Attachment 6

Appendix A to Subpart I of Part 550—Schedule of Pay Differentials Authorized for Hazardous Duty Under Subpart I

hazard pay differential, of part 550 pay administration (general)

Duty	Rate of hazard pay differential (percent)	Effective date
Exposure to Hazardous Weather or Terrain:		
(1) *Work in rough and remote terrain.* When working on cliffs, narrow ledges, or near vertical mountainous slopes where a loss of footing would result in serious injury or death, or when working in areas where there is danger of rock falls or avalanches	25	First pay period beginning after July 1, 1969.
(2) *Traveling under hazardous conditions.* (a) When travel over secondary or unimproved roads to isolated mountain top installations is required at night, or under adverse weather conditions (such as snow, rain, or fog) which limits visibility to less than 30 meters (100 feet), when there is danger of rock, mud, or snow slides	25	Do.
(b) When travel in the wintertime, either on foot or by means of vehicle, over secondary or unimproved roads or snow trails, in sparsely settled or isolated areas to isolated installations is required when there is danger of avalanches, or during “whiteout” phenomenon which limits visibility to less than 3 meters (10 feet)	25	Do.
(c) When work or travel in sparsely settled or isolated areas results in exposure to temperatures and/or wind velocity shown to be of considerable danger, or very great danger, on the windchill chart (appendix A–1), and shelter (other than temporary shelter) or assistance is not readily available	25	Do.
(3) *Snow or ice removal operations.* When participating in snowplowing or snow or ice removal operations, regardless of whether on primary, secondary or other class of roads, when (a) there is danger of avalanche, or (b) there is danger of missing the road and falling down steep mountainous slopes because of lack of snow stakes, “white-out” conditions, or sloping ice-pack covering the snow	25	Do.

(4) *Water search and rescue operations.* Participating as a member of a water search and rescue team in adverse weather conditions when winds are blowing at 56 km/h (35 m.p.h.) (classified as gale winds) or in water search and rescue operations conducted at night	25	Do.
(5) *Travel on Lake Pontchartrain.* (a) When embarking, disembarking or traveling in small craft (boat) on Lake Pontchartrain when wind direction is from north, northeast, or northwest, and wind velocity is over 7.7 meters per second (15 knots); or	25	Do.
(b) When travelling in small crafts, where craft is not radar equipped, on Lake Pontchartrain is necessary due to emergency or unavoidable conditions and the trip is made in a dense fog under fog run procedures	25	Do.
(6) *Hazardous boarding or leaving of vessels.* When duties (a), (b), or (c) are performed under adverse conditions of foul weather, ice, or night and when the sea state is high (0.9 meter (3 feet) and above):		
(a) Boarding or leaving vessels at sea or standing offshore during lightering or personnel transfer operations	25	First pay period beginning after May 7, 1970.
(b) Boarding, leaving, or transferring equipment between small boats or rafts and steep, rocky, or coral surrounded shorelines.		
(c) Transferring equipment between a small boat and rudimentary dock by improvised or temporary facility such as an unfastened plank leading from boat to dock.		
(7) *Small craft tests under unsafe sea conditions.* Conducting craft tests to determine the seakeeping characteristics of small craft in a seaway when U.S. storm warnings normally indicate unsafe seas for a particular size craft	25	First pay period beginning on or after Sept. 28, 1972.
(8) *Working on a drifting sea ice floe.* When the job requires that the work be performed out on sea ice, e.g., installing scientific instruments and making observations for research purposes	25	First pay period beginning after March 16, 1973.

