

STATE OF WEST VIRGINIA OFFICE OF THE ADJUTANT GENERAL 1703 COONSKIN DRIVE CHARLESTON, WEST VIRGINIA 25311-1085

NGWV-HRO-LRS

15 November 2017

MEMORANDUM FOR ALL CONCERNED

FROM: Environmental Differential Pay / Hazardous Duty Pay Committee

SUBJECT: Environmental Differential Pay (EDP)

The intent of the EDP (Environmental Differential Pay) committee is to provide the WVNG with a fair and workable Environmental Differential Pay (EDP) plan in a timely manner so that all technicians and supervisors are fully aware of entitlements to EDP I/A/W WVHRO 532-1 and WVHRO 550-2.

Title	Name	Position
President President President Stewart LRS HRS	Robert Webb Anthony Meadows Adam Harper Charles Workman J. Allen Martin Brittany Willard	Shenandoah Chapter Mountain State Chapter Mountaineer Chapter Mountaineer Chapter HRO HRO

CATEGORY OF EXPOSURE: Pressure Chamber and Centrifugal Stress. Simulating Cabin Pressure at Altitude while on the Ground.

DIFFERENTIAL RATE REQUESTED: 8%

AUTHORITY: Appendix A, CFR 532.511 Part II

UNIT/ACTIVITY: WVNG

BASED ON: Payment on Basis of Hours in Pay Status

SITUATION: Exposure in pressure chamber which subjects employee to physical stresses or where there is potential danger to participants by reason of equipment failure or reaction to the test conditions.

- 1. Participating in altitude chamber studies ranging from 5500 to 45,700 meters (18,000 to 150,000 feet) either as subject or as observer exposed to the same conditions as the subject.
 - a. Personnel should be compensated accordingly when directed to perform tasks under above mentioned conditions.

POSITION NUMBER AND TITLE POSITIONS TO BE EVALUATED:

D1549P01 Aircraft Electrician and D1550P01 Aircraft Electrician Supervisor

- D1525000 Aircraft Mechanic and D1635000 Aircraft Engine Mechanic
- D1637000 Aircraft Engine Mechanic Leader
- D1356000 Aircraft Pneudraulic Systems Mechanic

D0097000 Aircraft Pneudraulic Systems Mechanic

OFFICIAL(S) REQUESTING AUTHORIZATION TO ASSIGN AND CERTIFY EXPOSURE FOR PAY PURPOSES:

D1550P01 Aircraft Electrician Supervisor

- D0806000 Aircraft Mechanic Supervisor
- D1634000 Aircraft Engine Mechanic Supervisor

CATEGORY OF EXPOSURE: Work in fuel storage tanks.

DIFFERENTIAL RATE REQUESTED: 8%

AUTHORITY: Appendix A, CFR 532.511 Part II

UNIT/ ACTIVITY: WVNG

BASED ON: Payment on Basis of Hours in Pay Status

SITUATION: When inspecting, cleaning or repairing fuel storage tanks where there is no ready access to an exit, under conditions requiring a breathing apparatus because all or part of the oxygen in the atmosphere has been displaced by toxic vapors or gas, and failure of the breathing apparatus would result in serious injury or death within the time required to leave the tank.

1. Personnel should be compensated accordingly when directed to perform tasks under above mentioned conditions.

POSITION NUMBER AND TITLE POSITIONS TO BE EVALUATED:

D1356000 Aircraft Pneudraulic Systems Mechanic

D0097000 Aircraft Pneudraulic Systems Mechanic

D1371000 Sheet Metal Mechanic (Aircraft)

- D2321000 Non-Destructive Tester
- D1489000 Machinist
- D1493000 Machinist
- D1549P01 Aircraft Electrician and D1550P01 Aircraft Electrician Supervisor

D1525000 Aircraft Mechanic and D1635000 Aircraft Engine Mechanic

OFFICIALS REQUESTING AUTHORIZATION TO ASSIGN AND CERTIFY EXPOSURE FOR PAY PURPOSES:

- D0806000 Aircraft Mechanic Supervisor
- D0789000 Fabrication Supervisor
- D0791000 Sheet Metal Mechanic Supervisor

CATEGORY OF EXPOSURE: Explosives and incendiary material—high degree hazard. Flotation Equipment Deployment System (FEDS) components, Arm Fire Initiators and Pressure Cartridges.

