

AD-A146 774

HAZARDOUS MATERIALS TRAINING(U) AIR FORCE LOGISTICS  
MANAGEMENT CENTER GUNTER AFS AL K R DALTON APR 84

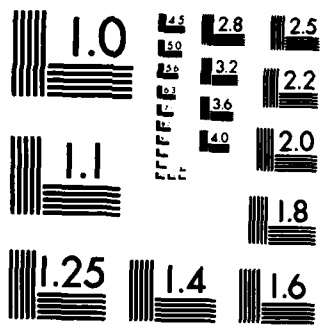
1/1

UNCLASSIFIED

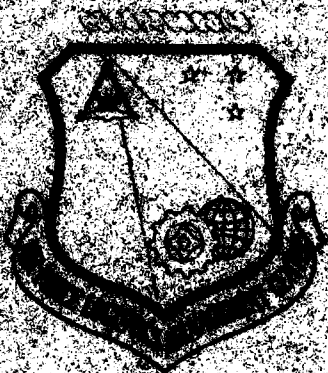
F/G 5/9

NL





**AIR FORCE LOGISTICS MANAGEMENT CENTER**



AD-A146 774

**HAZARDOUS MATERIALS TRAINING**  
BY  
**CAPTAIN KATHLEEN R. DALTON (ASPLMC)**  
**ASPLMC PROJECT LOGGERS**  
**APRIL 1984**

**DTIC**  
ELECTRONIC  
OCT 22 1984

S  
A

DTIC FILE COPY

**AIR FORCE LOGISTICS MANAGEMENT CENTER**  
**GUNTER AFS, AL. 36114**

This document has been approved  
for public release and sale; its  
distribution is unlimited.

84 05 21 218

ABSTRACT

The purpose of this project is to clarify hazardous materials training requirements and to provide guidelines for training Air Force personnel in the certification and handling of hazardous materials. Present training is sometimes excessive and unproductive to the needs of many personnel for their particular hazardous materials duties. This report identifies stated training requirements in AFR 71-4, which are not being fully utilized, and analyzes training programs offered by HQ Tactical Air Command (TAC) and HQ Air Force Reserve (AFRES) to fulfill these requirements. This report proposes that the Air Force standardize hazardous materials training by implementing the AFRES and TAC programs.



Accession For	
NCIS GRA&T	<input checked="" type="checkbox"/>
NCIS T&H	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	<i>Attic copy</i>
By	
Distributi	
Availability Codes	
Dist	Special
<i>A1</i>	

This document has been approved for public release and sale. Its distribution is unlimited.

## EXECUTIVE SUMMARY

Although AFR 71-4 identifies three types of hazardous materials training, it does not provide clear guidance on who should receive the training and who is responsible for establishing unit level training. Based on our analysis, the formal certification training required by AFR 71-4 should be designated for those personnel who handle and ship hazardous materials as part of their daily job, e.g., air freight and packing and crating personnel. The formal certification course is taught at the Sheppard Technical Training Center. Training of augmentees involved with base-level mobility operations should be done through unit level training programs. These programs should include both mobility certification and hazardous materials handling.

This report concludes the Air Force needs to clarify AFR 71-4 and to create, consolidate and standardize training programs for mobility operations and handlers of hazardous materials. We recommend the Air Force adopt the HQ TAC mobility certification program and HQ AFRES handlers program to standardize training Air Force-wide. This would provide unit level training for augmentees, eliminate the need for augmentees to receive formal training, and save significant TDY funds and man-hours for the Air Force.

TABLE OF CONTENTS

	<u>PAGE</u>
ABSTRACT.....	i
EXECUTIVE SUMMARY.....	ii
TABLE OF CONTENTS.....	iii
CHAPTERS	
I. THE PROBLEM.....	1
Background.....	1
Problem Statement.....	1
Factors Bearing on the Problem.....	1
II. RESEARCH.....	3
Requirements.....	3
Scope.....	4
Results.....	4
Economic Assessment.....	6
III. CONCLUSIONS.....	9
IV. RECOMMENDATIONS.....	10
FIGURES	
1. Proposed Savings.....	7
2. Present - Proposed Formal Training Attendance.....	8
ATTACHMENT	
Excerpt from AFR 71-4 - Training Qualifications.....	11

## CHAPTER I - THE PROBLEM

### BACKGROUND

The AFLMC was tasked by HQ USAF/LET to determine hazardous materials training requirements for Air Force personnel, who should receive the training, what that training should consist of, how often the training is necessary, and the training method.

