

**HEADQUARTERS  
MARYLAND NATIONAL GUARD  
Fifth Regiment Armory  
29<sup>th</sup> Division Street  
Baltimore, Maryland 21201**

**TECHNICIAN PERSONNEL REGULATION 532/550      11 March 2003**

**HUMAN RESOURCES OFFICE (HRO): CIVILIAN PERSONNEL**

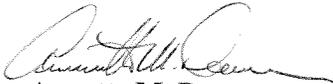
**HAZARDOUS DUTY PAY (HDP) AND ENVIRONMENTAL DIFFERENTIAL PAY (EDP)**

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\*This regulation superseded TPR 532/550

Dated 17 October 86

Official:



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COL, GS, MDARNG  
Human Resources Officer

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**SUMMARY.** This regulation establishes standard requirements for hazardous duty and environmental differential pay that apply to and govern the operating of the Maryland National Guard when not in active Federal Service.

**APPLICABILITY.** This regulation applies to the Maryland National Guard (MDNG).

**INTERNAL CONTROL SYSTEM.** This regulation is subject to the requirements of Title 5 U.S. Code of Federal Regulations, parts 532 and 550. It does contain internal control provisions, but it does not contain checklists for review.

**SUPPLEMENTATION.** Do not supplement this regulation or establish command without approval of MDNG-HRO.

**INTERIM CHANGES.** Interim changes to this regulation are not official unless authenticated by the Human Resources Officer (HRO). Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

**SUGGESTED IMPROVEMENTS.** The proponent agency of this regulation is the HRO. Users will send comments and suggested improvements on DA Form 2028 (recommended Changes to Publications and Blank Forms) directly to the HRO, ATTN: MD-HRO, 5<sup>th</sup> Regiment Armory, 29<sup>th</sup> Division St., Baltimore, Maryland 21202.

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## **CHAPTER 1**

### **GENERAL**

1-1. **PURPOSE**. The purpose of the regulation is to define the situations under which Hazardous Duty Pay (HDP) and Environmental Differential Pay (EDP) are paid to technicians employed by the Maryland National Guard. Specific procedures and guidelines are established to develop HDP and EDP situations. The procedures for processing of HDP or EDP are outlined herein.

1-2. **COVERAGE**.

a. This regulation applies to all Maryland Army and Air National Guard Technicians whether they are employed on a full-time, temporary, part-time or intermittent basis.

b. HDP applies only to General Schedule (GS) Technicians.

c. EDP applies only to Federal Wage Ssystem (WG, WL, WS) technicians.

d. HDP or EDP may not be paid to a technician when the duty has been taken into account in the classification of the technician position.

1-3. **POLICY**.

a. HDP and EDP are additional compensation programs available to technicians for actual exposure to various degrees of hazard, physical hardship and working conditions of an unusually severe nature. Authorization for HDP/EDP does not eliminate the continuing responsibility of all concerned to initiate positive action to eliminate or to reduce danger and risk, which contribute to or cause the hazard, physical hardship or working condition.

b. The existence of HDP and EDP differentials is not intended to condone work practices, which circumvent Federal Safety Laws, rules and regulations.

c. When potential hazards or actual discomfort are identified in a work assignment, consideration must be given to the protection of the technician first. Protective measures which reduce the hazard to the technician and/or tend to relieve his/her discomfort must be made available, if at all practical, and the application of these measures must be enforced. The payment of pay differentials is a measure which admits that no available means can reasonably be employed to eliminate the hazard or to reduce the discomfort to reasonably tolerable levels.

1-4. DISSEMINATION.

Supervisors are responsible to insure that the provisions of this regulation are made known to all subordinate technicians under their jurisdiction. A copy of this plan and all subsequent changes will be provided each supervisor/manager.

