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Subject: Helicopter Performance Planning

Area of Concern: Helicopter Operations

Distribution: Aviation Operations

Discussion: In recent years the investigations of several helicopter accidents and incidents have shown that, in many instances, performance planning is not being completed or is being done incorrectly. Improvements to our procedures have been implemented through Operational Procedure Memoranda (OPM), in changes to the Interagency Helicopter Operations Guide (IHOG), in Safety Alerts, and through numerous training events. The Interagency Helicopter Load Calculation (NFES #1064) has been revised and is available to improve performance planning. When required to use this method (some non-fire DOI users do not use load calculations) the following items are offered as a reminder to reinforce established procedures.

- A load calculation documenting adequate performance is required for all flights.
- All blocks on the load calculation must be completed. Each load calculation must be signed by the pilot and helicopter manager.
- The actual payload must not exceed the allowable payload for environmental conditions at departure and destination locations.
- The pilot is responsible for helicopter performance planning (load calculation). The government representative is responsible for checking the load calculation to ensure accuracy and completeness.
- The pilot must identify the Pressure Altitude and Outside Air Temperature values used to derive computed gross weight by checking Line 1 (Departure) or Line 2 (Destination) on the load calculation form.
- The pilot must use the correct flight manual performance charts to derive computed gross weight (Line 7b) and reference the charts on the load calculation form (Line 7a).
- The Fixed Weight Reduction must be used for all non-jettisonable loads (to include human external loads).
- Fuel burn enroute may be utilized to increase allowable payload at the destination. However, this must be calculated and documented on a load calculation or manifest.
- It is recommended that Hover-Out-of-Ground-Effect (HOGE) performance charts be used when planning for landing sites that are unknown, unimproved, or are not staffed (initial attack).
- All payloads must be manifested, including bucket payloads.
- HOGE performance charts must be used for all bucket operations.
- Buckets must be sized and adjusted so that, when filled full, the actual bucket payload does not exceed the allowable payload (see exceptions in IHOG).

It is strongly recommended that pilots, helicopter managers, and others who are responsible for the safety of helicopter operations review the detailed policy and procedures in the IHOG, Chapter 7 and the new Interagency Helicopter Load Calculation booklet. Please utilize this Accident Prevention Bulletin to augment pre-operational briefings at home units, project sites and incident helibases.

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