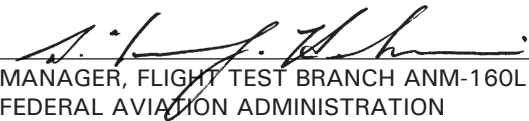


**FAA APPROVED
R22 PILOT'S OPERATING HANDBOOK
UKRAINIAN SUPPLEMENT**

This supplement must be included in the FAA-approved Robinson R22 Pilot's Operating Handbook for Ukrainian-registered aircraft.

The information contained herein supplements or supersedes the basic manual only in those areas listed in this supplement. For limitations, procedures, and performance information not contained in this supplement, consult the basic R22 Pilot's Operating Handbook. State Aviation Administration of Ukraine approval is limited to the model R22 Beta. Information in this supplement is specific to the R22 Beta.

This supplement is approved by the United States Federal Aviation Administration on behalf of the State Aviation Administration of Ukraine.

APPROVED BY: 
MANAGER, FLIGHT TEST BRANCH ANM-160L
FEDERAL AVIATION ADMINISTRATION
LOS ANGELES AIRCRAFT CERTIFICATION OFFICE,
TRANSPORT AIRPLANE DIRECTORATE

DATE: May 20, 2014

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SECTION 1: GENERAL

No change.

SECTION 2: LIMITATIONS

REQUIRED EQUIPMENT AND INSTALLATIONS

Ukrainian-registered R22s are equipped with an analog clock, and include an artificial horizon with inclinometer, an ATC transponder, a flight data recorder (for regular commercial transportation), an ELT or portable radio or emergency locator beacon, a VHF radio transmitter, and a GPS navigation system (for flight from 60° and higher latitude in areas without landmarks) as standard equipment.

A first-aid kit (supplied by operator) should be stored under the pilot's seat.

The bladder fuel tank is a required installation. (Reference R22 SB-109.)

FLIGHT AND MANEUVER LIMITATIONS

Maximum bank angle is 60°.

Maximum pitch angle is 20° except for takeoff, landing and flare at autorotation.

Maximum lateral ground slope angle for takeoff and landing is 7°.

Maximum fore/aft ground slope angle for takeoff and landing is 5°.

Maximum operating pressure altitude without oxygen is 2400 meters (7870 feet) with passengers on board. Maximum operating pressure altitude without oxygen is 3600 meters (11810 feet) with crew on board only. Flights between 3000 meters and 3600 meters (8940 feet and 11810 feet) pressure altitude without oxygen for the crew are limited to a maximum of 30 minutes.

SECTION 2: LIMITATIONS (cont'd)

FLIGHT AND MANEUVER LIMITATIONS (cont'd)

Helicopter is not approved for ditching. Flights with passengers over water beyond safe auto-rotation distance from land are prohibited without floats installed. Extended over-water operation is prohibited.

For flight from 60° and higher latitude in areas without landmarks, a GPS navigation system must be installed.

Flights are permitted only along routes with continuous VHF coverage.

For flight over remote and sparsely populated regions and large bodies of water, a COSPAS-SARSAT VHF/UHF emergency radio beacon (ELT) must be installed. For other cases, if an ELT is not installed, a VHF emergency locator beacon or VHF emergency (portable) radio transceiver, capable of operation on 121.5 MHz, should be placed in the baggage compartment under the pilot's seat.

FUEL LIMITATIONS

APPROVED FUEL GRADES

B91/115 grade aviation fuel.

91 (High octane number gasoline for carburetor engines) TU38.5901481-96 grade aviation fuel.

CAUTION

Make sure spark plugs are operating properly. If fouling of spark plugs is suspected, perform maintenance as prescribed in Lycoming Operator's Manual No. 60297-10 (Section 4) and in Lycoming Service Instruction 1070.

SECTION 3: EMERGENCY PROCEDURES No change.

SECTION 4: NORMAL PROCEDURES

GENERAL

Icing conditions are indicated by the accumulation of ice at the tips of the landing gear skids, landing gear struts, and yaw strings. An increase in power required to maintain airspeed is also an indication of icing conditions. Immediately leave suspected icing conditions by reversing track or landing as soon as possible.

COLD WEATHER OPERATION

Special precautions should be taken if the engine is to be started in ambient temperatures below -5°C (23°F). Ensure correct oil grade is utilized. Preheat engine and engine oil to a minimum temperature of -5°C (23°F). Preheating can be accomplished by parking the helicopter in a warm enclosure or by using an electrical engine preheat system.

CAUTION

Failure to preheat engine before starting may result in internal engine damage.

When landing in areas without preheating equipment, it is advisable to start the helicopter hourly to maintain engine warmth. Be sure to run the helicopter long enough to recharge the battery after each start. Using carburetor heat is recommended to assist in engine warming.

Since a cold battery has significantly reduced capacity, preheating the battery or storing the battery in a warm location to avoid cold soak is recommended.

SECTION 4: NORMAL PROCEDURES (cont'd)

COLD WEATHER OPERATION (cont'd)

Avionics equipment incorporating LCD screens may not function at cabin temperatures below -20°C (-4°F). Allow cabin to warm adequately before takeoff after a cold soak below -20°C (-4°F) to ensure correct functioning of avionics.

SECTION 5: PERFORMANCE

NOISE CHARACTERISTICS

The following noise levels comply with ICAO Annex 16, Volume 1, Chapter 11 noise requirements.

Model: R22 Beta

Gross Weight: 621 kg (1370 lb)

Engine	Noise Level dB(A)	Noise Limit dB(A)
Lycoming O-320-B2C	78.2	82
Lycoming O-360-J2A	78.9	82

SECTION 6: WEIGHT AND BALANCE No change.

SECTION 7: SYSTEM DESCRIPTION No change.

SECTION 8: HANDLING, SERVICING AND MAINTENANCE

No change.