1-5. RESPONSIBILITIES.

a. The Adjutant General (TAG) - The approving authority for local environmental differential pay (EDP) situations. This authority is further delegated to the Human Resources Officer (HRO). Decisions on EDP situations are to be based on all relevant factors, including EDP committee recommendations. TAG will appoint an EDP/HDP committee to conduct an annual review of the state's EDP/HDP situations, documentation used to establish situations, physical hardships or working conditions of an unusually severe nature, certification/ desertification of work situations and a review of the annual expenditures for EDP/HDP. The committee will meet at least annually, at the discretion of TAG or as required by the chairman of the committee who will be appointed by TAG.

b. Human Resources Office (HRO) - Responsible for management of the HDP/EDP Program and will insure that appropriate information received from Office of Personnel Management (OPM) and National Guard Bureau is disseminated as required. Upon receipt of requests to establish situations, the HRO will take expeditious action to approve the situation or forward to NGB for approval. All approved situations will be distributed to the field in the form of an Appendix to this regulation. HRO will conduct periodic evaluations of the program and approved situations to insure they are current and valid.

c. Supervisors - Must insure that safety practices and acceptable work procedures are followed. In those instances where a hazardous situation cannot be avoided, a request to establish HDP/EDP situation must be prepared and forwarded through supervisory channels to this office. Upon receipt of a request to establish an HDP/EDP situation, the supervisor must examine the situation and provide his/her recommendations and forward the situation thru supervisory channels to this office. Supervisors and managers do not have the authority to approve or disapprove a request to establish an HDP/EDP situation. Each supervisory/managerial level must forward the request to the next higher level within 10 working days of receipt.

d. Technicians - Each individual is required to work within the dictates of sound safety practices and procedures. In those instances where the application of these practices and procedures cannot eliminate a hazardous situation, technicians must take positive steps to report the situation, and if appropriate, initiate request to establish an HDP/EDP situation. Recommendations will be forwarded through designated supervisory channels.

e. Establishment of HDP/EDP Committees - Two EDP Committees (one ANG/one ARNG) will be established to make determinations as to whether local work situations qualify for differential compensation. The composition of these committees will be established by the Air Commander for ANG and the Command Administrative Officer for ARNG. Each Committee will conduct an annual review of existing approved State HDP/EDP situations to document whether or not conditions continue to warrant environmental differential pay. The committee must take the initiative to identify qualifying situations rather than waiting for determination requests from individual employees. Employees can and should request determination on situations in their work areas. Evaluations of local situations will be conducted in accordance with the following procedures:

(1) The situation will be brought to the attention of the appropriate HDP/EDP Committee.

(2) The committee will investigate the situation to determine if it qualifies for differential compensation.

(3) The committee will submit a written report of its determination and recommendations to the Air Commander or Command Administrative Officer as appropriate for his approval/disapproval. Reports should include all pertinent facts in the format depicted on HRO Form 550.

(4) If approved, the Air Commander or Command Administrative Officer will endorse the report to the HRO for final approval and include it in the appropriate Appendix to this regulation. Disapproved reports will be returned to the HDP/EDP Committee.

(5) Committee investigative reports will be kept on file for audit purposes.

## CHAPTER 2

### **HAZARDOUS DUTY PAY (HDP)**

#### 2-1. INTRODUCTION.

This chapter provides the details necessary to implement HDP in the Maryland National Guard Technician Program, as authorized by Section 5545(d) of Title 5, United States Code (USC); OPM and NGB regulations governing HDP.

#### 2-2. COVERAGE.

Regulations establish a schedule of pay differentials for irregular or intermittent duty involving unusual physical hardship or hazard. The law regarding HDP applies only to General Schedule (GS) technicians serving in full-time, part-time or intermittent GS position.

#### 2-3. RESTRICTIONS.

Hazardous duty pay will be paid in accordance with OPM regulations as explained herein. In order for an individual to be eligible for HDP, he/she must be performing hazardous duties or duties involving physical hardship. These situations will be established by the HRO for The Adjutant General of Maryland and will be IAW 5 CFR, Part 550, Subpart 1.

#### 2-4. DEFINITIONS.

a. **Physical Hardship:** A duty which may not in itself be hazardous but which causes extreme physical discomfort or distress and which is not adequately alleviated by protective or mechanical devices. Situations which could qualify for HDP are:

(1) Duties requiring exposure to extreme temperatures for a long period of time.

(2) Duties involving arduous physical exertion, such as a duty, which must be performed in, cramped conditions.