The number of personnel receiving formal training in the transportation of hazardous materials has increased substantially in the last few years. In FY 1982 the Trained Personnel Requirement (TPR) was approximately 5800. For FY 1983 the TPR was 6884 and 5394 were actually trained. The number of Mobile Training Team (MTT) instructors has risen from 4 to 10 in the past 5 years. The number of resident instructors has remained at three. The Sheppard Technical Training Center Transportation Training manager expects the training requirements to continue to increase 10 to 15 percent per year primarily because of mobility requirements.

The **Hazardous Materials Transportation Act** (Public Law 93-633) places the responsibility with the Department of Transportation (DOT) for issuing and enforcing regulations to ensure safe transportation of hazardous materials. Shipments of hazardous materials by military aircraft are exempt from the hazardous materials regulations in **Title 49 Code of Federal Regulations** (CFR 49). A military joint service regulation, AFR 71-4, covers shipments by military air. The civil and criminal penalties for noncompliance with DOT regulations combined with increased emphasis on safety and mobility and a lack of understanding of AFR 71-4 and CFR 49 have prompted many Air Force managers to overreact. They are sending all of their personnel who require any level of training to formal courses. These formal courses often offer more training than some individuals need for their particular Air Force jobs. Thus, many personnel are receiving excessive training for the certification of hazardous materials.

### PROBLEM STATEMENT

Increased emphasis on safety and mobility has prompted MAJCOMs to overreact by sending all of their personnel to formal hazardous materials training. Consequently, we are overtraining many people in the certification of hazardous materials. Classes offered at Sheppard are oftentimes excessive and unproductive to many personnel for their particular hazardous materials duties. The guidelines in AFR 71-4 are vague concerning alternative on-base training for mobility and handlers of hazardous materials.

### FACTORS BEARING ON THE PROBLEM

There are over 2000 individually classified and regulated hazardous materials. These materials fall into 16 general hazard classes. Furthermore, a single hazardous material is characteristically regulated differently according to the form of the material (e.g., liquid, solid, or gas), the

quantity contained in a package, and the type of package. Regulations also frequently change due to new packaging, new hazardous materials, or in response to hazardous materials incidents. Thus, hazardous materials regulations are based upon a commodity-by-commodity and a package-by-package philosophy which requires an extensive investment of manpower to determine specific packaging and transportation requirements.

The roles of various personnel range from individuals who handle or prepare only one hazardous material for shipment to those who receive, package, handle, and/or quality control the entire spectrum of hazardous materials shipped by Department of Defense activities. The actual duties are performed by personnel in such diverse fields as aircraft maintenance, medicine, and transportation.

Mobility commitments require personnel who normally do not handle hazardous materials to perform some hazardous materials duties. Augmentees normally fall in this category. Although some procedures are waived or modified for mobility or emergency situations, basic safety procedures must be followed to guarantee the safety of personnel and equipment.



## CHAPTER II - RESEARCH

### REQUIREMENTS

Hazardous materials training requirements were identified for both normal and mobility operations. The requirements were identified through interpretation of laws and regulations; review of duties of individuals with hazardous materials roles in several commands to include AFLC, MAC, SAC, and TAC; and review of procedures used by commercial carriers and shippers.

AFR 71-4 states three types of training (Atch 1):

Paragraph 1-20 **Qualification of DOD Certifying Officials.** DD Form 1387-2 certification will be accomplished by the DOD personnel who are qualified as a result of training, and authorized in writing by the individual's commander. The formal training courses presently offered are:

- Army Materiel Development and Readiness Command (DARCOM)  
Military Traffic Management Command (MTMC) course at  
Savanna, IL.
- Joint Military Packaging Training Center (JMPTC) course  
at Aberdeen Proving Ground, MD.
- Transportation of Hazardous Materials, Sheppard AFB, TX.
- Oakland Naval Transportation Management School, CA.

Paragraph 3-5, **Certification**, states that in mobility, tactical, or contingency operations, certification of hazardous materials will be accomplished by the qualified specialist or technician who actually prepares, packs, and inspects the item for air shipment according to the applicable T.O., (examples: aircraft maintenance technician, vehicle mechanic, medical technician). These specialists/technicians who certify their specific items for mobility will be trained through unit training programs taught by hazardous materials qualified 602XX, 605XX or other qualified personnel. These individuals, because they will only be certifying their own equipment, usually one or two items, do not require the extensive training offered by the formal schools.