DIFFERENTIAL RATE: 8%

AUTHORITY: Appendix A, CFR 532.511 Part II

UNIT/ACTIVITY: 167 AW

BASED ON: Payment on Basis of Hours In Pay Status

SITUATION: 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; other partial or total disabilities of equal severity; and/or loss of life resulting from work situations wherein protective devices and/or safety measures either do not exist or have been developed but have not practically eliminated the potential for such personal injury. Normally, such work situations would result in extensive property damage requiring complete replacement of equipment and rebuilding of the damaged area; and could result in personal injury to adjacent employees.

1. Personnel should be compensated accordingly when directed to perform tasks under above mentioned conditions.

POSITION NUMBER AND TITLE POSITIONS TO BE EVALUATED:

D1549P01 Aircraft Electrician and D1550P01 Aircraft Electrician Supervisor

D1435000 Ordinance Equipment Worker

OFFICIAL(S) REQUESTING AUTHORIZATION TO ASSIGN AND CERTIFY EXPOSURE FOR PAY PURPOSES:

D1550P01 Aircraft Electrician Supervisor

D1444000 Aircraft Maintenance Supervisor

CATEGORY EXPOSURE: Dirty Work

DIFFERENTIAL RATE: 4%

AUTHORITY: Paragraph 4(a) (b) (c), Part I, Appendix A, CFR 532.511

UNIT/ACTIVITY: WVNG

BASED ON: Actual Exposure

SITUATION:

1. Aircraft Mechanic personnel are required to wash Aircraft every 120 days. During the wash process personnel are required to wash the entire exterior of the aircraft, which generally takes one shift to complete. The aircraft soap has the potential to cause mild skin irritations if exposure is over an extended amount of time, in accordance with Safety Data Sheet for stock number 6850-01-429-2371. Rain suits are provided for protection, but do not alleviate all instances of clothing from becoming soiled.

2. The majority of the wash is located overhead of the personnel accomplishing it. Body and clothing become soiled as water and soap enter the rain gear through sleeves as well as the collar. This causes clothing underneath to become soaked with water and aircraft soap. The potential also exists for water or soap to come in contact with the face.

3. Automotive mechanics at times need to pressure wash an engine or area of repair to correctly identify oil leaks or confirm a satisfactory repair. Despite appropriate PPE water, mud, oil, and other debris get on personnel causing the body and clothing to be soiled and possibly contact the face.

DETERMINATION: Personnel should be compensated accordingly when directed to perform the tasks described above. Incumbents of the following positions are eligible for EDP within the scope of the stated criteria.

D1366000 Aircraft Mechanic

D1525000 Aircraft Mechanic

D1193000 Surface Maintenance Repairer

D1194000 Surface Maintenance Mechanic

OFFICIALS AUTHORIZED TO ASSIGN AND CERTIFY EXPOSURE FOR PAY PURPOSES:

D0734000 Aircraft Mechanic Supervisor

D1290000 Surface Maintenance Mechanic Supervisor

CATEGORY EXPOSURE: Explosive and Incendiary Material Flare Upload/Download

DIFFERENTIAL RATE: 8%

AUTHORITY: Paragraph 2, Part II, Appendix A, Subpart E, CFR 523.511

UNIT/ACTIVITY: WVNG

BASED ON: Hours in Pay Status

SITUATION:

- 1. Individuals will be required to upload and download class 3 and 4 munitions onto aircraft. Working with or in close proximity to explosive and incendiary material which involves potential personal injury such as permanent or temporary, partial or complete loss of sight or hearing, severe burns, or complete loss of life resulting from work situations wherein safety measures have been developed but do not practically eliminate the potential for such personal injury. Stray voltage is always a factor when uploading and downloading munition and load crews must constantly ground themselves before handling the magazines. Even though the magazines have a retainer plate to secure the munition, the squibs are exposed for potential stray voltage. Much effort is incorporated to mitigate hazards, but there will always be the potential hazard from the stray voltage. Individuals are also exposed to the direct path of the munition when upload/downloading aircraft.
- 2. This hazard increases when adverse weather conditions exist (i.e., high winds, rain, ice, snow and sleet), by adding additional clothing that may contain unsuitable material. This increases potential for detonation due to static electricity. These conditions could also increase the hazard by creating an environment for mishandled or dropped magazines while performing the duties noted above.