(3) A duty involving exposure to fumes, dust or noise, which may cause nausea, skin, eye, ear or nose irritation.

b. **Hazardous duty:** A duty performed under circumstances in which an accident could result in serious injury or death, such as a duty performed on a high structure when adverse conditions such as darkness, lightening, steady rain or high wind velocity exist.

c. **Hazardous Pay Differential:** Pay for the performance of irregular or intermittent hazardous duty or duty involving physical hardship. HDP applies only to those situations where the

individual is not fully compensated for the duty in his/her current technician position description and the resulting GS grade.

#### 2-5. ESTABLISHING HAZARD DIFFERENTIAL SITUATIONS.

a. Individual technicians or technician supervisors may submit a recommendation to establish an HDP situation. These recommendations must be forwarded through supervisory channels. Each intermediate supervisor will indicate his concurrence or non-concurrence. Under no circumstances may an intermediate supervisor deny the recommendation. All recommendations must be forwarded to the HRO for review and approval/disapproval. The Adjutant General will make the final approval of the situation.

b. Recommendations to establish new situations or to change existing situations must address the conditions indicated above and must be submitted using HRO Form 550.

#### 2-6. AUTHORIZATION TO PAY HDP.

a. The supporting pay branch is authorized to pay HDP when:

(1) There is an approved HDP situation.

(2) The supervisor has processed the required documentation in accordance with NGB Pam 37-105/AFM 177-372A, Vol. II.

b. HDP may only be paid to technicians who are assigned hazardous duty or duty involving physical hardship. HDP is not authorized for volunteers, that is, technicians who undertake a duty without proper authorization, either expressed or implied.

#### 2-7. PAYMENT OF HDP.

a. Hazardous Pay Differentials may not exceed an amount equal to 25% of the rate of basic pay applicable to the technician. Hazardous pay is in addition to any additional pay or allowance to which the technician becomes entitled. It shall not, however, be used to compute any additional pay or allowance payable under another statute. If a technician is being paid a retained rate, that rate is his rate of basic pay for purposes of computing hazard pay. HDP is not subject to the limitation placed on premium pay by Section 5547 of Title 5 USC (this section limits other premium pay to an amount which will not cause total pay in any period to exceed the maximum rate for grade GS-15).

b. When a technician performs duty for which hazardous pay differential is authorized, he will be entitled to hazardous differential pay for only the actual time in a pay status on the day in which the duty was performed. When a Technician performs a duty for which a hazard pay differential is authorized, the agency will pay the hazard pay differential for all of the hours in

which the employee is in a pay status on the day the duty was performed. If the technician is in a non-paid leave status for part of the day that he normally would perform hazardous duty, he is entitled to hazardous differential for the paid hours only. Hours in a pay status for work performed during a continuous period over two days must be considered to have been performed on the day on which the work began, and the allowable differential must be charged to that day.

c. Payment of hazard differential is authorized for technicians only while they are in a pay status. Appendix A, Part 550, 5 CFR, provides guidance for determining proper rates.

#### 2-8. LIMITATIONS ON USE OF HDP.

a. HDP will be terminated when adequate safety precautions have reduced the hazard to a negligible level.

b. Relationship to other pay - HDP is in addition to any other pay and allowances to which a technician is entitled. It is not part of basic pay and may not be used to compute any additional pay payable under another law.

## **CHAPTER 3**

### **ENVIRONMENTAL DIFFERENTIAL PAY (EDP)**

#### **3-1. INTRODUCTION.**

This chapter provides the details necessary to implement an Environmental Differential Pay (EDP) Program in the MDNG (Army/Air) Technician Program as authorized by Title 5, USC, OPM, and NGB regulations governing EDP.

