder pedals in neutral position, lifting of the arm activates both brakes.

If the pilot chooses to use the control without the control ring attached he may develop his own techniques moving his right hand from the bar to the throttle or flaps.

Note of Observation: If the portable hand controller was not set up correctly to suit the physical size of the individual i.e. leg length, then there could be a restriction in the controller itself not being able to flow freely in the lateral plane, due to the obstruction of the individual's right leg. If this were to be overcome by adjustment of the portable hand controller, then due to the space between the bottom of the instrument panel and the front of the seat, there would be limited braking action and directional control when taxiing.

Pre flight check

Check suitability – achieved

Check serviceability of throttle friction – friction achieved

Taxi

During taxi the nose wheel is steered through rudder deployment and if required brake may be used. Due to the amount of travel required it may be advisable to use the left hand to operate the control in hard left turns leaving the right arm for throttle control. Also the left hand may be used to hold brake while the run-up is conducted. The control wheel can be left free during normal taxi conditions. N.B It is advisable when able on rough / bumpy ground to have full aft elevator applied.

Engine Run up

Check brake performance at full RPM – no creep.

Take off

N.B Throttle friction finger tight.

With pilot's right hand on the throttle advance the throttle while operating (with the left hand) the rudder using the hand control as required to keep straight. Once full throttle is achieved and full power verified, the right hand can go back onto the hand control with the left hand now on the aeroplane control wheel. Lift off is accomplished in the normal manner with the left hand on the control wheel. During rotation maintain climb to preclude nose wheel touchdown should the aeroplane contact the runway after lift off. Directional control is maintained with coordinated rudder and aileron during climb out.

Flight Operation

During flight many maneuvers can be made without use of the rudder. However, the pilot can use the control to balance turns, perform slips, stalls and other maneuvers, which require balance flight using the control with his right hand.

Landing

The landing approach is made with the pilot's right hand on the throttle. Normal crosswind landing techniques are used as required with the pilot's left hand on the control wheel and his right hand providing directional control with rudder and his right hand controlling the throttle. The right hand should be carefully moved between throttle and rudder control. It may be best to make the initial crosswind approach in a crab method and once over the runway threshold, idle the throttle and apply cross control technique to land in a crosswind. Flaps should be extended as desired from the base leg of the approach, 2 stages at base and the final stage of flaps long final.

Aborted Landings

Normal procedures for a go around should be used. The pilot may have to remove his right hand from the control bar for flap retraction. This should be done only if the aircraft is not in contact with the ground.

SECTION III. PERFORMANCE INFORMATION

Maximum demonstrated cross-wind velocity is 12 knots.

Attention:

Cross wind limitation for student pilots with less than 30 hrs solo flight experience:
5 kts.