

## **BIENNIAL FLIGHT REVIEW – GROUND PHASE**

ALL AIRCRAFT DOCUMENTS MAY BE USED FOR THIS REVIEW

This form is to be used as an aid in reviewing FAR Part 61 and 91 regulations, fundamental specifications, mechanical systems, and procedures for the aircraft that is to be used for the flight review. Not all questions may apply to the particular aircraft, in which case they should be overlooked. Utilize all available resources including aircraft documents, aircraft operator's manual, aircraft maintenance logbooks, performance charts, aircraft placards, and markings and listings to aid in this review. After completion of the review, a copy of this form will be furnished to the pilot for their records and future reference.

PILOT: \_\_\_\_\_

AIRCRAFT MAKE AND MODEL: \_\_\_\_\_

### Fuel & Oil

What is the total fuel capacity? \_\_\_\_\_

What is the usable fuel capacity? \_\_\_\_\_

How many fuel tanks are there? \_\_\_\_\_

What is the usable capacity of each tank? \_\_\_\_\_

How many fuel drains are there and where are they located? \_\_\_\_\_

When should the fuel be sampled and checked? \_\_\_\_\_

What is the recommended fuel grade, and what is its color? \_\_\_\_\_

What is the recommended oil grade? \_\_\_\_\_

What is the minimum operating oil level? Maximum? \_\_\_\_\_

What is the normal operating oil level? \_\_\_\_\_

### Airspeeds

What is the recommended rotation airspeed ( $V_R$ ) for a normal takeoff? \_\_\_\_\_

What is the recommended rotation airspeed ( $V_R$ ) for a short-field takeoff? \_\_\_\_\_

What is the recommended normal approach airspeed and configuration? \_\_\_\_\_

What is the recommended short-field approach airspeed and configuration? \_\_\_\_\_

What is the recommended soft-field approach airspeed and configuration? \_\_\_\_\_

What is the  $V_y$  airspeed and what will it achieve? \_\_\_\_\_

What is the  $V_x$  airspeed and what will it achieve? \_\_\_\_\_

What is the maneuvering airspeed ( $V_A$ ) at maximum allowable gross weight? \_\_\_\_\_

When should  $V_A$  be used? \_\_\_\_\_

What is the maximum demonstrated crosswind component? \_\_\_\_\_

What is the published best glide airspeed ( $V_{L/D \text{ MAX}}$ ) and what aircraft configuration is this airspeed based on? \_\_\_\_\_

What will flaps allow an aircraft to do? \_\_\_\_\_

What is the maximum landing gear extension speed ( $V_{LE}$ )? \_\_\_\_\_

What is the maximum landing gear retraction speed ( $V_{LR}$ )? \_\_\_\_\_

What is the maximum landing gear operating speed ( $V_{LO}$ )? \_\_\_\_\_

### Slow Flight & Stalls

Why is it necessary to maintain coordinated flight at speeds near the minimum controllable airspeed (MCA) of the aircraft? \_\_\_\_\_

Why is it necessary to maintain shallow bank angles when turning at airspeeds near the minimum controllable airspeed (MCA) of the aircraft? \_\_\_\_\_

What is the stall airspeed in the landing configuration ( $V_{SO}$ )? \_\_\_\_\_

What is the stall airspeed in the landing configuration ( $V_{SO}$ ), maximum gross takeoff weight, at  $60^\circ$  of bank? \_\_\_\_\_

What factors affect the stall airspeed of an aircraft? \_\_\_\_\_

What are the indications of an oncoming stall? \_\_\_\_\_

What is the recovery procedure for a stall? \_\_\_\_\_

What is the recommended spin recovery procedure? \_\_\_\_\_

Describe the procedure for a go-around \_\_\_\_\_

### Aircraft Performance

What is the maximum allowable takeoff gross weight? \_\_\_\_\_

What is the maximum allowable landing gross weight? \_\_\_\_\_

How does density altitude affect aircraft performance? \_\_\_\_\_

What is the surface density altitude given the following associated conditions:

29.80 altimeter setting, 75° F surface temperature, 107 foot MSL airport elevation?

