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### **ARMY HELICOPTER INTERNAL LOAD OPERATIONS**

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\*This publication supersedes FM 55-450-2, 24 August 1984.

## PREFACE

This manual will assist personnel who perform helicopter internal load missions. It will familiarize them with the tie-down equipment found in the Army inventory, acquaint them with the helicopter they will be loading, and provide basic procedures for loading and rigging loads.

Unit commanders should train selected groups of personnel on helicopter operations. Training should be geared to internal load requirements unique to each type of unit. This manual does not provide details on aviation operations, nor does it present detailed information that would normally be in unit standing operating procedures (SOPs) or other publications that specifically address the subject.

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Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

### CHAPTER 1

# INTERNAL CARGO-CARRYING HELICOPTERS

**1-1. INTRODUCTION.** This chapter identities the Army helicopters used for carrying internal loads. It also describes the capacities, capabilities, and limitations of these helicopters.

**1-2. UTILITY HELICOPTERS.** A utility helicopter is a general-purpose aircraft that has limited carrying capability. Its mission includes transporting troops, cargo, or patients. Two helicopters fall into this type: the Iroquois and the Blackhawk.

a. The UH-1 (Iroquois) is a single-turbine-engine, single-rotor helicopter with a skid-type landing gear (Figure 1-1). There are three models of the UH-1: H, M, and V. The differences among models are engine horsepower, rotor size, and cargo compartment size and configurations.

(1) The UH-1 is used for aerial fire support, aerial command posts, light tactical transport, medical evacuation and electronic surveillance.

(2) Depending on the model, the UH-1 can seat up to 11 combat-equipped troops. The cargo compartment floor has a maximum load limit of 100 psf. The cargo area contains about 220 cubic feet of obstruction-free cargo load space.

(3) The tie-down rings in the floor have a rated capacity of 1,250 pounds in the vertical and 500



FIGURE 1-1. UH-1 Helicopter (Iroquois).

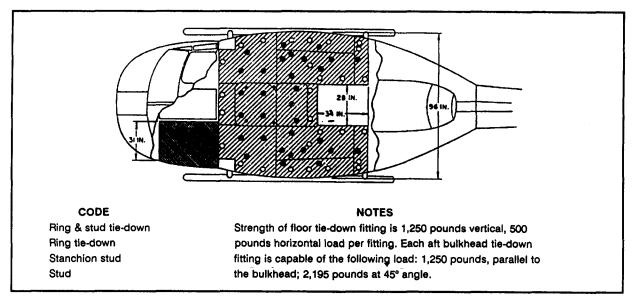


FIGURE 1-2. UH-1 Cargo Restraint Ring Locations.