



Standard Specification for Rotary Wing Basic Life Support Transport Units¹

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INTRODUCTION

Committee F-30 was established on a voluntary basis to edit, update, and create where necessary, voluntary standards for all facets of emergency medical services (EMS).

Task Group F30.01.02 is responsible for water and air vehicles and has prepared standards that cover the medical transport units for the three levels of general patient care, namely basic, advanced, and specialized.

The specifications for these units have been prepared as separate standards, each standing alone, for the convenience of the unit's personnel.

It cannot be emphasized enough that the requirements contained in these specifications are minimums. Additional personnel, equipment, and supplies can be carried at any time, providing the stated minimums are not violated.

The specifications are concerned only with the three broad categories of general EMS. They do not cover any aspect of rescue and they do not preclude unique configurations such as the units that are used exclusively as neonatal transports.

This specification covers the first of the three rotary wing medical transport unit categories. It is solely concerned with the minimum requirements for the rotary wing basic life support transport unit. A unit, staffed and equipped as specified in this specification, will be capable of meeting today's accepted standard of basic life support.

1. Scope

1.1 This specification pertains to rotary wing transport units involved in patient transportation and care at the basic life support level. It outlines the minimum requirements, including personnel, and the patient care equipment and supplies, that must be met before the unit can be classified as an basic life support transport unit.

1.2 This specification describes; the minimum vehicle configuration and capability, the minimum number of seats for personnel, and the provisions for the minimum medical equipment and supplies.

1.3 Other specifications of Committee F-30 will apply.

2. Referenced Documents²

2.1 ASTM Standards:

F 1118 Specification for National Air Medical Transport Units Resources Catalog³

F 1177 Terminology Relating to Emergency Medical Services³

¹ This specification is under the jurisdiction of ASTM Committee F-30 on Emergency Medical Services and is the direct responsibility of Subcommittee F30.01 on EMS Equipment.

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² Appendix X1 contains a list of documents that relate to medical transportation.

³ *Annual Book of ASTM Standards*, Vol 13.01.

F 1219 Guide for Training the Emergency Medical Technician (Basic) to Perform Patient Primary Assessment³

F 1220 Guide for Emergency Medical Services System (EMSS) Telecommunications³

F 1229 Guide for Establishing the Qualifications, Education, and Training of EMS, Air-medical Patient Care Providers³

2.2 USARTL-TR-79-22D Aircraft Crash Survival Design Guide

3. Terminology

3.1 Definitions:

3.1.1 Specific terms used throughout this specification are defined in 3.2. Other applicable terms are contained in Terminology F 1177.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 Descriptions of Terms Relating to Personnel:

3.2.1.1 *air ambulance provider*—the individual or entity that holds the state (or equivalent) air ambulance provider certificate and is responsible for and manages the operation of the air medical transport unit.

3.2.1.2 *air-medical crewmembers*—transport personnel whose primary function is to carry out the medical duties of the medical mission that has been accepted by an air medical transport unit. They are qualified to perform the medical

responsibilities of the mission to the standard established for the designated air medical transport unit category, (basic life support, advanced life support or specialized).

3.2.1.3 *flight crewmembers*—transport personnel whose primary function is to operate and navigate the aircraft under the specified conditions, in accordance with all the applicable Federal Aviation regulations. Flight crewmembers include pilots, navigators, radio operators and crew chiefs.

3.2.1.4 *transport personnel*—flight crewmembers and air-medical crewmembers who, by specialized training (as defined in Guide F 1229 or applicable FAA regulations) are currently qualified to carry out their assigned duties.

3.2.2 *Descriptions of Terms Relating to Vehicles:*

3.2.2.1 *medical transport vehicle*—a vehicle that is capable of meeting the standard for a medical transport unit if the requisite personnel, equipment and supplies are added. It does not include the personnel and the on board medical equipment.

3.2.2.2 *rotary wing aircraft*—aircraft that use a rotor system to take off and land vertically. They include helicopters and tiltrotor aircraft.