\_\_\_\_\_

What is the takeoff ground roll distance given the following conditions:

Normal takeoff, no obstacle, flaps 0°, 85° F surface temperature, 1300 feet pressure altitude, maximum gross takeoff weight, departure on Runway 16, Wind 200° @ 20 knots, paved, level, dry runway? \_\_\_\_\_

What is the cruise power setting, true airspeed, and fuel consumption rate given the following conditions:

5° C outside air temperature, 7500 feet pressure altitude, 75% power, best power leaning? \_\_\_\_\_

What is the range of the aircraft under the following associated conditions:

4500 feet pressure altitude, 75% power, day VFR fuel reserve, best power leaning?

\_\_\_\_\_

### Emergency / Abnormal Procedures

What conditions are favorable for carburetor ice formation? \_\_\_\_\_

What is the indication that carburetor ice has formed? \_\_\_\_\_

How is carburetor ice remedied? \_\_\_\_\_

Describe the procedure for a "cold" start \_\_\_\_\_

Describe the procedure for a "hot" start \_\_\_\_\_

Describe the procedure for a "flooded" start \_\_\_\_\_

Describe the procedure for a power loss during the takeoff ground roll \_\_\_\_\_

Describe the procedure for a power loss after takeoff, but with usable runway remaining \_\_\_\_\_

\_\_\_\_\_

Describe the procedure for a power loss after takeoff, but with no usable runway remaining \_\_\_\_\_

\_\_\_\_\_

Describe the procedure for a power loss at cruising altitude \_\_\_\_\_

What would be the indications of an alternator or generator malfunction? \_\_\_\_\_

What would be the indications of a vacuum system malfunction? \_\_\_\_\_

What would be the indications of a pitot-static system malfunction? \_\_\_\_\_

If installed in the aircraft, where is the alternate static source located? \_\_\_\_\_

What would be the indications of a landing gear malfunction? \_\_\_\_\_

Describe the procedure for an emergency landing gear extension \_\_\_\_\_

Describe the procedure for a propeller overspeed condition \_\_\_\_\_

What is the Emergency radio frequency? \_\_\_\_\_

What is the transponder code for an Emergency? Lost Communication? \_\_\_\_\_

### Federal Aviation Regulations

Who is responsible for making sure the aircraft is airworthy? \_\_\_\_\_

When are all occupants of the aircraft required to have their seatbelts fastened? \_\_\_\_\_

When must position lights be on? \_\_\_\_\_

What aircraft documents must be onboard the aircraft during flight? \_\_\_\_\_

What personal documents must you have on your person when acting as pilot in command? \_\_\_\_\_

What are the basic VFR visibility and cloud clearance minimums for flight in controlled airspace? \_\_\_\_\_

What is the minimum safe altitude over a congested area? \_\_\_\_\_

What is the minimum safe altitude over a non-congested area? \_\_\_\_\_

What are the appropriate VFR cruising altitudes and how are they determined? \_\_\_\_\_

What is the required day VFR fuel reserve? \_\_\_\_\_

What is the required night VFR fuel reserve? \_\_\_\_\_

What is the right of way rule for two aircraft approaching head-on? \_\_\_\_\_

What is the right of way rule for two aircraft converging at a 90° angle? \_\_\_\_\_

What sources can be used for weather information? \_\_\_\_\_

When is it permissible to deviate from an ATC clearance? \_\_\_\_\_

PILOT SIGNATURE: \_\_\_\_\_  
PILOT CERTIFICATE LEVEL AND #: \_\_\_\_\_  
PILOT MEDICAL CLASS, DATE, AND #: \_\_\_\_\_  
INSTRUCTOR SIGNATURE: \_\_\_\_\_  
INSTRUCTOR CERTIFICATE #, TYPE, AND EXPIRATION: \_\_\_\_\_  
DATE OF FLIGHT REVIEW GROUND PORTION: \_\_\_\_\_  
DATE OF FLIGHT REVIEW FLIGHT PORTION: \_\_\_\_\_  
AIRCRAFT TYPE AND REGISTRATION #: \_\_\_\_\_

( Photocopy Below: 1.) Photo I.D., 2.) Pilot License, 3.) Medical Certificate )