

## **Notes on Printing POH Revisions**

The revised pages are provided here for your convenience so you can print them at home. You may use any type of paper you'd like to update your POH. If you would like your revised pages to match your factory issued POH, use 32-lb laser print paper with a brightness rating of 98.

To print your revisions:

1. Load the paper into your printer.
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3. PRINT this PDF document.
4. Cut the pages in half and arrange them in order.
5. Remove the superseded pages from the blue POH binder.
6. Use one of the superseded pages as a template to punch holes in the new pages with a single-hole punch if you do not have a small format 3-ring punch.
7. Install your new pages. Read them carefully.
8. Sign the new RECORD OF REVISIONS page.
9. Go fly!



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# List of Effective Sections

The table below shows the current effective sections and dates in this revision of the handbook. The applicable handbook revision is listed on the lower left corner of this page. Supplements are issued and controlled separately by the Log of Supplements in Section 10.

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# Section 2

## Airplane and Systems Descriptions

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### 2.1 Descriptive Data

#### AIRFRAME

Structure.....Molded fiberglass  
with aluminum and steel reinforcements

#### ENGINE

Manufacturer .....Jabiru Aircraft Pty Ltd,  
Aero Engines Division

Type ..... 3300 Air-Cooled

Power Rating ..... 107 hp @ 2750 RPM  
..... 120 hp @ 3300 RPM

#### OPERATING WEIGHTS AND LOADING

Maximum takeoff weight ..... 1320 lbs

Maximum landing weight ..... 1320 lbs

Power Loading ..... 11 lbs / hp

Wing Loading ..... 12.5 lb / sq ft

## **STANDARD PROPELLER\***

Manufacturer .....Sensenich Wood Propeller Company

Type .....Fixed Pitch Wood Model W60ZK-55G

Diameter .....60 inches

Pitch .....55 inches

\*For approved propeller options, refer to Section 11.

## **TIRE INFLATION PRESSURES**

Standard Mains ..... 35-40 psi

Nose .....25 psi

## **BRAKE SYSTEM AND FLUID GRADE**

A single hand brake located on the center console in front of the pitch trim lever activates both main wheel hydraulic disk brakes simultaneously. The parking brake is set by flipping the locking mechanism forward to engage the parking brake strike plate. The lock mechanism trails aft of the brake handle during flight and ground taxi operations.

Brake fluid grade ..... Automotive DOT 4

## **ELECTRICAL SYSTEM**

Battery.....	12V sealed drycell
Reserve capacity.....	approx. 1 hour @ 12 amps
Alternator.....	20-amp A/C, permanent-magnet
Voltage Regulator.....	External regulator-rectifier
Circuit Breakers.....	Flush (pre-2009) or Pull-Type
Switches.....	Breaker-Type

## **2.2 ENGINE OIL SYSTEM**

### **OIL SYSTEM COMPONENTS**

The Jabiru 3300 is equipped with a wet-sump oil system driven by a mechanical pump on the camshaft. Oil is pumped out the side of the crankcase, through an oil cooler adapter and oil cooler radiator and then through an automotive-type oil filter. Oil is then fed under pressure to the interior of the engine and returns to a wet sump at the bottom of the engine. Oil pressure is monitored just before the oil leaves the crankcase on the way to the cooler. Oil temperature is measured in the sump. A pressure regulating valve is under the oil cooler adapter. A vent line runs from the filler neck on the

crankcase to a bottle mounted on the firewall. This bottle collects excess oil and should be emptied periodically, about every 50 hours. Maximum normal oil consumption is 1 quart every 10 hours.

## OIL CAPACITY

Sump capacity ..... 3.7 US Quarts

## APPROVED OIL GRADES

Oils developed and branded for use in air-cooled aircraft piston engines which conform to the requirements of SAE J-1899 (formerly MIL-L-22851D), Textron Lycoming Specification No. 301F, or Teledyne-Continental Motors MHS-24B are approved.

Oils meeting these requirements include, but are not limited to, AeroShell W100 and AeroShell part synthetic 15W-50, with **Aeroshell 15W-50 being the preferred oil**. In cold climates, AeroShell part synthetic 15W-50 (or equivalent) is recommended.

- CAUTION: DO NOT USE oil or additives containing LinKite, as this will damage the engine and void the engine warranty.

- **NOTE:** Oil additives of any type are not recommended for use in Jabiru aircraft engines.