DETERMINATION: Personnel performing the upload and download class 3 and 4 munitions onto aircraft should be compensated when required to perform the above task under the stated hazardous criteria. Incumbents of the following positions are eligible for EDP:

a. Avionics Section

D2284P01 Electronics Integrated Systems Mechanic Supervisor D1341000 Electronics Integrated Systems Mechanic

b. Aircraft Generation Squadron

D1525000 Aircraft Mechanic D1366000 Aircraft Mechanic

OFFICIAL(S) AUTHORIZED TO ASSIGN AND CERTIFY TO EXPOSURE FOR PAY PURPOSES:

a. Avionics Section

D2284P01 Electronics Integrated Systems Mechanic Supervisor

b. Aircraft Generation Squadron

D0734000 Aircraft Mechanic Supervisor D1444000 Aircraft Mechanic Supervisor

CATEGORY EXPOSURE: Lasers (Class IV) Large Aircraft Infrared Countermeasure (LAIRCM) And Laser Wire Marking Equipment

DIFFERENTIAL RATE: 4 %

AUTHORITY: Currently, there is no regulation for EDP in 5 CFR covering Class IV Lasers.

UNIT/ACTIVITY: WVNG

BASED ON: Hours in Pay Status

SITUATION: Individuals will be required to perform operational function check of the Large Aircraft Infrared Countermeasure (LAIRCM) system. The LAIRCM is a class 4 laser and has a "high risk" or "high power" system that can cause serious injury to eye and skin. It can cause combustion of flammable materials and may produce diffuse reflections that are hazardous. Individuals will be working in the Nominal Hazard Zone (NHZ) which requires special precaution and safety measures necessary to operate the LAIRCM system. Individuals performing the operational check stimulate the system with the Multi-Purpose Electro Optical End-to-End Tester in which the system acquires the position of the threat and then sends a laser to the tester. Individual holding the tester is in the direct line of sight of the laser and the potential hazard. When maintenance actions require the bypassing safety interlocks are required. Individuals are exposed a Class 4 laser, while working in the NHZ.

DETERMINATION: Personnel working inside the Nominal Hazard Zone (NHZ) should be compensated when required to perform the above task under the stated hazardous criteria. Incumbents of the following positions are eligible for EDP:

a. Avionics Section

D2284P01 Electronics Integrated Systems Mechanic Supervisor D1341000 Electronics Integrated Systems Mechanic

b. Aircraft Generation Squadron

D1525000 Aircraft Mechanic D1366000 Aircraft Mechanic

c. Accessories Section

D1550P01 Aircraft Electrician Supervisor D1549P01 Aircraft Electrician

OFFICIAL(S) AUTHORIZED TO ASSIGN AND CERTIFY TO EXPOSURE FOR PAY PURPOSES:

a. Avionics Section

D2284P01 Electronics Integrated Systems Mechanic Supervisor

b. Aircraft Generation Squadron

D0734000 Aircraft Mechanic Supervisor D1444000 Aircraft Mechanic Supervisor

c. Accessories Section

D0734000 Aircraft Mechanic Supervisor

CATEGORY OF EXPOSURE: Underfloor Work in C-17a Aircraft with OBIGGS I systems installed, potential exposure to **Zeolite Dust**.