#### **3-2. COVERAGE.**

- a. Environmental Differential Pay is applicable only to Federal Wage System Technicians as authorized by OPM, NGB and this regulation.
- b. EDP will be paid in accordance with this regulation and only for those situations indicated in Appendix A and B.
- c. EDP is authorized in accordance with section 5343 (c)(4) of Title 5, United States Code (USC), entitlements to EDP shall be paid when an employee is exposed to a working condition or hazard that falls within one of the categories approved by the Office of Personnel Management. (See Appendix A to Subpart E of Part 532, 5 CFR)

#### **3-3. BASIS FOR EDP.**

a. Environmental differentials are paid for those work situations in which the technician is exposed to a potentially severe hazard which has a real probability of occurrence and for which no adequate precautions or protective facilities are possible to minimize or practically eliminate physical injury, illness or death to the worker should the potential of the situation actualize. Examples of unusually severe hazards for which EDP would be authorized are:

- (1) A high structure when the hazard is not eliminated by protective facilities such as scaffolding and enclosed ladders.
- (2) A high open structure when adverse conditions such as darkness, lightning, steady rain, snow, sleet, ice, or high wind velocity exist.
- (3) Exposure to an unusually severe physical hardship under circumstances which cause significant physical discomfort or distress not eliminated by protective devices.

(4) Exposure to an unusually severe working condition under circumstances involving exposure to fumes, dust, or noise which cause significant distress or discomfort in the form of nausea, skin, eye, ear or nose irritation; or conditions which cause abnormal soil of body and clothing.

b. Environmental situations do not qualify for differential compensation simply on the basis that an element of hazard or discomfort has been identified in a work situation. The hazard must involve a real threat. The hazard must have no effective measures available to protect the technician from attendant discomforts or threat of injury. Significant actual discomfort arising from the work situation must be experienced by the technician with no effective means available to relieve the discomfort. The hazard or discomfort in a job situation must be such that the technician is exposed to unrelieved discomfort or to potential injury or harm significantly beyond that experienced by other technicians or the general population from the same source.

c. If no effective measures are available to protect the technician from the effects of the work environment, and real injury or serious discomfort is experienced by the worker, appropriate compensation through EDP must be provided. However, the essential requirement for the work assignment, which involves potential hazard or serious discomfort, must be determined first. Second, such protection as is available must be applied to reduce the effect of the adverse environmental conditions to whatever minimum is possible. Third, the number of technicians exposed to a potential hazard or severe discomfort should be limited to the absolute minimum necessary to accomplish the work assignment.

#### 3-4. PAYMENT FOR EDP SITUATIONS.

a. An environmental differential is paid to a Federal Wage System technician who is exposed to a hazard, physical hardship, or working condition of an unusually severe nature. Approved situations are listed in Appendix A and B to this regulation.

b. These payments are made only in those instances where the exposure, physical hardship or working conditions of an unusually severe nature are not taken into consideration in the job-grading process, and additional pay for exposure to these conditions is provided only through the authorized environmental differentials in this regulation.

c. A technician subjected at the same time to more than one hazard, physical hardship, or working condition of an unusually severe nature shall be paid for that exposure which results in the highest differential but shall not be paid more than one differential for the same hours worked.

d. EDP is authorized only when technicians are in a pay status. Overtime, which is worked for compensatory time off, is not a paid status for this purpose. The Comptroller General has ruled that compensatory time worked as applies to technicians, is not a paid status, therefore, EDP is not authorized to be paid to personnel who are in a compensatory pay status.

### 3-5. ESTABLISHMENT OF ENVIRONMENTAL DIFFERENTIALS.

a. Environmental differentials are stated as percentage amounts and are authorized for categories of exposures. The amount of the environmental differential which is payable is determined by multiplying the percentage rate authorized for the described exposure by the second rate for grade WG-10 on the current regular nonsupervisory wage schedule for the area, counting one-half cent and over as a full cent. The resulting cents-an-hour amount is paid uniformly to each wage technician in the area who qualified for the authorized environmental differential, regardless of the grade level of the wage technician or the Federal Wage System Wage Schedule on which the technician is paid.

b. Changes to categories indicated in the approved situations will be effected as necessary. Recommendations for changes to the approved situations or requests to establish new situations will be processed thru supervisory channels to this office. Submission should include information about the hazard, physical hardship, or working condition, showing:

(1) The nature of the exposure so as to show clearly that the hazard, physical hardship, or working condition, which results from that exposure, is of an unusually severe nature.

(2) The degree to which the employee is exposed to the hazard, physical hardship or working condition of an unusually severe nature.

(3) The period of time during which the exposure will continue to exist.