## **2.3 FUEL SYSTEM**

The J230-SP fuel system is comprised of a 17.7 gallon tank in each wing (total of 35.4 gallons) that feeds into a 1.5 gallon header tank in the cockpit behind the co-pilot seat. There is an engine-driven fuel pump that runs continuously during engine operation to draw fuel from the header tank. An electric boost pump is installed as a backup to the mechanical pump and to facilitate refilling of the carburetor bowl after periods of inactivity.

### **FUEL SELECTOR**

There are three fuel selector valves in the system. One is located on the door post behind each cockpit door (left and right). These selectors are placed before the header tank and control the flow from the left and right wing tanks. The main fuel selector is placed after the header tank and is located on the center console under the control stick.

## **FUEL SUMPS**

The aircraft has three fuel sumps (one in each of the wing tanks and one in the header tank) with quick-drain valves that must be checked during preflight operations. The wing sump quick-drain valves are located just outboard of the fuselage on the underside of the wing. The third quick-drain valve is located on the underside of the fuselage (approximately behind the seats) and protrudes slightly from the belly skin.

## **FUEL CAPACITY**

Total Capacity.....	36.9 US gallons
Total Capacity Each Wing Tank.....	17.7 US gallons
Total Capacity Header Tank.....	1.5 US gallons
Total Useable.....	35.4 US gallons

## **APPROVED FUEL TYPES AND GRADES**

100LL grade aviation gasoline is recommended for all operations. Ethanol and other alcohols of any concentration are prohibited in all Jabiru aircraft manufactured by Jabiru USA Sport Aircraft, LLC.

See Jabiru USA Service Bulletin JSA-006, available on [www.usjabiru.com](http://www.usjabiru.com), for more information.

- ◆ **WARNING:** Use of automotive fuel in Jabiru aircraft that contains ethanol or other additives may cause permanent damage to the wings and fuel tanks.

## 2.4 Carburetor

Manufacturer.....Bing Agency  
Model.....Type 64/40 pressure-compensating

### **CARBURETOR JETTING**

Each Jabiru J230-SP carburetor is set up for proper jetting in an average climate before leaving the factory. Operation in extreme climates or out of high mountain airports may require an adjustment to carburetor jetting for optimum engine performance. Consult the aircraft manufacturer or *Instruction and Maintenance Manual for Jabiru 3300 Aircraft Engine*, Document No. JEM3304-5, for more information.

### **CARBURETOR HEAT SYSTEM**

Air temperatures inside the carburetor drop during normal operation due to vaporization of the fuel and expansion of air through the carburetor. This cooling can result in surface temperatures as much as 30°F below the temperature of the ambient air. As a result,

carburetor ice may form on the throttle plate during periods of operation at low power settings. Carburetor icing can obstruct airflow and result in engine stoppage.

The first indication of icing is an RPM drop or reluctance of the engine to come back to full power after prolonged period of reduced power. Progressive icing will cause obstruction of the carburetor, leading to enriched mixture and a rough running engine.

The carb heat system directs air from the outer surface of the muffler into the engine induction system for the prevention and elimination of carburetor ice. It should be used at power settings less than 1800 rpm. If ice is suspected, pull carb heat to full OPEN. "Pump" the throttle open and closed several times to break the ice free from the throttle plate. Leave carb heat on for at least one minute to melt all residual ice from the induction system.

Carburetor heat may be safely used on the ground but is not to be used during takeoff or climb. In case of a go-around, turn the carburetor heat OFF as soon as safely possible.

- ❖ **CAUTION:** Prolonged use of carburetor heat with more than 80% power applied increases the likelihood for detonation.

## **CARBURETOR HEAT CHECK**

Carburetor icing can occur on the ground, particularly when the aircraft and engine have become damp overnight.

Because the carburetor automatically adjusts for changes in air density, there should be VERY LITTLE, if any, RPM drop during the run-up carburetor heat check. If there is a noticeable drop in RPM when heat is applied, carburetor ice may have formed during taxi and should be burned off prior to takeoff. Prior to lining up on the runway close the throttle completely; if a low idle rpm or engine stoppage occurs, ice may be present. Burn it off with one minute of heat and then test again prior to take off.

## **2.5 Standard and Optional Equipment System Descriptions**

For standard and optional equipment descriptions, see Section 11 of this handbook.

# Section 8

## Aircraft Ground Handling and Servicing

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### 8.1 General

This aircraft must be maintained in accordance with applicable Federal Aviation Regulations. This includes an annual inspection, 100-hour inspections for commercial operators, and 50-hour service and inspections as required by the manufacturer.

