

DEPARTMENT OF THE INTERIOR – AVIATION MANAGEMENT
AIRCRAFT RENTAL AGREEMENT PROVISIONS: SUPPLEMENT NO. 6
SPECIAL USE – LOW LEVEL ACTIVITIES

Definition

Special Use, Low-Level Activity: Any planned flight at less than 500 feet from the surface. (Not including takeoff or landing or enroute weather considerations).

B8.6.1 GENERAL – Refer to Section B1

B8.6.2 FLIGHT OPERATIONS

B8.6.2.1 Low-level flight (below 500 feet AGL) may be required, 14 CFR 135.203 notwithstanding. The minimum safe altitude requirements of 14 CFR 91.119 shall be adhered to at all times.

B8.6.2.2 Only personnel necessary to the mission shall be on board the aircraft.

B8.6.2.3 **Planning.** The pilot shall attend a mission briefing, which should include flight routes/areas and altitudes, hazard identification, and risk assessment.

B8.6.3 PERSONNEL REQUIREMENTS

B8.6.3.1 200 hours PIC in normal low-level operations, over typical terrain (hazardous/mountainous), such as power line/pipeline patrol, agriculture operations, wildlife survey, law enforcement, aero magnetic survey, and search and rescue. This experience must have been gained while conducting operations under certificates or authorizations that allow aircraft operations below 500 feet AGL. Some activities not considered normal low-level operations are traffic watch, banner towing, aerial photography, and civil flight instruction.

B8.6.3.2 Pilots shall show evidence of experience in low-level operations and be knowledgeable of all specialized mission requirements. This may include low-level operations, special flight techniques, terrain considerations, use of specialized navigation equipment, or operation of other equipment as appropriate for the specific mission. Pilots may be required to demonstrate their ability during an agency evaluation flight.

B8.6.3.3 Helicopters Only

B8.6.3.3.1 Pilots shall have recorded minimum flying time as pilot-in-command as follows:

B8.6.3.3.2 200 hours Mountainous Terrain (When operating in mountainous terrain)

B8.6.3.3.3 10 hours Mountainous Terrain in Make and Model

PIC mountainous terrain experience is defined as: Experience in maneuvering a helicopter at more than 7,000 feet mean sea level (MSL) altitude including numerous take-offs and landings in situations indicative to mountainous terrain. This terrain consists of abrupt, rapidly rising terrain resulting in a high land mass projecting above its surroundings, wherein complex structures in which folding, faulting, and igneous activity have taken place. These mountainous areas produce vertical mountain winds, and turbulence associated with mountain waves, producing abrupt changes in wind direction often resulting in up flowing or down flowing air currents.

Mountain qualified pilots are considered rough terrain qualified.

B8.6.3.3.4 200 hours Rough Terrain (When operating in rough terrain)

B8.6.3.3.5 10 hours Rough Terrain in Make and Model

PIC with rough terrain experience is defined as: Experience in maneuvering a helicopter at less than 7,000-foot MSL altitude including numerous takeoffs and landings in situations indicative to rough terrain. This terrain consists of abrupt, rapidly rising terrain resulting in a high land mass projecting above its surroundings, wherein complex structures in which folding, faulting, and igneous activity have taken place. Rough terrain features can disrupt smooth wind flow into a complex of eddies or mechanical turbulence. Characteristic of this type of terrain is the higher the wind speed and/or the rougher the terrain the greater the turbulence.

B8.6.3.4 Personal Protective Equipment (PPE). The following items shall be worn by the pilot, be operable, and maintained in good repair:

B8.6.3.4.1 An aviator's flight helmet, consisting of a one-piece hard shell made of polycarbonate, Kevlar, carbon fiber, or fiberglass, must cover the top, sides (including the temple area and to below the ears), and the rear of the head. The helmet shall be equipped with a chinstrap and appropriately adjusted for proper fit. Flight helmets for helicopter usage must conform to a national certifying agency standard, such as DOT, Snell-95, SFI, or an appropriate military standard, and be compatible with required avionics (see section B8.6.5.1). "Shorty" (David Clark style) helmets are not approved. Flight helmets currently meeting this requirement are the SPH-3, SPH-4, SPH-5, SPH-4B, SPH-8, HGU-56 and HGU-84. Helmets designed for use in fixed wing aircraft do not provide adequate protection for helicopter occupants and are not approved for helicopter use. Aviator protective helmets are not required in multiengine fixed wing airplanes.