DIFFERENTIAL RATE: 8%

AUTHORITY: Appendix A, CFR 532.511 Part II (4)

UNIT/ACTIVITY: 167 AW

BASED ON: Payment on Basis of Hours in Pay Status

SITUATION: Exposure to highly poisonous and toxic ZEOLITE material exists while performing maintenance in the underfloor area of the C-17a Aircraft. Underfloor conditions (temperature, confined area, and potential life-threating hazards) subjects' employee(s) to physical stresses or where there is potential danger to participants by reason of equipment failure or reaction to the physical conditions of exposure to ZEOLITE. The product dust may dry the skin. This material becomes hot when it first comes into contact with moisture. The hot material could cause thermal burns; the product gets hot as it adsorbs water. Burns to moist body tissues can result if contact is prolonged. Prolonged or repeated exposure may cause lung injury. In clean-up efforts, personnel are required to don respirators and various other garments to assure contamination is mitigated. Current technical data and regulations do not require personnel to wear PPE to perform maintenance in the potential hazardous area.

- 1. Poisons (toxic chemicals) *high degree hazard*. Working with or in close proximity to poisons (toxic chemicals), other than tear gas or similar irritants, which involves potential serious personal injury such as permanent or temporary, partial or complete loss of faculties and/or loss of life including exposure of an unusual degree to toxic chemicals, dust, or fumes of equal toxicity generated in work situations by processes required to perform work assignments wherein protective devices and/or safety measures have been developed but have not particularly eliminated the potential for such personal injury.
 - a. Personnel should be compensated accordingly when directed to perform tasks under above mentioned conditions.

POSITION NUMBER AND TITLE POSITIONS TO BE EVALUATED:

- D1549P01 Aircraft Electrician and D1550P01 Aircraft Electrician Supervisor
- D1525000 Aircraft Mechanic and D1635000 Aircraft Engine Mechanic

OFFICIAL(S) REQUESTING AUTHORIZATION TO ASSIGN AND CERTIFY EXPOSURE FOR PAY PURPOSES:

D1550P01 Aircraft Electrician Supervisor

D0806000 Aircraft Mechanic Supervisor

CATEGORY OF EXPOSURE: Working above a 10 foot height without any fall protection, to fill de-icing trucks with fluid and water.

DIFFERENTIAL RATE: 25%

AUTHORITY: Appendix A, CFR 532.511 Part I (2).b, (3)

UNIT/ACTIVITY: WVNG

BASED ON: Actual Exposure

SITUATION: Flight Line mechanics are required to de-ice aircraft to meet mission needs. In order to continuously de-ice aircraft, mechanics are required to fill the equipment with de-icing fluid and water at heights above 10 feet without fall restraint. This all takes place on top of the de-icing vehicle, where there is no ladder and footing is not adequate, in mostly adverse conditions. (i.e. rain, snow, fluid and limited visibility).

- Working at a lesser height: If the footing is unsure or the structure is unstable; or
 If safe scaffolding, enclosed ladders or other similar protective facilities are not adequate (for example,
 working from a swinging stage, boatswain chair, a similar support); or
 If adverse conditions such as darkness, steady rain, high wind, icing, lightning or similar environmental
 factors render working at such height(s) hazardous.
 - a. Personnel should be compensated accordingly when directed to perform tasks under above mentioned conditions.

POSITION NUMBER AND TITLE POSITIONS TO BE EVALUATED:

D1525000 Aircraft Mechanic

D1807000 Powered Support Systems Mechanic

OFFICIAL(S) REQUESTING AUTHORIZATION TO ASSIGN AND CERTIFY EXPOSURE FOR PAY PURPOSES:

D0806000 Aircraft Mechanic Supervisor

D0795000 Powered Support Systems Mechanic Supervisor

CATEGORY EXPOSURE (EDP): Pressure Chamber & Centrifugal Stress

DIFFERENTIAL RATE: 8%

AUTHORITY: 5 CFR Section 532, Subpart E, Appendix A, Part II, Item 8

UNIT/ACTIVITY: WVNG

BASED ON: Hours in Pay Status

SITUATION:

1. Servicing, handling and inspection of the F-2B 20-Man, FLU2A/P One Man Life raft inflation cylinders, and Portable High Altitude High Pressure Oxygen System (HPO2) cylinders. The servicing of the life raft cylinders is required every 5 years due to hydrostatic testing requirements of the cylinders. This requires the cylinder to be removed and installed from the life raft assembly, to be transported to the E/E between AFE shops for disassembly, testing, assembly, and servicing. The servicing of the HPO2 cylinders will be required for high altitude air drop missions as well as every 5 years for hydrostatic testing requirements. AFE shop is responsible for the control and issue of these items, while the E/E shop is responsible for the servicing and maintenance.