(4) The degree to which control may be exercised over the physical hardship hazard or working condition of an unusually severe nature. The request shall also include the rate of environmental differential recommended to be established.

c. Recommendations to establish new situations or to change existing situations must address the conditions indicated above and must be submitted on HRO Form 550.

### 3-6. WHEN EDP IS PAID.

a. When a technician is entitled to an environmental differential, which is paid on an actual exposure basis, he/she shall be paid a minimum of one-hour differential pay for the exposure. For exposure beyond one hour, the technician shall be paid in increments of one-quarter hour each 15 minutes and portion thereof in excess of fifteen minutes, (i.e., if a technician is exposed for 1 hour and 6 minutes, he/she will be paid EDP for 1 hour and 15 minutes).

b. When a technician is exposed at intermittent times during a day to an unusually severe hazard, physical hardship or working condition for which the environmental differential is paid on an actual exposure basis, each exposure is considered separately and the amount of time exposed is not added together before payment is made for exposure beyond one hour duration, except that pay for the environmental differential may not exceed the number of hours of active duty performed by the technician on the day of exposure.

c. When a technician is exposed to an unusually severe hazard, physical hardship, or working condition for which an environmental differential is payable on a shift basis and on the same day he/she is exposed to an unusually severe hazard, physical hardship, or working condition for which an environmental differential payable on an actual exposure basis at a higher rate is authorized, he/she shall be paid the environmental differential on the basis of the actual exposure, and the environmental differential on the basis of the shift for the remaining hours in the pay status that day.

d. In computing environmental pay, entitlement begins with the first instance of exposure and ends one hour later (except when exposure continuing beyond one-hour entitlement ends at the end of the last full quarter-hour in which exposure occurs). All exposures occurring during the period of entitlement must be considered; however, payment is computed for the period on the basis of the highest differential rate authorized during the period of entitlement.

e. Environmental differential pay during absences of leave.

(1) Environmental differential pay is included as part of a technician's basic rate of pay for periods of paid leave (annual leave, sick leave, administrative leave, etc.) under the following circumstances:

(a) When a technician is exposed to a situation for which EDP is authorized on the basis of hours in a pay status, that differential will be paid during a period of absence on paid leave on the day on which the exposure occurs.

(b) When a technician is exposed to a situation for which EDP is authorized on an actual exposure basis, that differential will be paid during a period of absence on paid leave only to the extent that the leave is within the minimum payment periods of one hour's differential pay for the exposure or beyond that in increments of one-quarter hour.

(2) A technician will not be paid EDP during a period of absence on paid leave on any days in which he/she would not have been exposed to situations for which an environmental differential is authorized.

d. Because EDP is paid only on a day on which a technician is exposed to a situation for which the differential is authorized, it is not included in lump sum payment for annual leave or in computing severance pay.

## **CHAPTER 4**

### **DOCUMENTATION OF HDP/EDP**

4-1. ARNG. The supporting payroll office receives documentation of HDP/EDP Form 104 attached to T&A cards, as prescribed in NGB Pam 37-105. This process is required in order to calculate payments of HDP/EDP. The Certificate (NGB Form 104 on E-Forms) will be completed as follows:

- a. Enter name, social security account number, unit and location of the technician concerned.
- b. List the category number of exposure. Show all exposures as they occur each workday. When exposure occurs under more than one category, intermittently for the same category or concurrently with more than one category on the same workday, list each individual exposure separately to include clock times.
- c. Duration of exposure- List the date, inclusive clock time and actual elapsed time in hours and minutes of each category of exposure shown in the preceding column. For example, 1 November 2001, 1300-1525; 2 hours, 25 minutes.
- d. The signature and title of authorizing official must be an official designated for the particular situation listed in Appendix A and B, to certify the exposure for pay purposes.
- e. A summary of Environmental Differential Pay Hours will be completed by the supporting payroll office. These categories are established in accordance with Appendix A to Subpart E of Part 532, 5 CFR, and are listed in paragraph 4-1(b) above.

