

HSAC Recommended Practice (RP) # 2004-05

Night Offshore Helicopter Flights

Background

Night offshore helicopter flights have been demonstrated to be high risk due to a poor visual cues and human physiology. A high degree of pilot training including cockpit resource management (CRM), specified night operating procedures, dual pilots and suitably equipped aircraft are essential for safe operations.

Recommended Practices

1. Helicopter Type: Only multi-engine helicopters properly equipped for night and instrument flight and capable of sustaining flight with one engine inoperative (OEI) with the loads being flown should be used.

2. Helicopter Configuration: Helicopters planned for night flights should be equipped with the following, which will be fully functional for night flight:

- a. Dual pilot IFR offshore instrument group
- b. Dual display radio altimeters with audio and visual alert preferred, or single display situated for both dual pilot use
- c. Weather radar (minimum scale of 2.5 NM)
- d. In addition to a landing light, a moveable search light is preferred
- e. A flashlight within reach of the pilots
- f. Helicopter Emergency Egress Lighting (HEEL) or equivalent night egress lighting system are preferred when available for the aircraft model.
- g. Suitable over water life raft(s), each equipped with night signaling devices, water-resistant portable floating emergency beacon, and suitable survival kit. Externally mounted life rafts, or the ability for external release, are preferred when approved for the aircraft model.
- h. Pilot life vests should be equipped with a water-resistant floating portable emergency radio / beacon (406 MHz preferred) with two-way voice communications capability preferred.

3. Pilot Qualifications: Night qualification and currency is essential in completing safe night flights offshore.

a. Only dual pilot crews should be used and both pilots will be qualified and hold a current instrument rating for the helicopter type being flown.

b. Captains should have the following qualifications:

(1). Commercial and Instrument Rating.

(2). Minimum of 1000 hours in command with 100 hours in command on type

(3). Minimum of 25 hours of night offshore time

(4). Completed within the last 12 months the following: an offshore night/IFR/CRM course of instruction and an initial or recurrent night training session.

c. It is recommended that pilots scheduled for night offshore operations maintain night recency of 3 takeoffs and landings offshore every 90 days.

d. Training using a simulator or other approved flight training device on the aircraft type on an annual basis is recommended for all IFR pilots.

e. Instrument currency should be maintained as prescribed in Federal Aviation Regulation (FAR) Part 61.57 and/or FAR 135.297.

4. Flight Procedures:

a. All night flights should utilize IFR cockpit procedures for takeoffs and landings (on and offshore).

b. Standardized Operating Procedures (SOPs) or Operations Manual should be developed by Operators detailing all aspects of night and IFR cockpit procedures, including issues associated with arrival and departure techniques, aircrew training and emergency procedures.

c. One-way fuel shall not be used, all night flights will have adequate fuel to fly to destination, return to a suitable onshore destination, plus reserves of at least 45 minutes at OEI cruise fuel flow.

5. Helidecks: To be considered suitable as a night offshore helideck destination, the facility should meet the following guidelines:

a. Size should be a minimum of 1 rotor diameter. Weight and size capability to accommodate the helicopter as loaded.

b. Adequate night lighting to include obstruction lighting, lighted windsock, and helideck perimeter lighting per API RP 2L is recommended.

c. Communication System capable of providing direct radio contact with the helicopter crew to provide landing information, winds/weather and/or status of helideck. If this can not be established, an active phone/radio relay from the offshore facility to the aircraft operator's communication center and pilot can be an alternative.

d. Provide any helideck restrictions/limitations to the operator before flight departure.

6. Flight Following: Active flight following is used, with position reports every 15 minutes minimum. Automated satellite flight following is encouraged to provide accurate location/reduce the search window.

7. Offshore Weather:

a. Visual inter-field segments should have 1,000 feet cloud ceiling and 3 miles visibility.

b. For other than life and limb emergencies and hurricane evacuations, the recommended weather conditions are maximum winds of 40 knots and average wave height of 10 feet.

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