Engine and airframe maintenance must be carried out as per the *Instruction and Maintenance Manual for Jabiru 3300 Aircraft Engine* (publication JEM3304) and the Jabiru J230-SP/J250-SP Aircraft Maintenance Manual (publication JSAMM230SP, current revision).

Service items and maintenance schedules are referenced in both manuals, as applicable. Service manuals for both engine and airframe may be downloaded from the Jabiru USA website:

[www.usjabiru.com](http://www.usjabiru.com).

- NOTE: Engine and airframe maintenance shall only be performed by

authorized personnel as directed by the aircraft maintenance manual (publication JSAMM230SP).

- **NOTE:** Certain routine maintenance tasks, including oil changes, may be performed by the owner/operator with proper equipment, training, and reference materials. Refer to aircraft maintenance manual for more information.

## 8.2 Propeller Care And Servicing

Sensenich wood and glass-covered propellers will give years of reliable service if properly cared for. Tips for long propeller life include:

1. Always store your aircraft with the propeller in the horizontal position to avoid uneven accumulation of moisture in the blades.
2. Never perform run-ups in areas with loose gravel, which may kick up and damage the blades.
3. Avoid flight in heavy rain, which may nick the paint surface of the blade leading edge.

The hub of a wood propeller will naturally swell and shrink slightly due to seasonal changes, moisture accumulation and dehydration. Because of this, mounting bolts of wood propellers must be periodically checked for correct tension. This check must be done during each 50-hour service or after periods of prolonged significant climate change. Refer to the Jabiru J230-SP Maintenance Manual for detailed instructions for checking propeller bolt tension. Failure to check propeller bolt tension may result in elongation of propeller hub bolt holes and subsequent propeller failure.

Nicks and gouges in a wood propeller must be repaired according to Sensenich Wood Propeller Company repair procedures. Refer to Jabiru J230-SP Aircraft Service Manual for more information.

## **8.3 Servicing Fuel and Engine Oil**

Aviation grade 100LL gasoline is recommended for all operations in Jabiru aircraft.

Ethanol and other alcohols of any concentration are prohibited.

See Jabiru USA fuel notification, JSA-N006, available at [www.usjabiru.com](http://www.usjabiru.com) for more information.

## **GUIDELINES FOR SAFE FUELING**

Fuel quantity must be visually checked before each flight.

1. A fuel sample should be drawn from each main tank and header tank before each flight and after each refueling to check for water or sediment in the fuel system.
2. Aircraft must be grounded with an approved grounding cable during fueling. Grounding cable may be clipped onto nose gear leg or exhaust pipe.
3. Set parking brake before fueling.

❖ **CAUTION:** Do not lean the fuel nozzle against the edge of the fuel filler opening. The weight of the hose and nozzle prying against the edge of the fuel collar may cause damage to the collar and wing skin.

❖ **CAUTION:** Do not allow the fuel nozzle to impact the bottom of the tank, as fuel tank damage may occur.

◆ **WARNING:** Always check for fuel contamination. Contamination is a major cause of engine failure. Once

fuel is dispensed into a container, contamination hazards exist. Use a clean, safety approved storage container. Do not overfill the container—allow for expansion.

- ◆ **WARNING:** Use of automotive fuel is discouraged because it may contain unknown amounts of acetone, MEK, and other chemicals which will harm the fuel tank sealant.

## **SERVICING ENGINE OIL**

Refer to Section 2 for detailed information about the oil system and approved oil grades.

Engine oil quantity must be checked before each flight using the following procedure:

1. Flip open magnetic oil door in top of cowl.
2. Unscrew oil filler cap.
3. Remove dipstick and wipe clean, if necessary, with a clean rag.
4. Reinsert dipstick and screw filler cap down until snug, but not tight.

5. Unscrew filler cap and remove dipstick again, noting engine oil level.
  - NOTE: Normal cold engine oil level is no more than halfway between dipstick hash marks. Normal hot engine oil level is 1/8" up from bottom of dipstick.
  - NOTE: It takes approx. 1/2 quart to raise cold oil level from bottom of dipstick to lower hash mark. It takes 3/4 quart to raise oil level from lower hash mark to upper (FULL) hash mark. Total crankcase volume is 3.7 quarts.
  - ❖ CAUTION: DO NOT overfill. Oil levels above the FULL mark may cause elevated oil temperature and reduced oil pressure.
6. Add the appropriate amount and grade of engine oil using a clean funnel.
7. Reinsert dipstick and turn cap until snug. DO NOT over-tighten.
8. Clean up any spilled oil and close the oil door.