4-2. ANG. The supporting payroll office receives documentation of HDP/EDP by use of the T&A cards, as prescribed in AFM 177-372A, Vol. II. The following information is required:

- a. Enter name, social security account number, unit and location of the technician concerned.
- b. List the category number of exposure- Show all exposures as they occur each workday. When exposure occurs under more than one category, intermittently for the same category or concurrently with more than one category on the same workday, list each individual exposure separately to include clock times.
- c. Duration of exposure- List the date, inclusive clock time and actual elapsed time in hours and minutes of each category of exposure shown in the preceding column. For example, 1 November 2001, 1300-1525; 2 hours, 25 minutes.

d. The signature and title of authorizing official must be an official designated for the particular situation listed in Appendix A and B, to certify the exposure for pay purposes

e. A summary of Environmental Differential Pay Hours will be completed by the supporting payroll office. These categories are established in accordance with Appendix A to Subpart E of Part 532, 5 CFR, paragraph 4-1(5) above.

**CHAPTER 5**

**EDP/HDP SITUATIONS**

**MARYLAND AIR NATIONAL GUARD**

<u>CATEGORY</u>	<u>EXPOSURE SITUATION</u>	<u>EDP RATE</u>	<u>BASIS OF EXPOSURE</u>	<u>EFF DATE</u>	
1.	Work in Fuel Storage Tanks	A-1 Fuels Mgmt	8%	Hrs in Pay Status	29 Sep 00
2.	Loading/Handling of Explosions & Incendiary Materials	A-2 Weapons Element	4%	Actual Exposure	7 Feb 01
3.	Egress Systems Maintenance/Handling Of Explosive Devices And Incendiary Material	A-3 Egress Systems	4%	Actual Exposure	26 Feb 02
4.	Munitions Maintenance/Handling Of Explosive Devices And Incendiary Material	A-4 Munitions	4%	Actual Exposure	8 Aug 02

## APPENDIX A-1

### ENVIRONMENTAL DIFFERENTIAL PAY PLAN

#### A/S 32 R-11 FUEL SERVICING TANK TRUCK

#### WORK IN FUEL STORAGE TANKS – 8%

Category of Exposure as defined under Paragraph 9, Part II, Appendix J

1. Justification: The fuel tank assembly of the A/S 32 R-11 Fuel Servicing Tank Truck requires visual inspection annually of the interior and every three years (in conjunction with the filter separator, filter element change) the cargo tank interior/welds thus requiring entry to the tank.
  - a. The Technician performing such duties must work in a confined space and often-strained body position as they crawl in and out of the tank assembly baffles performing inspections and/or maintenance/repair. The atmosphere within the tank assembly is both toxic and flammable from the fuel and chemicals involved. This exposure is above Permissible Exposure Levels (PEL) thus requiring the need for protective clothing and equipment to reduce skin damage and inhalation of toxic vapors.
  - b. Work performed on the dispensing or storage system is accomplished within a highly explosive atmosphere, in tight, poorly ventilated areas within or around the vehicle. Draining of jet fuel from piping and valves increases the risk of explosion from static electricity. Normal everyday wear and tear compounded with exposure to natural elements increase the need for repair of fuel systems and their controlling components.
2. Determination: When technicians work under conditions which require a tyvek suit, PVA gloves, and breathing apparatus, in this instance, “Full Face Respirator” because all or part of the oxygen in the atmosphere has been displaced by toxic vapors and failure of the breathing apparatus would result in serious injury or death within the time required to leave the fuel tank assembly, EDP would be appropriate. In short, risks associated with this work involve potential not only for failed respiration, but also, risk of the Technician succumbing to heat within the tank baffles thereby necessitating need for emergency response to extract the Technician in a timely manner to prevent serious injury or death. Of additional concern is the de-puddling and purging issue resulting from fuel left in the tank, which may contribute, to a flashover if static electricity is present.
3. Based on: Basis of Hours in Pay Status
4. Approving Authority: Local EDP/HDP Committee

