VOLUME 3, Issue 10

OCTOBER 93

123.05



NEWS

NOVEMBER MEETING

BE SURE TO MARK YOUR CALENDAR: Thursday, November 4, 1993 Westford Regency Inn, Westford, MA 6:30 - 7:30 pm Social Hour 7:30 pm Meeting

Agenda Cockpit Resources Management

NEHPA Newsletter

Greg Harville - President
Thomas Grassia - 1st Vice President
Carl Svenson - 2nd Vice President
Holly Sawyers - Treasurer
Penny Bowman - Secretary

NEHPA COMMITTEES 1993

Public Relations/Activities & Auditing Tom Grassia - 5 Commonwealth Ave. Natick, MA 01760 508-650-9252 Fax 508-650-9846

ATC

Jack Keenan - 32 Hillside Drive Shrewsbury, MA 01545 203-524-3951 Fax 508-650-9846

IFR

Wendell Moore - c/o Boston Medflight 31 Fargo Street, Boston, MA 02210 Office 617-695-9561 * * *

Membership Penny Bowman - P.O. Box 420 Topsfield, MA 01983 603-885-9636 Fax 603-885-3153

Recreation Holly Sawyers - 60 Sloane Drive Framingham, MA 01701 508-887-7929

1993 OFFICERS

Greg Harville - President Tom Grassia - 1st Vice President Carl Svenson - 2nd Vice President Holly Sawyers - Treasurer Penny Bowman - Secretary

BAD WEATHER NOTIFICATION

During the middle of this past winter we discovered that there was no established procedure to notify the membership of cancellation of a membership meeting. We have made arrangements with WBZ radio to broadcast NEHPA cancellation information.

CORRECTION

In the last issue of 123.05 News an article was printed which stated that certain pilots with less than 400 hours

of flight time would need to complete a flight review after August 31, 1993 prior to acting as pilot in command of an aircraft. The Federal Aviation Regulations have been amended and this information is not correct. The regulation currently states, in part, that a flight review consists of 1 hour of ground instruction and 1 hour of flight instruction and that no person may act as pilot in command of an aircraft unless they have accomplished this flight review since the beginning of the 24th calendar month in which the pilot acts as pilot in command. There are certain exceptions from this requirement based on obtaining a pilot certificate, rating or operating privilege; completing of one or more phases of an FAA-sponsored proficiency award program (Wings Program); or, renewal of a flight instructor's certificate. The Flight Review requirements can be found in a current copy of the Federal Aviation Regulations under Part 61.56.

NEHPA CORPORATE MEMBERS

Alden Electronics, Inc. - ZFX/Information by FAX

Alpha Aviation Insurance Agency, Inc. American Eurocopter Corporation
 ArrowComp • Atlantic Helicopters • Bell Helicopter Textron, Inc.

Bose Corporation • Boston City Heliport • Boston Helicopter Company

Cheney North Corporation • Coastal Helicopters, Inc. • Cobey Corporation

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EXTERNAL LOADS

So, your helicopter has a cargo hook attached to it and you are considering doing some lift work. Did you know that there is a separate part of the Federal Aviation Regulations, FAR Part 133, which pertains to Rotorcraft External-Load Operations? This regulation requires you to obtain a Rotorcraft External-Load Operator Certificate and to demonstrate certain knowledge and skill as a pilot to the Administrator before lifting an external load.

Rotorcraft-Load combinations are classed by both the type of load and the external load attaching means. These combinations are designated as Class A, Class B, Class C, and Class D, as follows:

- "Class A rotorcraft-load combination" means one in which the externalload cannot move freely, cannot be jettisoned, and does not extend below the landing gear.
- "Class B rotorcraft-load combination" mens one in which the external-load is jettisonable and is lifted free of land or water during the rotorcraft operation.
- "Class C rotorcraft-load combination" means one in which the externalload is jettisonable and remains in contact with land or water during the rotorcraft combination.
- "Class D rotorcraft-load combination" means one in which the externalload is other than a Class A, B, or C and has been specifically approved by the Administrator for that operation.

The rules are fairly specific about routes and altitudes to be flown in order to avoid hazardous operations to persons or property on the surface. Advisory Circular AC 133-1 contains FAA guidance material for persons interested in applying for a Rotorcraft External-Load Operator Certificate. There are several definitions in the Advisory Circular which will help the operator select an appropriate route of flight.

