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AEROMEDICAL TRAINING FOR FLIGHT PERSONNEL

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HEADQUARTERS, DEPARTMENT OF THE ARMY

Aeromedical Training for Flight Personnel

Contents

		Page
	PREFACE	vi
Chapter 1	TRAINING PROGRAMS	1-1
	Training Requirements	1-1
	Aeromedical Training in Specific Courses	1-1
	Hypobaric Refresher Training	1-1
	Special Training by Other Services	1-2
	Unit Training	1-2
	Responsibilities	1-3
	Revalidation and Waiver	1-3
	Training Record	1-4
Chapter 2	ALTITUDE PHYSIOLOGY	2-1
	Section I – Atmosphere	2-1
	Physical Characteristics of the Atmosphere	2-1
	Structure of the Atmosphere	2-1
	Composition of the Atmosphere	2-3
	Atmospheric Pressure	2-4
	Physiological Zones of the Atmosphere	2-6
	Section II – Circulatory System	2-7
	Structure and Function of the Circulatory System	2-7
	Components and Functions of Blood	2-8

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i

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	Section III – Respiratory System	2-10
	The Processes of Breathing and Respiration	2-10
	Functions of Respiration	2-10
	Phases of External Respiration	2-11
	Components of the Respiratory System	2-13
	Section IV – Hypoxia	2-16
	Characteristics of Hypoxia	2-16
	Types of Hypoxia	2-16
	Signs, Symptoms, and Susceptibility to Hypoxia	2-18
	Effects of Hypoxia	2-20
	Stages of Hypoxic Hypoxia	2-21
	Prevention of Hypoxic Hypoxia	2-23
	Treatment of Hypoxia	2-24
	Section V – Hyperventilation	2-24
	Characteristics of Hyperventilation	2-24
	Causes of Hyperventilation	2-24
	Signs and Symptoms of Hyperventilation	2-25
	Treatment of Hyperventilation	2-25
	Section VI – Pressure-Change Effects	2-26
	Dysbarism	2-26
	Trapped-Gas Disorders	2-26
	Evolved-Gas Disorders	2-32
Chapter 3	STRESS AND FATIGUE IN FLYING OPERATIONS	3-1
	Stress Defined	3-1
	Identifying Stressors	3-1
	The Stress Response	3-10
	Stress and Performance	3-11
	Stress Management	3-12
	Fatigue	3-13
	Effects of Fatigue on Performance	3-14
	Diurnal (Circadian) Rhythms and Fatigue	3-15
	The Sleep Cycle	3-16
	Sleep Requirements	3-16
	Prevention of Fatigue	3-17
	Treatment of Fatigue	
Chapter 4	GRAVITATIONAL FORCES	
	Terms of Acceleration	4-0
	Types of Acceleration	4-0

	Gravitational Forces	4-2
	Factors Affecting Accelerative Forces	4-3
	Physiological Effects of Low-Magnitude Acceleration	4-4
	Physiological Effects of +G _z Acceleration	4-5
	Physiological Effects of –G _z Acceleration	4-7
	Physiological Effects of +/-G _z Acceleration	4-8
	Physiological Effects of +/-G _y Acceleration	4-9
	Physiological Effects of High-Magnitude Acceleration and Deceleration	4-9
	Preventive Measures	4-14
Chapter 5	TOXIC HAZARDS IN AVIATION	5-0
	Section I – Aviation Toxicology Principles	5-0
	Environment	5-0
	Acute Toxicity	5-0
	Chronic Toxicity	5-1
	Time and Dose Relationship	5-1
	Physiochemical Factors	5-1
	Entry Points	5-1
	Preexisting Conditions	5-1
	Individual Variability	5-2
	Allowable Degree of Bodily Impairment	5-2
	Body Detoxification	5-2
	Section II – Aircraft Atmosphere Contamination	5-3
	Contamination Overview	5-3
	Exhaust Gases	5-3
	Carbon Monoxide	5-3
	Aviation Gasoline	5-5
	Tetraethyl Lead in Aviation Gasoline	5-6
	Jet Propulsion Fuels	5-6
	Hydraulic Fluid Vapors	5-7
	Coolant Fluid Vapors	5-7
	Engine Lubricants	5-7
	Fire-Extinguishing Agents	5-7
	Fluorocarbon Plastics	5-9
	Oxygen Contamination	5-10
	Protective Measures	5-10
Chapter 6	EFFECTS OF TEMPERATURE EXTREMES ON THE HUMAN BODY	6-1
	Section I – Heat in the Aviation Environment	6-1
	Heat Effects	6-1