Paragraph 1-22, **Training of Other Than Certifying Officials**, states that other personnel who perform handling or loading duties will receive initial and annual refresher training. This training will be designated for local units to teach. Those personnel required to handle or load hazardous materials on/off aircraft need to be familiar with DOT hazard classifications, labels, placards, compatibility and safety in order to safely perform their jobs. These personnel, unless authorized as mobility augmentee certifiers, will only require the familiarity training that a handler's course would provide. This course will also be designated for initial and annual refresher training and training records will be documented.

AFR 39-1, **Airman Classification**, lists those personnel who, for their particular duties, require hazardous materials training. According to this

regulation, the formal training is intended for 602XX packaging and crating and air freight personnel, and 605XX air cargo specialists. In instances where these personnel are not available, other people designated by the commander will attain certification through training at a formal school.

#### SCOPE

We worked with personnel from all MAJCOMs to determine the most appropriate methods to provide training. We then canvassed the training experts at Sheppard Technical Training Center and found the following:

In 1982, through the Sheppard Technical Training School, 4788 joint service and civilian personnel were trained in the certification of hazardous materials. In 1983, the school trained 5394 personnel, an increase of over 13% from 1982. Of the 1983 figure of 5394, over 80% or 4315 were trained through the mobile training teams.

The following is a breakdown of formal training for Air Force personnel at Sheppard Technical Training Center for a three-year period.

<u>1981</u>	<u>1982</u>	<u>1983</u>
1810 Air Force	981 Air Force	1109 Air Force
1120 602, 605 AFSC	643 602, 605 AFSC	721 602, 605 AFSC
690 Other AFSCs	338 Other AFSCs	388 Other AFSCs

These totals indicate 35% trained at Sheppard were other than 602, 605 transportation personnel.

#### RESULTS

We determined that training needs vary depending upon the specific hazardous materials duties performed. Transportation personnel, whose duties include processing the entire spectrum of hazardous materials shipped by the Department of Defense, need a broad range of training. Those transportation and non-transportation personnel serving mobility functions and whose duties are limited to certifying only one or a very limited number of hazardous materials will not require this broad training.

We also determined that hazardous materials training requirements are best satisfied by attendance at a formal school or through local/base generated courses. Local training is done by trainers from the wing, base, or command. In TAC, local certification training of hazardous materials for mobility personnel is handled through the base mobility operations center. In AFRES the handlers/loaders course is taught by cargo/freight personnel in AFRES units. Following are synopsis of the training programs now being used by HQ TAC and Hq AFRES.

#### **HQ TAC HAZARDOUS MATERIALS TRAINING (under paragraph 3-5, AFR 71-4, Certification Training).**

This four- to five-hour tape/slide unit training program is intended for teaching those technicians/specialists certifying their own equipment for

mobility, tactical, or contingency situations. This hazardous cargo course offered to TAC units by TAC Mobility Operations is designed to achieve the following objectives: (1) familiarize personnel with the requirements for shipping hazardous materials, and (2) show them how to document the shipments. Each student will be able to identify hazardous items within the COMPES LOGMOD-B, utilize AFR 71-4 to prepare/certify hazardous cargo, and to prepare DD Form 1387-2, **Special Handling Data/Certification**.

The course content follows:

- Identification of rules and regulations regarding preparation/certification of hazardous cargo.
- Identification of hazardous cargo classes.
- Identification of standard requirements for accepting hazardous materials into the airlift system.
- Identify inspection and quality control requirements for hazardous materials.
- Identify requirements for shipping empty containers.
- Identify hazardous cargo item codes.
- Use of Table 4-1.
- Brief explanation of all chapters.

Unit commanders will authorize, in writing, those individuals qualified to certify hazardous materials as a result of completing this class.

HQ AFRES HAZARDOUS MATERIAL HANDLERS COURSE (under paragraph 1-22, AFR 71-4, **Training of Other Than Certifying Officials**).

This eight-hour hazardous materials handlers course is intended for those personnel required to handle or load hazardous cargo on/off aircraft. This course was developed by HQ Air Force Reserve (HQ AFRES)/LGTO and was designed to achieve the following objectives: (1) familiarize personnel with the information contained on a DD Form 1387-2, (2) show them how to extract the necessary information from the form for safe handling and storage, and (3) teach them how to determine compatibility for shipment and storage. The course is divided into three parts:

**Part I. Warning Labels and Symbols (Slide/Tape):**

The labels/symbols used in the handling and storage of hazardous materials are covered here and are divided into four groups. They identify hazardous materials, cautions to take during handling or storage, fire hazardous symbols, and chemical hazard symbols.

Part II. Compatibility and Storage:

This covers compatibility and storage of hazardous materials in a training module consisting of a study guide, handout, lesson plan, and criterion test.