2. Care must be taken during the servicing of high pressure cylinders to ensure that all connections on the pumping and manifold systems are proper and tight. All system components must be compatible with pressure applied. While in the act of servicing the cylinders individuals are exposed to the piping systems of the transfer units, the high pressure supply cylinders, and the cylinder which is being serviced which could rupture. A component rupture at high pressure has an explosive effect which could cause serious injury to personnel from flying debris and shock.

3. Personnel shall not under any circumstance enter any room/servicing area for the purpose of servicing or adjusting the equipment without immediate presence or assistance of another person capable of rendering aid. (Ref. Safety Summary/Notes in T.O.'s 14S-1-102-11 & -21; 15X1-3-3-2; 34Y14-2-12-21; 42B5-1-2; 42B6-1-1; 42B7-3-1-1). The mishandling of any of these cylinders could result in personal injury or loss of life.

4. When AFE personnel are inspecting the life raft assembly's one of the requirements is to remove the inflation bottles from the raft to perform a weight check. This requires individuals to be exposed to the FLU2A/P and F-2B life raft bottles both during removal and installation.

5. Servicing and storage of the life raft cylinders will be conducted in the Electro/Environmental shop. The removal/install of the life raft cylinders will be conducted within the Aircrew Flight Equipment Section; Servicing of the HPOS cylinders will be conducted in the Electro/Environmental shop. Storage and issue of the HPOS cylinders will be in the Aircrew Flight Equipment Section.

6. Every five years the bottles themselves are required by federal law to undergo Permanent Volumetric Expansion Testing. During this testing procedure the bottles are subjected to 5/3 of the maximum working pressure that the bottle can withstand. While preforming this testing the personnel are exposed to possibility that the bottle could fail catastrophically which would result in personal injury or loss of life.

7. Mitigating steps taken to eliminate/reduce hazard (if applicable): No known safety equipment could be utilized to reduce hazards involved in this situation. All known required safety procedures are being followed in accordance with applicable manuals.

DETERMINATION: Personnel should be compensated when required to perform the above tasks under the stated hazardous criteria. Incumbents of the following positions are eligible for EDP:

D1408000 Aircraft Electrician D1409000 Aircraft Electrician D1356000 Aircraft Pneudraulic Mechanic D1367000 Aircraft Pneudraulic Mechanic D0824P01 Aircraft Survival and Flight Equipment Repairer Supervisor D0825000 Aircraft Survival and Flight Equipment Repairer D0826000 Aircraft Survival and Flight Equipment Repairer

OFFICIAL(S) AUTHORIZED TO ASSIGN AND CERTIFY TO EXPOSURE, PERFORMANCE OF IRREGULAR OR INTERMITTENT DUTY FOR PAY PURPOSES:

D0734000 Aircraft Mechanic Supervisor D1457000 Flight Services Manager D0307000 Air Operations Officer (Pilot/Navigator) D0824P01 Aircraft Survival and Flight Equipment Repairer Supervisor

CATEGORY EXPOSURE (EDP): Pressure Chamber & Centrifugal Stress

DIFFERENTIAL RATE: 8%

AUTHORITY: 5 CFR Section 532, Subpart E, Appendix A, Part II, Item 8

UNIT/ACTIVITY: WVNG

BASED ON: Hours in Pay Status

SITUATION:

1. While servicing the Self Generating Nitrogen Servicing Cart (SGNSC) Aerospace Ground Equipment (AGE) personnel are exposed to extremely high pressure gas cylinders and piping. Operators of the SGNSC are required to continuously monitor and supervise the carts during the high pressure build up operation, this requires them to never leave the cart unattended for any reason. The purpose of this requirement tis to prevent the cart from becoming over pressurized (4,500 psi or higher).