B8.6.3.4.2 A long-sleeved shirt and trousers (or long-sleeved flight suit) made of fire-resistant polyamide or aramid material or equal.

B8.6.3.4.3 Boots made of all-leather uppers which extend above the ankles.

B8.6.3.4.4 Gloves made of leather, fire-resistant polyamide or aramid material.

B8.6.3.4.5 Shirt with sleeves overlapping gloves and pants with legs overlapping boots.

B8.6.4 EQUIPMENT REQUIREMENTS

B8.6.4.1 A strobe light, with either a white, or ½ white and ½ red lens, mounted on top of the aircraft, or otherwise visible from above. If the aircraft certification requires the anticollision light to be aviation red, then a white strobe light with an independent activating switch shall be provided in addition to the red strobe.

B8.6.4.2 A first aid kit containing items specified in Exhibit 4 shall be furnished by the Vendor and carried aboard the aircraft on all flights.

B8.6.4.3 A survival kit containing items specified in Exhibit 4 shall be furnished by the Vendor and carried aboard the aircraft on all flights.

B8.6.5 AVIONICS REQUIREMENTS

B8.6.5.1 An intercommunications system (ICS) shall be provided for the pilot, observer/copilot, and any additional required crewmember positions. ICS operation may be via either voice-activation (VOX) or push-to-talk (PTT). If PTT, the pilot's PTT switch(es) shall be mounted on the flight controls (helicopter cyclic or airplane control yoke), with cord-mounted PTT switches at any other required positions. ICS audio shall mix with, but not mute, selected receiver audio. An ICS audio level control shall be provided. ICS sidetone audio shall be provided for the earphones corresponding with the microphone in use. The ICS audio output shall be free of excessive distortion, hum, noise, and crosstalk; and shall be amplified sufficiently to facilitate ease of use in a noisy cockpit/cabin environment.

B8.6.5.2 The system shall be designed for operation with 600-ohm earphones and carbon-equivalent, noise-canceling boom type microphones (Gentex electret type model 5060-2, military dynamic type M-87/AIC with type CE-100 TR preamplifier (or equivalent)). The pilot position only may be configured for low impedance (dynamic) operation.

B8.6.5.3 Earphone/microphone jacks:

B8.6.5.3.1 Helicopters: all jacks (except the pilot's) shall be U-92A/U (single/female) type, which shall accept U-174/U type plugs.

B8.6.5.3.2 Airplanes: JJ-033 and JJ-034 jacks shall be furnished at each required station.

B8.6.6 MAINTENANCE REQUIREMENTS

B8.6.6.1 **Weight & Balance.** The aircraft's required weight and balance data shall be determined by actual weighing of the aircraft and following any major repair or major alteration or change to the equipment list which significantly affects the center of gravity of the aircraft.

B8.6.6.1.1 All weighing of aircraft shall be performed on scales that have been certified as accurate within preceding 24 calendar months. The certifying agency may be any accredited weights and measures laboratory.

B8.6.6.1.2 A list of equipment installed in the aircraft at the time of weighing must be compiled. The equipment list shall include the name of each item installed. Items which may be easily removed or installed for aircraft configuration changes (seats, doors, radios, cargo hook, baskets, special mission equipment, etc.) shall also be listed including the name, the weight and arm of each item. Each page of the equipment list must identify the specific aircraft by at least serial number or registration number of the aircraft. Each page of the equipment list shall be dated indicating the last date of weighing or computation. The weight and balance must be revised each time new equipment is installed or old equipment is removed. Weight and balance procedures under 14 CFR 135.23(b) and 135.185 are acceptable.