Part III. Transportation and Packaging (Slide/Tape):

This brings all parts of the course together in the slide/tape presentation. It covers information necessary for packaging the different classes of hazardous materials and incorporates the warning labels and symbols, storage of different hazard classes, and precautions to be taken.

ECONOMIC ASSESSMENT

According to school data received from Sheppard Technical Training Center, the Air Force trained an average of 1591 personnel in hazardous materials certification from 1980-1983; this included annual and refresher training. Training costs were determined from figures provided by the AFO, SATO, AFMPC, and TTG at Sheppard. Annual training costs to the Government total \$759,000. Of the average figure of 1591 students, 35%, or 557, were non-602XX or 605XX AFSCs and did not require the Sheppard formal training. Reducing formal training by 35% with the addition of on-base mobility and handlers courses such as the ones offered by HQ TAC and HQ AFRES, would result in an annual savings of \$263,000. The following graphs depict these average costs and savings and training attendance figures.

PROPOSED SAVINGS

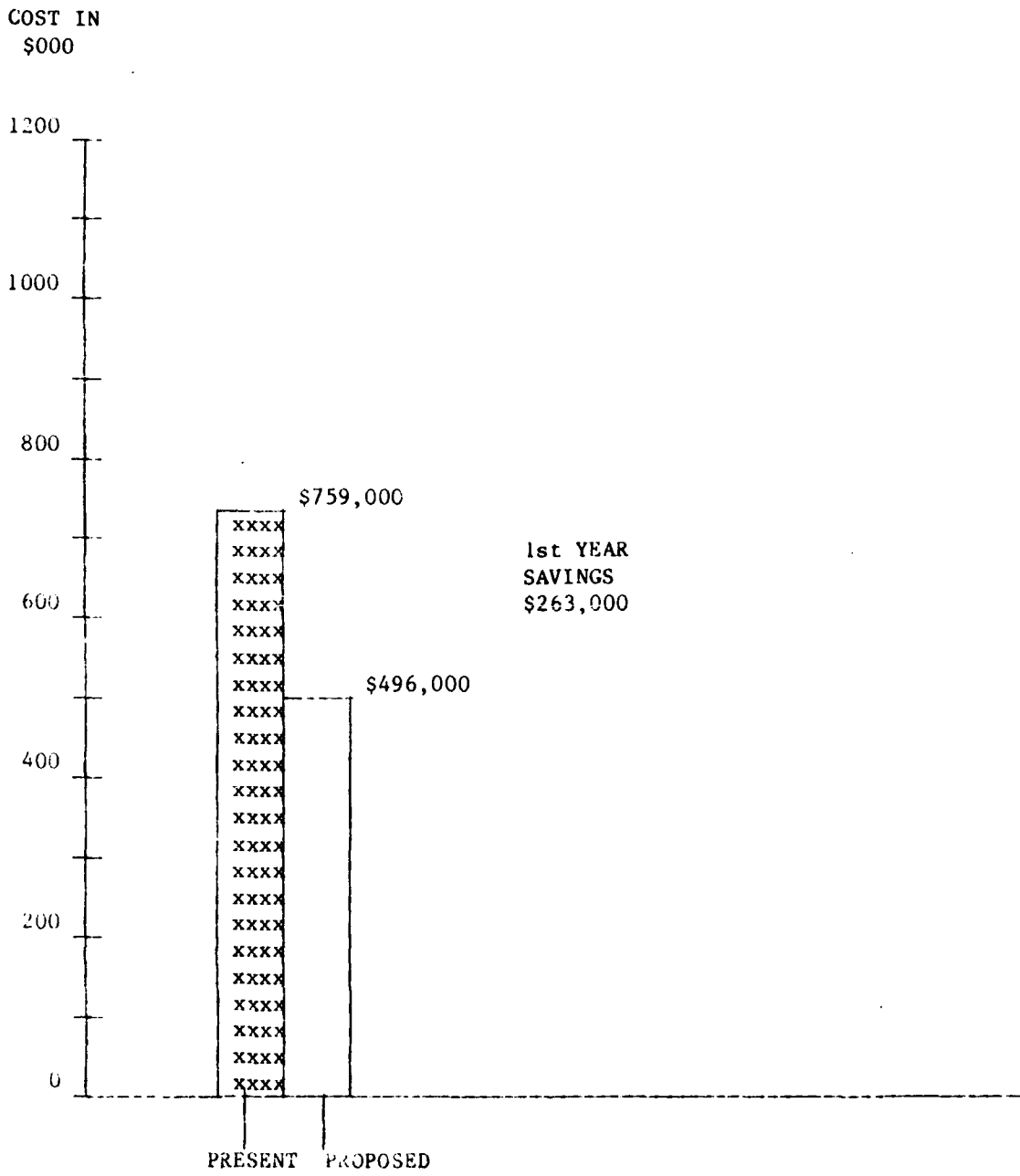


Figure 1

PRESENT-PROPOSED  
FORMAL TRAINING

ATTENDANCE

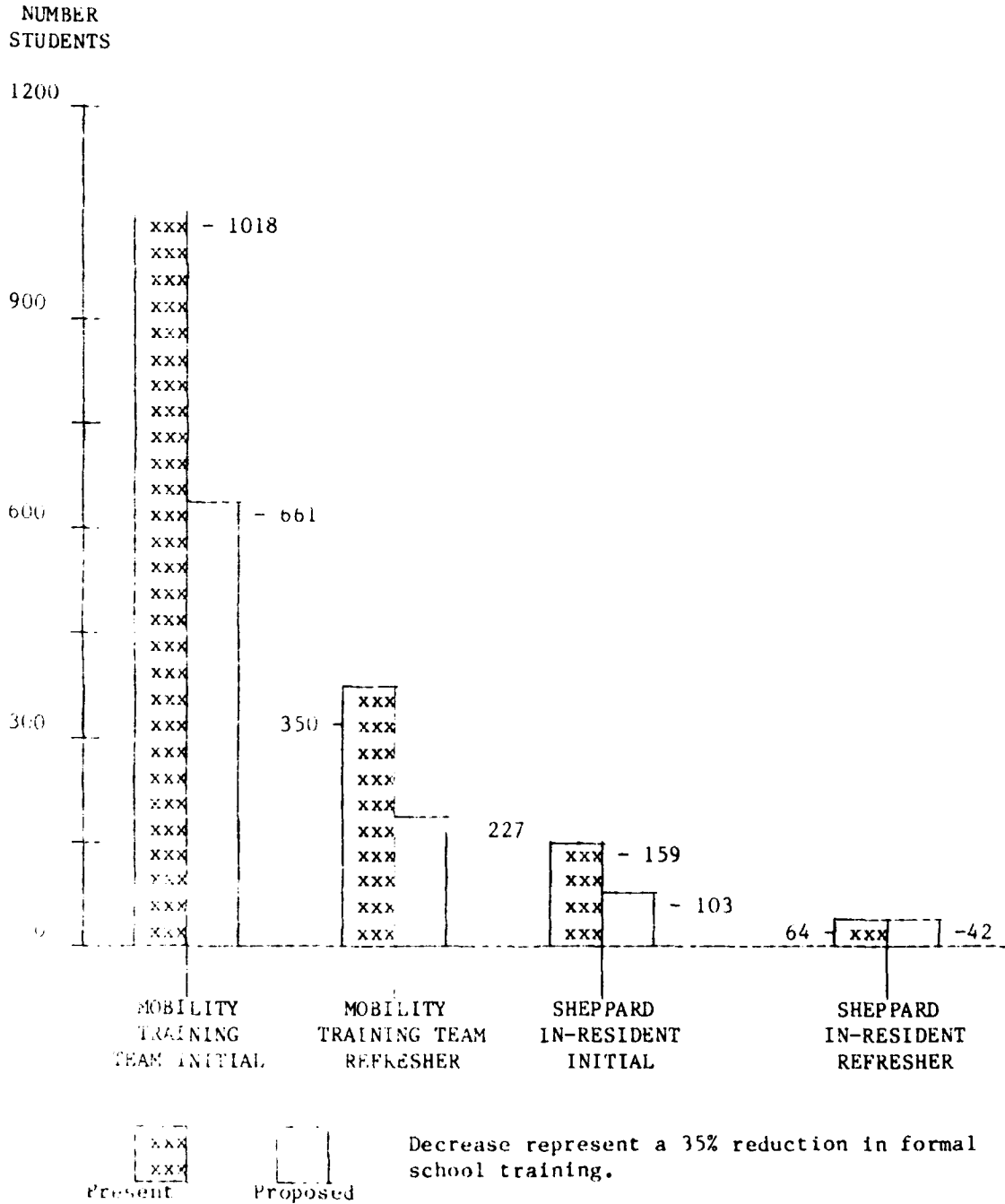


Figure 2

### CHAPTER III - CONCLUSIONS

Hazardous materials training has been an item of interest for sometime. The questions of who needs training and what kind of training, how often and by what method arise frequently. We also hear such questions as, "Are we training too many people and are we training the right people?" Managers at all levels have shared these concerns.

