

FLIGHT PERFORMANCE OBJECTIVES

OV-1 TRANSITION COURSE

Stage I (30:00) Flight Evaluation (OV-1)

The student will be able to perform the following maneuvers/procedures as prescribed in the maneuver guide with the aid of the checklist, DOD FLIP and pilot's handbook, unless otherwise indicated, within the tolerances listed. The flight evaluator will determine proficiency during unforeseen or widely varying circumstances.

MANEUVER/PROCEDURES

SKILL

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| 1. Preflight inspection | 100% accuracy of all items required for safe operation of the type flight contemplated. |
| 2. Procedures for engine-
a) Prestarting
b) Starting
c) Warmup
d) Runup
e) Shutdown | 100% accuracy of all checklist items. Comply with procedures to a degree to prevent damage to engines and insure that both engines and other equipment are operational and within the prescribed tolerances for safe flight. |
| 3. Taxiing | Taxi the aircraft safely to and from the designated runup area and comply with all instructions. Taxi speeds should not exceed 5 knots in congested areas and 10 knots in uncongested areas. |
| 4. Reverse Thrust | Demonstrate ability to reverse both propellers and bring aircraft to a full stop utilizing only reverse thrust and maintain aircraft control as reverse thrust pressures increase. |
| 5. Communication radio check and usage. | Tune correct frequency for the communication facility to be utilized. Obtain and comply with clearances for taxi, takeoff and landing utilizing the prescribed frequencies and phraseology. |
| 6. Cock-Pit Procedures | 100% accuracy of all checklist items. |
| 7. Normal Takeoff | Heading control $\pm 10^\circ$; airspeed ± 10 knots. |
| 8. Straight & Level flight | Maintain heading $\pm 10^\circ$, altitude ± 100 feet. |
| 9. Propeller Synchronization | Demonstrate ability to set the left tachometer ± 50 rpm, and synchronize the right tachometer to within 35 rpm prior to activating the synchrophaser switch. |

MANEUVER/PROCEDURESSKILL

10. Slow Flight Maintain heading $\pm 10^\circ$, airspeed ± 10 knots, altitude $\pm 100'$.
11. Stalls Recover from power-on and power-off stalls in all configurations of gear and flaps with minimum loss of altitude, utilizing maximum allowable power at a rate compatible with engine acceleration limits to straight and level flight without exceeding the operating limitations of the aircraft or engine.
12. Aileron Roll Execute a 360° roll of the aircraft about the longitudinal axis employing the prescribed engine rpm, airspeeds, entry angle and aileron control pressures. Maneuver should be executed without a loss of altitude.
13. Recovery from Inverted Flight Execute a recovery from inverted position to straight and level flight using coordinated rudder and aileron pressures with minimum loss of altitude.
14. 360° Tactical Overhead Approach Airspeed ± 10 knots and angle of bank no less than 45° nor more than 70° . Touchdown to be made on center line of the runway and within 5 plane lengths of a predetermined point.
15. Normal Landing Airspeed ± 10 knots. Touchdown to be made on the center line of the runway and within 5 plane lengths of a predetermined point.
16. Shortfield Operation
A. Takeoff Torque pressure at takeoff; heading control $\pm 10^\circ$; airspeed ± 10 , -0
B. Landing Airspeed -0, +10 knots. Touchdown to be accomplished within 2 plane lengths of a predetermined point and on the runway centerline. Maximum reverse thrust should be used as necessary to stop aircraft in shortest possible distance. Avoid excessive use of brakes.
17. Single Engine Procedures
A. At Altitude Complete from memory all actions as outlined in the initial single engine procedure maintaining aircraft control.
B. Downwind Leg Perform the remaining listed actions as required for continued safe operation with
C. Base Leg
D. Final
E. On Takeoff

the aid of a checklist.

- 18. Normal and Emergency Systems Operations
 - A. Engine Restart in Flight
 - B. Manual Gear Extention
 - C. Electrical
 - D. Fuel
 - E. Heating & Ventilation

Initial action of emergency procedures will be from memory to the minimum necessary for safe operation. Checklist items 100% accuracy.

STAGE II (50:00) Flight Evaluation (OV-1)

MANEUVER/PROCEDURES

SKILL

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| 1. Communication & Navigational
Radio Check & Usage | Tune correct frequency for the communication facility to be utilized. Obtain and comply with clearances for taxi, takeoff, and landing utilizing the prescribed frequencies and phraseology. Determine if the radio equipment meets the requirements for an instrument flight, using prescribed tolerances. |
| 2. Instrument Proficiency | |
| A. Instrument Takeoff | Heading control-steering pointer vertical; torque pressure - takeoff; airspeed ± 10 knots. |
| B. Holding | Enter a standard or non-standard holding pattern as determined by aircraft heading $\pm 10^\circ$ upon arrival over a fix and remain in the prescribed airspace. |
| C. Approach | Execute a minimum of 3 published approaches and comply with all prescribed criteria for the particular approach to the minimum altitude, 100 feet above to 0 feet below, and within the minimum visibility. |
| D. Enroute Navigation | Demonstrate adequate performance, utilizing VOR/RMF, ADF/RMI, ILS, and radar, and remain within the prescribed airspace. |
| 3. Single Engine Procedures | Complete from memory all actions as outlined in the initial engine out procedures, maintaining aircraft control in a safe and efficient manner. Perform necessary radio calls as required by current regulations. Also perform the remaining listed actions required for continued safe operations with the aid of a checklist. |
| 4. Normal & Emergency Systems
Operation | Initial action of emergency procedures will be from memory to the minimum necessary for safe operation. Check list items 100% accuracy. |
| A. Anti-icing & De-icing | |
| B. Oxygen | |