	Heat Transfer	6-2
	Performance Impairment	6-4
	Heat-Stress Prevention	6-4
	In-Flight Heat-Stress Reduction	6-5
	Section II – Cold	6-5
	Cold Effects in the Aviation Environment	6-5
	Types and Treatment of Cold Injury	6-6
	Cold-Injury Prevention	6-6
Chapter 7	NOISE AND VIBRATION IN ARMY AVIATION	7-0
	Noise Characteristics and Effects	7-0
	Sound and Vibrational Measurement	7-1
	Noise and Hearing Levels	7-2
	Vibrational Effects	7-4
	Hearing Loss	7-4
	Hearing Protection and Reduction of Vibrational Threat	7-5
	Preventive Measures	7-10
Chapter 8	PRINCIPLES AND PROBLEMS OF VISION	8-0
	Visual Deficiencies	8-0
	Anatomy and Physiology of the Eye	8-3
	Types of Vision	8-6
	Factors Affecting Object Visibility	8-10
	Dark Adaptation	8-10
	Night-Vision Protection	8-11
	Night-Vision Techniques	8-13
	Distance Estimation and Depth Perception	8-16
	Visual Illusions	8-21
	Meteorological Conditions and Night Vision	8-21
	Self-Imposed Stress and Vision	8-22
	Nerve Agents and Night Vision	8-25
	Flight Hazards	8-25
	Protective Measures	8-27
	Principles of Proper Vision	8-28
Chapter 9	SPATIAL DISORIENTATION	9-1
	Common Terms of Spatial Disorientation	9-1
	Types of Spatial Disorientation	9-1
	Equilibrium Maintenance	9-2
	Visual Illusions	9-9
	Vestibular Illusions	9-14

	Proprioceptive Illusions	9-18
	Prevention of Spatial Disorientation	9-18
	Treatment of Spatial Disorientation	9-19
Chapter 10	OXYGEN EQUIPMENT AND CABIN PRESSURIZATION	10-0
	Oxygen Systems	10-0
	Storage Systems	10-1
	Oxygen Regulators	10-1
	Oxygen Masks	10-3
	Oxygen-Equipment Checklist	10-4
	Cabin Pressurization	10-4
Appendix	HYPOBARIC CHAMBER FLIGHT PROFILES	A-0
	GLOSSARY	Glossary-0
	BIBLIOGRAPHY	Bibliography-0
	INDEX	Index-1

Preface

Lessons learned from previous military conflicts and recent contingency operations have caused changes in Army aviation doctrine and the development of more sophisticated aircraft and weapons systems. Army aircrew members must be capable of operating these systems around the clock, in austere environments, and under adverse conditions. They must be capable of employing these systems and avoid enemy air defense and air-to-air weapons systems. The hazards of stress and fatigue imposed by operating more sophisticated systems in combat operations and CONOPS will eventually take a toll in aircrew performance and could jeopardize mission accomplishment. Aircrew members must be trained to recognize and understand these hazards. Training can prepare aircrew members and prevent stress and fatigue from reducing their mission effectiveness and increase their chances of survival.

This manual gives aircrew members an understanding of their physiological responses to the aviation environment; it also describes the effects of the flight environment on individual mission accomplishment. In addition, it outlines the essential aeromedical training requirements (in Chapter 1) that assist the commander and flight surgeon in conducting aeromedical education for Army aircrew members. The subject areas addressed in the training are by no means all inclusive but are presented to assist aircrew members in increasing their performance and efficiency through knowing human limitations. This manual is intended for use by all Army aircrew members in meeting requirements set forth in AR 95-1, TC 1-210, and other appropriate aircrew training manuals.

The proponent of this publication is Headquarters, TRADOC. Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Dean, US Army School of Aviation Medicine, ATTN: MCCS-HA, Fort Rucker, Alabama 36362-5377.

The provisions of this publication are the subject of the following international agreement: STANAG 3114 (Edition Six).

The use of trade names in this manual is for clarity only and does not constitute endorsement by the Department of Defense.

This publication has been reviewed for operations security considerations.

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

Chapter 1

Training Programs

Aircrews must be trained and ready in peacetime to perform their missions in combat or other contingency operations. Therefore, leaders at all levels must understand, sustain, and enforce high standards of combat readiness. Tough, realistic training should be designed to challenge and develop soldiers, leaders, and units. This chapter outlines the essential aeromedical training requirements needed for all aircrew members.

TRAINING REQUIREMENTS

1-1. All U.S. Army flight students receive aeromedical training during initial flight training and during designated courses given at the United States Army Aviation Center, Fort Rucker, Alabama. Aeromedical training is also provided for specific aviators during refresher training courses. In addition, unit commanders are responsible for aeromedical training at the unit level.

AEROMEDICAL TRAINING IN SPECIFIC COURSES

- 1-2. Initial aeromedical training is conducted for all U.S. Army students in the Initial Entry Rotary Wing Course. Their initial physiological training is performed according to the provisions of STANAG 3114 and TRADOC programs of instruction at USAAVNC. Aeromedical training is conducted for aviators receiving transition or advanced training at USAAVNC in the following courses:
 - Fixed-Wing Multiengine Qualification Course.
 - Fixed-Wing Multiengine Instructor Pilot Course.
 - Aviation Safety Officer Course.

HYPOBARIC REFRESHER TRAINING

- 1-3. Crew members and Department of the Army civilians who fly in pressurized aircraft or in aircraft that routinely exceed 10,000 feet MSL receive hypobaric training. Refresher training is conducted once every three years. The aviators trained are those who fly in pressurized aircraft or in aircraft that routinely exceed 10,000 feet MSL.
- 1-4. Refresher training consists of classroom instruction to review the essential materials presented in the initial training. After completing classroom instruction, aviators participate in a hypobaric (low-pressure/high-altitude) chamber exercise using the appropriate profile for the aircraft flown (see the appendix).