As a result of these concerns, this study was conducted. We concluded that we are overtraining many personnel in the certification of hazardous materials. From this study it was determined that a need does exist for standardized hazardous materials training for mobility certification personnel and handlers/loaders of hazardous material. The extent of this need will vary with command. The requirements for this training exist within AFR 71-4 but are not being fully used. The mobility training program offered by HQ TAC is currently being taught on all TAC bases, and is working. TAC is able to maintain combat readiness standards through their program while sending fewer people away to school. Productivity is also enhanced. The HQ AFRES handlers course is now being distributed. This course is good not only for handlers but for anyone requiring or wanting a general knowledge of hazardous materials.

These stated training options include standardized materials and procedures, and both include annual refresher courses. The programs encourage participation in on-base training for those personnel not requiring formal training. These programs will be a means to train personnel locally using available materials and equipment with the end result of saving Air Force TDY funds.

Based on our analysis, by implementing our recommendations the Air Force will reduce the number of personnel receiving formal training, will not degrade safety, and will save \$1,330,000 over the next five years by avoiding TDY and transportation costs.

In addition, these programs will provide flexibility to commanders in choosing the type of training required for their people. This option alone will save many valuable manhours in productivity.

CHAPTER IV - RECOMMENDATIONS

We recommend the Air Force implement the HQ TAC and HQ AFRES training programs Air Force-wide. These programs will initiate and standardize training for mobility and handlers/loaders of hazardous materials. (OPR: HQ USAF/LET; OCR: MAJCOM/LGs)

We further recommend these changes be incorporated into MAJCOM supplements to AFR 71-4. (OPR: HQ USAF/LET)

Our final recommendation is to incorporate these changes into the present revision of AFR 71-4. (OPR: HQ USAF/LET)



★ 1-18. DOT Exemption 7573:

a. DOD has been exempted from provisions of part 103 of the Federal Aviation Regulations to the extent necessary to permit the transportation of hazardous materials via DOD contract airlift, under DOT-E-7573. A requirement of these exemptions is that the hazardous material must be packed according to, or in excess of, the requirements of Title 49 Code of Federal Regulations (49 CFR) and in compliance with this publication.

b. These exemptions are not applicable to:

(1) Movement of hazardous materials on contract aircraft with passengers or;

(2) Movement through nonmilitary air terminals not identified in amendments to DOT-E-7573.

c. When requirements dictate movements of hazardous materials under conditions described in b(1) and (2) above, the material must be prepared in accordance with 7573.

d. When hazardous materials are loaded aboard any commercial contract cargo aircraft (category "B", LOG-AIR, or QUICKTRANS) operating under DOT-E 7573, the pilot in command must be notified, in writing, that special precautions are being exercised. See paragraph 2-1b(8) for a sample statement which must be included on the hazardous cargo manifest and used in the briefing provided to the pilot.

1-19. Acquisition Responsibilities:

a. All DOD contracts and purchase requests for manufacturing or purchase of material regulate here include the provisions of DAR (formerly ASPR) 7.101-73. Manufacturers should mark all interior and exterior containers of applicable materials regulated by this regulation to show proper shipping name of item, flash point, and percentage concentration of acids and corrosive liquids. For 7573 applicable administrative procedures apply.

b. DOD field contract administration personnel refer questions regarding contracts involving hazardous materials to the sponsoring service, to ensure compliance with regulations.

1-20. Qualification of DOD Certifying Officials:

a. The preparation, packaging, and marking of hazardous materials must be accomplished by personnel most knowledgeable in properly preparing the hazardous material for shipment, except as provided in paragraph 3-5. DD Form 1387-2 certification will be accomplished by the DOD personnel who are qualified as the result of special training specified in c and d below and authorized, in writing, by the individuals' commander. Technical specialists who are qualified as a result of specialty training in the preparation of hazardous materials peculiar to their specialty do not require additional training specified in c below.

NOTE: Local regulations and procedures are recommended whereby DD Form 1387-2 may be certified by the most qualified and readily available personnel for items requiring special preparation such as engines,

motor vehicles, munitions, and missiles. When local procedures dictate certification by transportation or packaging personnel, the technical specialist must provide documentation indicating that the item is prepared for air shipment.

b. Qualified packaging personnel, E-4 or higher, or equivalent civilian job classification are the preferred certifiers. Such personnel must have satisfactorily completed one of the qualifying courses listed in c or d below within the preceding 24 calendar months. In instances where qualified packing and crating personnel are not assigned, traffic management personnel, or other officials designated by their commander to perform the functions of preparation, packaging, acceptance for airlift of hazardous materials, may certify, provided they have completed the training detailed in c or d below within the preceding 24 calendar months.

c. Satisfactory completion of one of the following courses is a prerequisite for personnel identified in a and b above to certify the DD Form 1387-2 for airlift of hazardous cargo.