CONGESTED AREA

The term "congested area" has been applied on a case-by-case basis since it first appeared in the Air Commerce Regulations of 1926. No precise mathematical or geographic definition has yet been developed. The term has never been defined in any regulation. However, the following guidelines have been applied by the Civil Aeronautics Board (CAB) (now National Transportation Safety Board - NTSB) in attempting to give the term fair and equitable effect:

- 1. The term is administered so as to protect persons and property in small, sparsely settled communities, as well as persons and property in large metropolitan areas, from the hazards and from the noise of low flying aircraft. Thus, the size of the area is not controlling, and violations of the rules have been sustained for operation of aircraft: (i) over a small congested area consisting of approximately 10 houses and a school; (ii) over the campus of a university; (iii) over a beach area along a highway; and (iv) over a boys camp where there were numerous people on the docks and children at play onshore.
- 2. The presence of people is important to the determination of whether a particular area is "congested." Thus, no violation was found in the case of a flight over a large shop building and four one-family dwellings because, in the words of a CAB examiner, "it was not known whether the dwellings were occupied." In the case, the area surrounding the buildings was open, flat and semiarid. For external-load operations, a factory with adjacent occupied parking lots, filled with employees and vehicles, might be considered a congested area unless the parking lots and employees are vacated and necessary precautions taken to prevent vehicles and perons from reentering the area.
- The term is administered to prohibit overflights that cut the corners of

large, heavily congested, residential areas.

4. As stated in FAR 91.119, the congested area could be any area of a city, town, or settlement. However, no precise density of population, ground traffic, or congestion, or precise description of the proximity of buildings or number of residences, has yet been devised that will achieve both the intended protection of persons and property on the ground, and fair application of the rule to operators of aircraft.

DENSELY POPULATED AREAS

A densely populated area could be considered almost synonymous with a congested area. Those areas of a city, town, or settlement, which contain a large number of occupied homes, factories, stores, schools, university and hospital-type buildings, and other related business structures, might be considered densely populated areas. Additionally, a densely populated area may not contain any buildings, but could consist of a large gathering of persons, such as on a beach, an airshow, a ball game, fairgrounds, etc.

NEAR A BUSY AIRPORT WHERE PASSENGER TRANSPORTATION OPERATIONS ARE CONDUCTED

An external-load operation conducted within Class B, C, D, or E Airspace could be considered "near" in the application of FAR 133.45(d).

External-load operations cannot be conducted within such an area when passenger transportation operations (air carrier and air taxi) are being conducted to or from those airports. Accordingly, the operator must be advised that advance coordination with the controlling air traffic control facilities will be necessary to ensure the establish-

ment of proposed hours of externalload operation, and to ensure that adequate procedures will be utilized to ensure that no external-load operation is conducted when passenger transport operations to or from the airport are in progress. Passenger transport operations will be considered "in progress" whenever an aircraft engaged in such operations is in flight within the above defined areas, and the operator is so advised by air traffic control.

Of course there are also special requirements which you must meet to act as pilot-in-command of an aircraft conducting external-load operations. The regulation states that no person may operate an aircraft with an external-load unless that person has an entry in his or her logbook or a letter of competency as required by FAR 133.37(a) (2). You must have your logbook or the letter of competency in your personal possession during the operation. The regulation also specifies qualification, testing and training requirements which

must be met before you can demonstrate your ability to the Administrator.

Whenever you are conducting external-load operations, no person who is not a required crewmember may be carried aboad the aircraft unless that person performs an essential function in connection with the external-load operation. Should the external-load operation require the use of a hoist, the hoist operator must at all times wear an approved hoist operator's safety harness.

Finally, in addition to the operating limitations set forth in the Approved Rotorcraft Flight Manual, the aircraft used for the operation must meet the Subpart D airworthiness requirements of FAR 133.

The process of conducting external-load operations is not as simple as hovering up and attaching the sling. The good news, though, is that FAR 133 and its associated Advisory Circular provide all the information necessary to obtain the required certification to conduct external-load operations.

FREE DENSITY ALTITUDE CHART

For those who have an altimeter and a thermometer in their aircraft, you may want to take advantage of a free Density Altitude Chart.

Send a prepaid, self-addressed envelope to John Lowry Box 20919, Billingts, MT 59104.

CALENDAR

November 4 - Directors' Meeting Westford Regency, Westford, MA

November 4 - Membership Meeting Westford Regency, Westford, MA Agenda

Cockpit Resource Management

December 2 - Directors' Meeting 5 Commonwealth Rd., Natick, MA

December 30 - TCA Mode C Veil in effect

> January 30 - Heli Expo Anaheim, California