2. AGE personnel are exposed to the high pressure nitrogen gas in the SGNSC storage tanks during routine inspections. This include periodical inspections, special inspections, and other required inspections on the SGNSC units.

3. Care must be taken during the servicing and maintenance of the SGNSC to ensure that all connections on the pumping and manifold systems are proper and tight. All system components must be compatible with pressure applied. While in the act of servicing the SGNSC units individuals are exposed to the piping systems of the transfer units, the high pressure supply cylinders, and the cylinder which is being serviced which could rupture. A component rupture at high pressure has an explosive effect which could cause serious injury to personnel from flying debris and shock.

4. Mitigating steps taken to eliminate/reduce hazard (if applicable): No known safety equipment could be utilized to reduce hazards involved in this situation. All known required safety procedures are being followed in accordance with applicable manuals.

DETERMINATION: Personnel should be compensated when required to perform the above tasks under the stated hazardous criteria. Incumbents of the following positions are eligible for EDP:

D0795000 Powered Support Systems Mechanic Supervisor D1807000 Powered Support Systems Mechanic

OFFICIAL(S) AUTHORIZED TO ASSIGN AND CERTIFY TO EXPOSURE, PERFORMANCE OF IRREGULAR OR INTERMITTENT DUTY FOR PAY PURPOSES:

All Maintenance Certifying Officials

CATEGORY EXPOSURE (EDP): Explosive & Incendiary Material – Low Degree Hazard

DIFFERENTIAL RATE: 4%

AUTHORITY: 5 CFR Section 532, Subpart E, Appendix A, Part II, Item 3

UNIT/ACTIVITY: WVNG

BASED ON: Hours in Pay Status

SITUATION:

1. Personnel assigned as Ordnance Equipment Mechanics are required to work with (i.e., physically handle) explosive and incendiary material involving potential injury to their entire anatomy resulting from accidental discharge of explosives and incendiary material.

2. Ordnance Equipment Mechanics are required to assemble and disassemble weapons into major sections such as arming, steering, power, sustainer, motor, and igniter assemblies. Some special devices and electronic packages are removed and routed to other repair facilities when appropriate. In addition to replacing defective components mechanics perform repairs which are often complicated by critical tolerances and surfaces which require skilled workmanship in the machine and hand finishing and assembly of replacement parts.

3. Ordnance Equipment Mechanics are also responsible for the packaging, repackaging, and inspection of Munitions and explosive devices. This requirement exposes personnel to many different types and classes of explosive materials. The above tasks are considered hazardous when actually handling cartridges that have been removed from shipping container, during inspection, and repackaging. During the time the munitions or explosive device is handled out of the shipping container, the possibility of detonation from static electricity becomes more likely, resulting in potential injury such as laceration of hands, face or arms of the employee.

DETERMINATION: Personnel should be compensated when required to perform the above tasks under the stated hazardous criteria. Incumbents of the following positions are eligible for EDP:

D0325000 Ordnance Equipment Mechanic

OFFICIAL(S) AUTHORIZED TO ASSIGN AND CERTIFY TO EXPOSURE, PERFORMANCE OF IRREGULAR OR INTERMITTENT DUTY FOR PAY PURPOSES:

All Maintenance Certifying Officials

CATEGORY EXPOSURE: Ground Work Beneath Hovering Helicopter

DIFFERENTIAL RATE: 15%

AUTHORITY: Paragraph 11, Part I, Appendix A, CFR 532.511

UNIT/ACTIVITY: WVNG

BASED ON: Actual Exposure

SITUATION: Personnel participating in operations to attach or detach external load to helicopter hovering just overhead.

DETERMINATION: Personnel should be compensated accordingly when directed to perform the tasks described above. Incumbents of the following positions are eligible for EDP within the scope of the stated criteria.

Personnel performing duty

OFFICIALS AUTHORIZED TO ASSIGN AND CERTIFY EXPOSURE FOR PAY PURPOSES:

All Certifying Officials