NOTE: Each course contains essentially the same core information plus special data peculiar to an individual's AFSC, MOS, or job specialty. While any of the following courses satisfies minimum training requirements, supervisors should consult DOD Catalog 5910.16-C, Defense Management Education and Training (DMET), to select the most appropriate course for the individual concerned.

(1) General Transportation of Hazardous Materials (MTMC-I), DARCOM Ammunition School, Savannah IL.

(2) Technical Transportation of Hazardous Materials (MTMC-II), DARCOM Ammunition School, Savannah IL.

(3) Defense Packaging of Hazardous Materials for Transportation, 8B-F7 (JT), resident and onsite, Joint Military Packaging Training Center (JMPTC), Aberdeen Proving Ground MD.

★ (4) Transportation of Hazardous Materials (Air and Surface) (J3AZR 6000 002) Sheppard AFB TX.

(5) Transportation and Storage of Hazardous Materials (A-8C-0023), Naval Transportation Management School, Oakland CA.

(6) Transportation Officer (J30BR6051 000), Sheppard AFB TX.

(7) Transportation Staff Officer (J30AR6011 000), Sheppard AFB TX.

(8) Defense Packaging Management Training Program, 8B-F26(JT) resident, Joint Military Packaging Training Center, Aberdeen Proving Ground MD.

★ (9) Airlift of Hazardous Materials (Initial) (J3AZR 60000 000) (Resident) Sheppard AFB, TX.

★ (10) Airlift of Hazardous Materials (Initial) (J4AZT 60000 000) (Onsite) Sheppard AFB, TX.

(11) Transportation of Hazardous Cargo, Mobile (4 AST 6000 000), Sheppard AFB TX.

d. The following formal courses satisfy the 24 month refresher training requirement only for personnel who have previously successfully completed one of the courses specified in c above:

Attach 1

A1-1

(1) Defense (Refresher) Packaging of Hazardous Materials for Air Transportation, 8B-F35 (JT), Joint Military Packaging Training Center (JMPTC) Aberdeen Proving Ground MD.

(2) Defense (Refresher) Packaging of Hazardous Materials for Air Transportation, 8B-F35 (JT), DARCOM Ammunition School, Savannah IL.

★(3) Airlift of Hazardous Materials (Refresher) (JBAZR 60000 003) (Resident) Sheppard AFB, TX.

★(4) Airlift of Hazardous Materials (Refresher) (JBAZT 60000 003) (Onsite) Sheppard AFB, TX.

NOTE: DMET Training Requirements must be submitted through formal training channels in accordance with the DMET Catalog, DOD 5010.16C.

e. Under a combat situation an aircraft commander or representative designated by the commander may certify and accept a hazardous materials shipment.

f. Deviations to the qualification requirements may be granted by senior commands for a period not to exceed 60 days during which eligible personnel must be trained. Senior command or service will ensure the local transportation function maintains a list of DOD personnel authorized to certify shipments of hazardous materials for transportation by military aircraft for which it has shipping responsibility.

1-21. **Contractor Personnel Certifying Hazardous Materials Shipments.** Hazardous materials offered for transportation by military air must be prepared according to this publication. The contractor must authorize

knowledgeable personnel to accomplish the DD Form 1387-2. In addition, paragraph 173.1 of Title 49 Code of Federal Regulations requires the contractors to instruct each of their officers, agents, and employees having any responsibility for preparing hazardous materials for shipment. Contractors desiring training in this subject will contact the cognizant contract administration office.

★ 1-22. **Training of Other Than Certifying Officials.** Other personnel who perform handling or loading duties will receive initial and annual refresher training. This training will be designed for local units to teach and will be structured to include as a minimum, familiarity with the following subjects:

- a. DOT hazard classifications.
- b. Marking, labels, placards, and forms.
- c. Packaging and handling.
- d. Compatibility and other safety requirements. Current records of individuals training must be maintained.