3.2.3 *Descriptions of Terms Relating to Patient Care Equipment*—Patient care equipment is defined as that equipment related to the medical mission. It includes:

3.2.3.1 *permanently installed patient care equipment*—designed to be used inside the air medical transport vehicle. It may be self contained or it may depend on the vehicle's power source, or a combination of both.

3.2.3.2 *portable patient care equipment*—self contained and designed for use en route, at the pick-up point, and in transit. It implies being capable of being hand carried. Some items of portable patient care equipment may have the option of using the vehicle's sources of power and medical gases.

3.2.3.3 *transportable patient care equipment*—not necessarily self-contained. It may be used en route if qualified for use in flight, and power and accessibility are available.

3.2.4 *Descriptions of Terms Relating to Communications*—Airborne communication equipment consists of three groups, depending on its primary function:

3.2.4.1 *aviation communication equipment*—equipment installed in the aircraft, used by the flight crew for traffic control, navigation of the aircraft and receiving weather information.

3.2.4.2 *intercommunication equipment*—equipment installed in the aircraft, used by the transport personnel to facilitate conversations between the flight crew and air-medical crewmembers and, in some cases, with the patient.

3.2.4.3 *medical communication equipment*—equipment installed in the aircraft, used by the transport personnel to facilitate conversations between the air-medical crewmembers and the emergency medical system in which they operate. It includes voice communication with public service and medical ground units, with selected medical control, and with EMS systems dispatch centers. It can include equipment for the transmission of graphic data.

3.2.5 *Description of Term Relating to Documentation:*

3.2.5.1 *national air medical transport units resources catalog*—the document produced in accordance with the format that is contained in Specification F 1118. The format is a guideline so that the catalog will contain standardized, com-

parable data on existing air medical transport units. The short title "Resources Catalog" may be used when the meaning is clear.

3.2.6 *Descriptions of Terms Relating to the Mission:*

3.2.6.1 *basic life support level*—a level of patient care where all the skills required for basic life support can be effectively applied at any time during the complete mission.

3.2.6.2 *category*—a level of patient care, relating to the capability of the air medical transport unit. There are three levels; basic life support, advanced life support, and specialized.

3.2.6.3 *declared effective service range*—the number of nautical miles, without resupply of aviation or medical requirements, within which the rotary wing medical transport unit can be expected to operate.

3.2.6.4 *declared response time*—the normal minimum number of minutes required between the initial notification of the medical mission and the liftoff of the air medical transport unit.

3.2.6.5 *declared service area*—the area designated by the air ambulance provider where the rotary wing medical transport unit is operationally capable of response. It includes pre-defined limits in range, altitude and weather, over water, instrument flight and day/night capability.

3.2.6.6 *medical mission*—an accepted medical flight from the initial notification to the completion or cancellation.

3.2.6.7 *rotary wing advanced life support transport unit*—a unit that meets the standard described in this specification.

3.2.6.8 *rotary wing medical transport unit*—a rotary wing medical transport vehicle, the crew, and on board equipment that meets the standard for the named category.

4. Classification

4.1 Air ambulance providers will use the title "Rotary Wing Basic Life Support Transport Unit" to indicate that the minimums contained in this specification have been met.

5. General Requirements

5.1 The rotary wing basic life support transport unit shall consist of the medical transport vehicle, transport personnel and patient care equipment, and supplies in accordance with this specification.

5.2 To comply with this specification, the rotary wing basic life support transport unit must be part of a designated medical control system, as described in Practice F 1149.

5.3 The unit will have medical direction provided by a medical director, as defined in Practice F 1149.

5.4 The specific aircraft and personnel that have been state licensed (or equivalent) as part of the unit will be available for the medical mission as stated in the "Resources Catalog". The aircraft will be configured to accept the personnel and equipment as stated. The equipment as listed in the "Resources Catalog" may be in the aircraft or held in readiness in an airworthy condition, in a specific location. More than one team and set of equipment may be provided for any particular aircraft, in more than one location, providing they each meet the specification criteria. The aircraft must have both the air-medical personnel and the medical equipment and supplies on board prior to patient transport as a basic life support unit.

5.5 The air ambulance provider and medical director will