B8.6.6.2 Time Between Overhaul and Life Limited Parts.

B8.6.6.2.1 All components, including engines, shall be replaced upon reaching the factory-recommended TBO or FAA-approved extension. Life limited parts shall be replaced at the specified time in service hours or cycles.

B8.6.6.2.2 Aircraft operated with components or accessories on approved TBO extension programs are acceptable provided: (1) the Vendor is the holder of the approved extension authorization (not the owner if the aircraft is leased), and (2) the Vendor operates in accordance with the extension authorization.

B8.6.6.2.3 The Vendor shall supply, at the time of the initial agency inspection, a list of all items installed on the aircraft that are required to be overhauled or replaced on a specified time basis. This list shall include the components name, part number, serial number, total time, service life (or inspection/overhaul time interval), and time and date when component was overhauled, replaced, or inspected.

B8.6.6.3 **Turbine Engine Power Assurance Check.** The first day of operation and no more than each ten hours of operation thereafter, a power assurance check shall be performed. The power assurance check shall be accomplished in accordance with the helicopter flight manual (pilots operating handbook) or approved company performance monitoring program. The results shall be recorded and kept in the helicopter or at the designated base. Engines with power output below minimum approved limits shall be removed from use until the cause of the low power condition is corrected.

FIRST AID & SURVIVAL KITS

These are minimum required items for Special Use Activities in the United States and U.S. Possessions. Additional survival kit items are required for flight activities conducted in Canada and Alaska.

Minimum First Aid Kit Items		
Each kit must be in a dust-proof and moisture-proof container. The kit must be readily accessible to the pilot and passengers.		
Item	Passenger Seats 0-9	Passenger Seats 10-50
Adhesive bandage strips, (3"long)	8	16
Antiseptic or alcohol wipes (pkts)	10	20
Bandage compresses, 4"	2	4
Triangular bandage, 40" (sling)	2	4
Roller bandage, 4"x 5 yds (gauze)	2	4
Adhesive tape, 1"x 5 yds (std roll)	1	2
Bandage scissors	1	1
Body Fluids Barrier kit:	1	1
2 - pair latex gloves		
1 - face shield		
1 - mouth-to-mouth barrier		
1 - protective gown		
2 - antiseptic towelettes		
1 - biohazard disposable bag		
NOTE Splints are recommended if space permits.		

MINIMUM AIRCRFT SURVIVAL KIT ITEMS

These are minimum required items for special use activities in the conterminous United States (including Alaska) and U.S. possessions.

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| Fire Starter (can be two boxes of matches in a waterproof container) | Magnesium fire starter |
| One knife | Signal Mirror |
| Signal Flares (six each occupant) | Food (two days emergency rations per occupant) |
| Candles | Water purification tablets |
| Collapsible water bag | Whistle |
| Space Blanket (one per occupant) | Nylon rope or parachute cord (50 feet) |

These are additional items for the contiguous U.S. and U.S. Possessions:

Water (one quart per occupant required when operating over areas without adequate drinking water)

These are additional items for Alaska only:

- Rations for each occupant sufficient to sustain life for one week
- One axe or hatchet
- One first aid kit
- One mosquito headnet for each occupant
- Insect repellent
- An assortment of tackle such as hooks, flies, lines, sinkers, etc.

OCTOBER 15 TO APRIL 1

- One pair of snowshoes
- One sleeping bag
- One wool blanket or equivalent for each occupant over four years of age

Note: Operators of multiengine aircraft licensed to carry more than 15 passengers need carry only the food, mosquito nets, and signaling equipment at all times other than the period from October 15 to April 1 of each year, when two sleeping bags and one blanket for every two passengers shall also be carried. All of the above emergency rations and equipment requirements are the minimum requirements under current law.