

DEPARTMENT OF THE INTERIOR – AVIATION MANAGEMENT

AIRCRAFT RENTAL AGREEMENT PROVISIONS: SUPPLEMENT NO. 17  
SPECIAL USE – HIGH ALTITUDE GLACIER OPERATIONS

**Definition**

**Airplane High Altitude Glacier Operations:** Locations where ski landings are required on glaciers, above 3500 feet pressure altitude, onto sloping terrain.

**B8.17.1 GENERAL – No Special Requirement**

**B8.17.2 FLIGHT OPERATIONS – No Special Requirement**

**B8.17.3 PERSONNEL REQUIREMENTS**

B8.17.3.1 Pilots shall be knowledgeable of glacier operations, high altitude landing and takeoff techniques in snow conditions. This includes: understanding of hidden hazards (crevass, ice etc.) special flight techniques for glacier takeoff and landing, mountain flying, and flat lighting/white out conditions. Equipment operation will include Wheel-ski or Ski operations.

B8.17.3.1.1 Pilots will be required to demonstrate proficiency during an initial agency evaluation flight.

B8.17.3.2 Personal Protective Equipment (PPE) No Special Requirement

**B8.17.4 EQUIPMENT REQUIREMENTS**

B8.17.4.1 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.

B8.17.4.2 A first aid kit containing items specified in Exhibit 4 shall be furnished by the Vendor and carried aboard the aircraft on all flights.

B8.17.4.3 A survival kit containing items specified in Exhibit 4 shall be furnished by the Vendor and carried aboard the aircraft. While doing glacier operations all items excluding the wool blankets but including a sleeping bag, for each occupant, will be on board the aircraft.

**B8.17.5 AVIONICS REQUIREMENTS**

B8.17.5.1 An intercommunications system (ICS) shall be provided for the pilot, observer, and all required crewmember 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.

B8.17.5.1.1 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 CE-100 TR preamplifier, or equivalent).

B8.17.5.1.2 Separate PTT switches shall be provided for radio transmitter and ICS microphone operation at the pilot position. The pilot's PTT switches shall be mounted on the control yoke or stick. The other positions shall be equipped with an ICS PTT switch mounted on the cord to the headset/microphone connector. NOTE: ICS PTT switches are not required for use with voice-activated (VOX) ICS systems.

B8.17.5.2 Provisions for Auxiliary VHF-FM (AUX-FM) Portable Radio.

## **REVISED (1/04)**

B8.17.5.2.1 The Contractor shall provide the necessary interface for installing and properly operating an auxiliary VHF-FM portable radio through the aircraft's audio control system(s). The interface shall consist of the appropriate wiring from the audio control system, terminated in an ITT/Cannon type MS3112E12-10S 10-pin connector conveniently located for use by **both the pilot and** the copilot, and utilizing the contact assignments as specified by drawing FS/OAS-17 in Exhibit 6.

B8.17.5.2.2 One weatherproof, external, broadband antenna covering the 150-174 MHz band, with associated RG-58A/U (or equivalent) coaxial cable and connector, terminated in a bulkhead-mounted, female BNC connector (type UG-290A), conveniently located for use by the observer/copilot adjacent to the above 10-pin connector (Comant model CI-177 or equal).

B8.17.5.2.3 Mounting facilities, in accordance with the specifications of FAA AC 43.13-2A, for secure installation of the auxiliary VHF-FM portable radio in the cockpit shall be provided. The location of the mounting facilities shall be such that, when connected with an 18-inch adapter cable, the radio's controls shall be located and arranged so that **both the pilot and** the copilot, when seated, have full view and unrestricted movement of the radio's display and controls, without interference from clothing, the cockpit structure, or the flight controls.

B8.17.5.2.4 Positive-polarity microphone excitation voltage shall be provided to the AUX-FM system from the aircraft DC power system through a suitable resistor network. A blocking capacitor shall be provided to prevent the portable radio microphone excitation voltage from entering the system. Sidetone for the AUX-FM shall also be provided (NAT model AA34-300, Premier model PA-34, or equivalent).

B8.17.5.2.5 In lieu of the above AUX-FM requirements, the Contractor may substitute one VHF-FM aeronautical transceiver (FM-1) which is capable of communicating with the Government's VHF-FM portable radios.

### **B8.17.6 MAINTENANCE REQUIREMENTS**

B8.17.6.1 **Weight & Balance.** The aircraft's required weight and balance data shall be determined by actual weighing of the aircraft within 24 calendar months preceding the starting date of the agreement, or renewal date, and following any major repair or major alteration or change to the equipment list which significantly affects the center of gravity of the aircraft.

B8.17.6.1.1 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.

B8.17.6.1.2 A list of equipment installed in the aircraft at the time of weighing must be compiled. The equipment list will include the name of each item installed. Items which may be easily removed or installed for aircraft configuration changes (seats, doors, radios, 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 will 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.

### **B8.17.6.2 Time Between Overhaul and Life Limited Parts.**

B8.17.6.2.1 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.

B8.17.6.2.2 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.

B8.17.6.2.3 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.

**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.

<b>Minimum First Aid Kit Items</b>		
Each kit must be in a dust-proof and moisture-proof container. The kit must be readily accessible to the pilot and passengers.		
<u>Item</u>	<u>Passenger Seats</u> 0-9	<u>Passenger Seats</u> 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		
<b>NOTE:</b> Splints are recommended if space permits.		

**MINIMUM AIRCRAFT 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)   | 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.

Exhibit 6

**FS/DOI AM A-17: AUXILIARY FM RADIO INTERFACE**