★ 1-23. **Penalties.** DOD personnel who knowingly violate the provisions of this regulation are subject to disciplinary action based on the seriousness of the offense according to the Uniform Code of Military Justice, the Federal Personnel Manual (FPM) chapter 751, and Agency Code of Penalties (AFR 40-750, AR CRR S1, NAV CMMI 751.1, MC NCPI 750, and DSAR FPM chapter 751).

★ Chapter 3

TACTICAL OR CONTINGENCY AIRLIFT OF HAZARDOUS CARGO

3-1 Purpose. The purpose of this chapter is to define the procedures to be followed for the air movement of hazardous cargo by military or ~~civil~~ reserve air fleet (CRAF) airlift under tactical, contingency, or emergency conditions.

3-2 Applicability. The procedures developed in this chapter are applicable to airlift of hazardous cargo during tactical or contingency airlift operations. Such operations support DOD agencies and allies to provide sustained, immediate, and responsive air movement and delivery of combat personnel and material directly to, within, or from objective areas. These operations are also conducted to provide primary area logistics airlift including movement of supplies, equipment, units, and personnel. Normally, hazardous cargo will not be transported aboard tactical or strategic aeromedical evacuation aircraft; however, in extreme circumstances where loss of life may be involved, casualties may, at the direction of the field commander, be transported aboard aircraft carrying hazardous cargo. Included in the above are mobilities, or executive (ECS) component, unilateral) designed to simulate, evaluate response to tactical or contingency situations requiring emergency airlift:

(a) The major command having operational control of the deploying unit will indicate the applicability of this chapter in the airlift request.

(b) For sustained logistical resupply airlift, theater commanders will reevaluate acceptable risk relative to the mission of a unit to determine if the procedures of this chapter will continue to apply.

(c) The requirements of this chapter are authorized under the following conditions:

(1) A practical ground and flight rules are observed.

(2) Commercial transportation is not required en route.

(3) Each aircraft commander or representative designated by the commander is thoroughly briefed in accordance with chapter 2, paragraph 2-1.

3-3 Special Assignment Airlift Missions (SAAM). Requests for SAAM are processed in accordance with AFR 71-4(C4) and OPNAVINST 4630.18B/MCO 4630.6A. Each request will include a statement from the major command having operational control of the moving unit that the mission meets the requirements of a tactical or contingency situation.

3-4 Packaging:

(a) Department of Transportation (DOT) specification and military specification (Mil Spec) containers prescribed in this publication for specific hazardous materials will be used whenever compliance does not hinder the military objectives of the airlift mission:

(1) When hazardous materials are removed from their specification packaging and stored in the racks or containers of tactical equipment or vehicles, all technical orders and/or technical publications must be complied with to ensure correct storage.

(2) Personnel will be allowed to carry their basic combat load or individual issue of hazardous materials only when they will engage an enemy force immediately upon arrival at the objective:

(a) All hazardous material other than small arms ammunition and nuclear, biological, and chemical (NBC) equipment will be consolidated in one central location on the aircraft and distributed to personnel prior to landing.

(b) All small arms ammunition will remain in the individual carrier (for example, bandoleers, ammo belts, pouches) and all weapons will remain clear until the aircraft has landed.

(c) All NBC equipment will remain in the individual carrier (for example, protective mask bag, mobility bag) and will accompany the individual at all times.

(3) Personnel who will not immediately engage the enemy force but will assume a tactical mission on arrival may deploy with their basic load or individual issue of hazardous materials; however, these items, to include small arms ammunitions, must be consolidated and centrally located in the aircraft prior to departure and again redistributed upon arrival at the objective.

(4) Additional waivers to these package requirements will be submitted in accordance with chapter 2, paragraph 2-3.

(b) When hazardous materials are removed from their original packing under this paragraph, specific reference will be made to 3-4 above when completing DD Form 1387-2 and aircrew personnel must be apprised of the hazards involved.

3-5 Certification. In mobility, tactical or contingency operations, certification of hazardous materials will be accomplished by the qualified specialist or technician who actually prepares, packs, or inspects the item for air shipment. (Examples: automotive maintenance technicians, wheeled or tracked vehicle mechanic, medical technician.) The training standards for these specialists or technicians must include training on the appropriate preparation, packaging, and documentation of those specific items for mobility airlift operations. Currency in hazardous materials preparation will be assured through unit training programs. Each unit commander will authorize in writing those individuals who may certify on the DD Form 1387-2 under the provisions of this paragraph. Personnel qualified under the provisions of chapter 1, paragraph 1-20, may also certify on the DD Form 1387-2 for mobility, tactical, or contingency operations.

3-6 Application of Dagger and Theta Waivers. Au-

**END**

**FILMED**

**11-84**

**DTIC**