



# Standard Guide for Qualification and Training of EMS Air Medical Patient Care Providers<sup>1</sup>

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## INTRODUCTION

This guide describes the minimum qualifications and training of air medical providers. These guidelines are built on a foundation of recognized courses that are used to train patient care providers. The developers of this guide are experienced air medical providers and users with broad and distinctive EMS backgrounds.

### 1. Scope

1.1 This guide applies to patient care providers onboard medical flights involved in the provision of patient care during air medical transport. It does not necessarily address the qualifications and training of additional specialty care providers or other allied health professionals during air medical transport.

1.2 This guide establishes air medical nomenclature.

1.3 This guide establishes minimum qualifications and training requirements for the air medical patient care provider(s) and the air medical director.

1.4 This guide identifies the general content of the curricula for air medical training.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

F1031 [Practice for Training the Emergency Medical Technician \(Basic\)](#)

F1124 [Specification for Rotary Wing Advanced Life Support](#)

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee F30 on Emergency Medical Services and is the direct responsibility of Subcommittee F30.02 on Personnel, Training and Education.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[Transport Units \(Withdrawn 2000\)](#)<sup>3</sup>  
F1256 [Guide for Selection and Practice of Emergency Medical Services Instructor for Emergency Medical Technician \(EMT\) Training Programs](#)  
F1257 [Guide for Selection and Practice of Emergency Medical Services Instructor for Advanced Emergency Medical Technician](#)  
F1274 [Specification for Fixed Wing Advanced Life Support Transport Units \(Withdrawn 2000\)](#)<sup>3</sup>  
F1453 [Guide for Training and Evaluation of First Responders Who Provide Emergency Medical Care](#)  
F1552 [Practice for Training Instructor Qualification and Certification Eligibility of Emergency Medical Dispatchers](#)  
F1651 [Guide for Training the Emergency Medical Technician \(Paramedic\)](#)  
F1705 [Guide for Training Emergency Medical Services Ambulance Operations](#)  
2.2 *U.S. Department of Transportation National Standard Curricula:*<sup>4</sup>  
[Emergency Medical Dispatcher](#)  
[Emergency Medical Care—First Responder](#)  
[Emergency Medical Technician—Basic](#)  
[Emergency Medical Technician—Intermediate](#)  
[Emergency Medical Technician—Paramedic](#)  
[Emergency Medical Services Instructor](#)  
[Emergency Vehicles Operator's Course](#)  
[Air-Medical Crew Education](#)

### 3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

<sup>3</sup> The last approved version of this historical standard is referenced on [www.astm.org](http://www.astm.org).

<sup>4</sup> Available from U.S. Department of Transportation, 400 Seventh St., S.W., Washington, DC 20590.

3.1.1 *aeromedicine, n*—the branch of medicine that deals with the physiological, psychological, pathological, and epidemiological conditions, diseases, and disturbances that arise from flying.

3.1.2 *air medical, n*—the practice of air medicine.

3.1.3 *air medical director, n*—a physician who is licensed, or otherwise legally authorized to practice, and who functions with an air medical operation as the individual ultimately responsible for the quality of patient care.

3.1.4 *air medical operations, n*—that aspect of air medicine involving policies, procedures, and protocols.

3.1.5 *air medical patient care providers, n*—patient care providers onboard medical flights.

3.1.6 *air medicine, n*—a discipline of medicine associated with the care and management of patients transported by aircraft.

3.1.7 *educational experience, n*—the accumulation of knowledge and skills through education, training, and clinical practice.

3.1.8 *qualification, n*—possessing a recognized, definable body of knowledge or specific credential (certificate, license, registration, or degree).

#### 4. Significance and Use

4.1 This guide provides minimum guidance for the development of air medical training programs.

4.2 This guide identifies additional subject areas of training necessary to become an air medical patient care provider.

#### 5. Flight EMT-P (Flight Paramedic)—Qualifications and Training

5.1 The minimum entry level for a flight EMT-paramedic shall be the body of knowledge and skills identified by both the required and optional objectives contained in the EMT-Paramedic DOT National Standard Curriculum. Commensu-

rate with the patient care mission, additional training is at the discretion of the air medical director. Additional areas include the following:

5.1.1 Aircraft safety;

5.1.2 Altitude physiology and principles of atmospheric physics (gas laws);

5.1.3 Aviation communications;

5.1.4 Crash and survival procedures;

5.1.5 Familiarization with EMS systems in the service area;

5.1.6 Hazardous materials response procedures;

5.1.7 In-flight treatment modalities;

5.1.8 Infection control;

5.1.9 Oxygen therapy in relation to altitude;

5.1.10 Patient assessment in the airborne environment;

5.1.11 Roles and responsibilities; and

5.1.12 Stress recognition and management.

#### 6. Flight Nurse—Qualifications and Training

6.1 The minimum entry level for a flight nurse shall be the body of knowledge and skills identified by the objectives contained in an accredited registered nursing program. Commensurate with the patient care mission, the flight nurse shall possess all of the knowledge and skills required of a flight EMT-paramedic and may have additional training in the assessment and management of patients with special needs as prescribed by the air medical director.

#### 7. Air Medical Director, Flight Physician—Qualifications, Training, and Educational Experience

7.1 The air medical director or flight physician shall be a physician who is licensed or otherwise legally authorized to practice and who has had educational experience in those areas of medicine and prehospital care that are commensurate with the patient care mission(s). Additional training shall include areas listed in 5.1.1 – 5.1.12.

#### 8. Keywords

8.1 air medical providers; EMS; patient care providers; training

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