## APPENDIX A-2

### ENVIRONMENTAL DIFFERENTIAL PAY PLAN

#### A-10 MUNITIONS LOADING/HANDLING OF EXPLOSIONS AND INCENDIARY MATERIALS

##### LOW DEGREE HAZARD 4%

Category of exposure as defined under CFR, Paragraph 3, Part II, Appendix J

1. Justification: This is an area of aircraft maintenance where extensive damage to property, loss of life, and destruction of valuable weapons systems can occur.
  - a. Technicians load and unload, 30mm ammo and BDU-33 bombs, Impulse Carts, Launcher Rockets (LAU-131A) Chaff/Flares, 30 mm ammo and BDU-33 bombs are percussion activated. Impulse Carts, Rockets and Chaff/Glares are electrically primed, and are subject to ignition by static electricity, electromagnetic energy, or percussion. Progressive detonation may occur when ignited or involved in fire.
  - b. Technicians perform maintenance and handling of munitions, explosive devices, and solid propellant rockets and motors. Explosives are subject to ignitions by static electricity, electromagnetic energy, and percussion.
2. Determination: Although safety practices are used and in force, (e.g., personnel grounding before handling electrically primed munitions, aircraft stray voltage checks, and static free clothing), all hazards cannot be eliminated. Some explosive devices may be unserviceable during loading, unloading, and inspection. Also a 100% static free condition cannot be attained because you cannot safe a system that is ANALOG. EDP for personnel performing these duties is appropriate, and they should be compensated when performing prescribed duties.
3. Based on: Basis of Hours in Pay Status
4. Approving Authority: Local EDP/HDP Committee

### APPENDIX A-3

#### ENVIRONMENTAL DIFFERENTIAL PAY PLAN

#### EGRESS SYSTEMS MAINTENANCE/HANDLING OF EXPLOSIVE DEVICES AND INCENDIARY MATERIALS

LOW DEGREE HAZARD 4%

Category of exposure as defined under CFR, Paragraph 3, Part II, Appendix J,

1. Justification: This is an area of aircraft maintenance where extensive damage to property, loss of life, and destruction of valuable weapons systems can occur.
  - a. Technicians perform required maintenance, inspections, and modifications of assigned aircraft egress systems. The removal and installation of some initiators and rocket catapults requires handling these explosive devices without safety pins or caps installed for a period of time.
  - b. Technicians perform required handling, maintenance, and storage of explosive devices and solid propellant rocket catapults. Egress maintenance shop is maintained as an explosive storage facility in accordance with Air Force Regulation 127-100 (Explosives Safety Standards, 3 Aug 90).
2. Determination: Personnel may be compensated accordingly when directed to perform duties within the scope of stated criteria.
3. Date of Determination: 26 February 2002
4. References: MDNG TPR 532/550 & FPM Supplement 532-1  
TO 1A-10A-2-95JG-1  
TO 11P3-1-7  
AFM 91-201
5. Approving Authority: Local EDP/HDP Committee

## APPENDIX A-4

### ENVIRONMENTAL DIFFERENTIAL PAY PLAN

#### MUNITIONS

#### LOADING/HANDLING OF EXPLOSIVES AND INCENDIARY MATERIALS

Category of Exposure as defined under Paragraph 9, Part II, Appendix J

1. Justification: The assembly of chaff/flare canisters, BDU-33 bombs, 2.75 Rockets and the processing of 30mm ammunition presents a potential risk to Munitions Storage personnel.
  - a. During the process of assembling chaff/flare canisters, live squibs are handled with no safety devices with the exception of a static discharge pad. This squib is an electrically initiated cartridge that contains a small amount of explosive. Also, the flares must be loaded into the same canisters using virtually the same process aforementioned with squibs. However, the flare consists of pellets, which burn at 2 million-candle power, and produces hot gases and particles that generate infrared radiant energy. Needless to say, accidental detonation can cause severe injury or death. There have been recorded accidents at other units throughout the years where munitions personnel have been severely maimed or killed as a result of handling the same type of flares used at the 175<sup>th</sup> Wing.
  - b. Ordnance Equipment Mechanics inspect, assemble BDU-33 bomb bodies with MK-4 MOD 3 Signal cartridges. The signal cartridges are electrically primed and consist of smokeless powder and a shotgun shell primer. BDU-33's are also assembled with a CXU-3A/B cartridge. This cartridge contains 2 grams of smoke powder and a glass vial containing 17cc's of Titanium Tetrachloride, which is highly toxic in liquid or vapor form. When liquid titanium tetrachloride reacts to air as a result of leakage or damage to the cartridge housing, white smoke can be produced in varying quantities and concentrations. Toxic by-product of this reaction is hydrochloric acid, which in liquid or vapor form can be harmful to human tissue externally and internally.
  - c. The Ordnance Equipment Mechanics also process 30mm ammunition for inspection and accountability. During this inspection process, members have handled damaged 30mm rounds that make the stability of the round questionable. Sometimes, 30mm rounds are damaged so bad, that gunpowder may be leaking from the round. This obviously poses a situation where our employees are exposed to a highly potential detonation of the gunpowder.
  - d. Ordnance mechanics are also required to assemble and inspect 2.75 inch MD66 Rockets. Rocket motors and rocket warheads are shipped separately to the base and assembled at the base. Rocket motors are electrically initiated with less than one volt. Static electricity will fire a motor. During assembly the only safety feature used is a grounding strap to eliminate static electricity. Both types of warheads contain explosive, the M274 contains a smoke charge similar to the

MK4 Signal. However, the other warhead used at the 175<sup>th</sup> Wing is a White Phosphorous, which presents the most hazardous of all normally used munitions. The following are two excerpts directly from our Technical Orders. "White Phosphorous is a spontaneous flammable chemical and can cause grave injury to personnel and damage to material when exposed to open atmosphere. If an operating procedure is not strictly observed, it could result in injury to, or death of, personnel or long-term health hazard to personnel." Therefore, if a warhead is accidentally punctured by dropping the item or bumped against something, it could result in severe injury to personnel.

2. Determination: CFR 532-1, Part II, Paragraph 2, 3b,. Explosives and incendiary material (high degree) hazard, is defined as working with or in close proximity to explosives and incendiary material which involves potential personal injury such as permanent or temporary, partial or complete loss of sight or hearing, partial or complete loss of any or all extremities; or other partial or total disabilities of equal severity; and or loss of like resulting from work situations where protective devices and or safety measures either do not exist or have been developed but have not practically eliminated the potential for personal injury.
3. Protective devices and or safety measures have been developed but have not practically eliminated the potential for personal injury.
4. Based on Actual Exposure
5. Date of Determination: 8 Aug 2002
6. Approving Authority: Local EDP/HDP Committee

REQUEST FOR HAZARDOUS DUTY OR ENVIORNMENTAL  
DIFFERENTIAL PAY

DETERMINATION

<p>TO:</p> <p>State Differential Pay Committee Department of Military Affairs Human Resource Office Fifth Regiment Armory Baltimore, Maryland 21202</p>	<p>FROM:</p>
<p>The following local work situation is submitted in accordance with Technician Personnel Plan 500. Hazardous Duty and Environmental Differential Pay Plan, for determination of entitlement to differential pay under provisions of: (mark one)</p> <p style="text-align: center;"> <input type="checkbox"/> Hazardous Pay Differential   <input type="checkbox"/> Environmental Pay Differential         </p>	
<p>1. Category:</p>	<p>2. Date Identified:</p>
<p>3. DETAILED DESCRIPTION OF SPECIFIC SITUATUON:</p>	
<p>4. DEGREE TO WHICH TECHNICIAN IS EXPOSED TO SITUATION:</p>	

5. LENGTH OF TIME SITUATION WILL EXIST:		
6. DEGREE OF CONTROL OVER SITUATION:		
7. RECOMMENDED RATE:	8. FOR HPD ONLY: (Job No., Series and Grade):	
	9. FOR EDP ONLY:	
<b>Basis of Pay</b>	Actual Exposure Part 1, Annex D <input style="width: 40px; height: 20px;" type="text"/>	All Hours of Shift Part 2, Annex D <input style="width: 40px; height: 20px;" type="text"/>
10. RECOMMENDED OFFICIALS AUTHORIZED TO CERTIFY FOR EXPOSURE AND PAY:		
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>		
<b><u>REQUESTING OFFICIALS</u></b>		
<u>MANAGEMENT REP</u>	<u>LABOR ORGAN REP</u>	<u>SAFETY OFFICER</u>
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Signature)	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Signature)	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Signature)
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Typed Name)	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Typed Name)	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Typed Name)
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Date)	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Date)	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> (Date)