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Exposure to Physiological Hazards:		
(1) *Pressurechamber subject.* (a) Participating as a subject in diving research tests which seek to establish limits for safe pressure profiles by working in a pressure chamber simulating diving or, as an observer to the test or as a technician assembling underwater mock-up components for the test, when the observer or technician is exposed to high pressure gas piping systems, gas cylinders, and pumping devices which are susceptible to explosive ruptures	25	Do.
(b) *Working in pressurized sonar domes.* Performing checkout of sonar system after sonar dome has been pressurized. This may include such duties as changing transducer elements, setting of transducer turntables, checking of cables, piping, valves, circuits, underwater telephone, and pressurization plugs	8	First pay period beginning after Feb. 16, 1975.
(c) Working in nonpressurized sonar domes that are a part of an underwater system. Performing certification pretrial inspections, involving such duties as calibrating, adjusting, and photographing equipment, in limited space and with limited egress	4	First pay period beginning after Feb. 16, 1975.
(2) *Simulated altitude chamber subjects. Observers.* Participating in simulated altitude 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	25	Do.
(3) *Centrifuge subjects.* Participating as subject in centrifuge studies involving elevated G forces above the level of 49 meters per second^2(5 G's) whether or not at reduced atmospheric pressure	25	Do.
(4) *Rotational flight simulator subject.* Participating as a subject in a Rotational Flight Simulator in studies involving continuous rotation in one axis through 360° or in a combination of any axes through 360° at rotation rates greater than 15 r.p.m. for periods exceeding three minutes	25	First pay period beginning after July 1, 1969.
Hot Work—Working in confined spaces wherein the employee is subject to temperatures in excess of 43 °C (110 °F)	4	First pay period beginning after Feb. 16, 1975.
(5) *Environmental thermal-chamber tests:* Subjects and observers exposed to the hazards and physical hardships of an environmental chamber-thermal test which simulates adverse weather or sea conditions such as the exposure to subzero temperatures; high heat and humidiity; and cold water, spray, wind, and wave action	25	May 4, 1988.

(6) *Working at high altitudes.* Performing work at a land-based worksite more than 3900 meters (12,795 feet) in altitude, provided the employee is required to commute to the worksite on the same day from a substantially lower altitude under circumstances in which the rapid change in altitude may result in acclimation problems.	8	January 11, 1999.
Exposure to Hazardous Agents, work with or in close proximity to:		
(1) *Explosive or incendiary materials.* Explosive or incendiary materials which are unstable and highly sensitive	25	First pay period beginning after July 1, 1969.
(2) *At-sea shock and vibration tests.* Arming explosive charges and/or working with, or in close proximity to, explosive armed charges in connection with at-sea shock and vibration tests of naval vessels, machinery, equipment and supplies	25	Do.
(3) *Toxic chemical materials.* Toxic chemical materials when there is a possibility of leakage or spillage	25	Do.
(4) *Fire retardant materials tests.* Conducting tests on fire retardant materials when the tests are performed in ventilation restricted rooms where the atmosphere is continuously contaminated by obnoxious odors and smoke which causes irritation to the eyes and respiratory tract	25	Do.
(5) *Virulent biologicals.* Materials of micro-organic nature which when introduced into the body are likely to cause serious disease or fatality and for which protective devices do not afford complete protection	25	Do.
(6) Asbestos. Significant risk of exposure to airborne concentrations of asbestos fibers in excess of the permissible exposure limits (PELS) in the standard for asbestos provided in title 29, Code of Federal Regulations, §§1910.1001 or 1926.58, when the risk of exposure is directly connected with the performance of assigned duties. Regulatory changes in §1910.1001 or 1926.58 are hereby incorporated in and made a part of this category, effective on the first day of the first pay period beginning on or after the effective date of the changes	8	June 8, 1993
Participating in Liquid Missile Propulsion Tests and Certain Solid Propulsion Operations:		
(1) *Tanking and detanking.* Tanking or detanking operations of a missile or the test stand “run” bottles with liquid propellants	25	First pay period beginning after July 1, 1969.

(2) *Hoisting a tanked missile.* Hoisting a tanked missile or a solid propellant propulsion system into and/or over the test stand	25	Do.
(3) *Pressure tests.* Pressure tests on loaded missiles, missile tanks, or run bottles during prefire preparations	25	Do.
(4) *Test stand tests.* Test stand operations on loaded missiles under environmental conditions where the high or low temperatures could cause a failure of a critical component	25	Do.
(5) *Disassembly and breakdown.* Disassembly and breakdown of a contaminated missile system or test stand plumbing after test	25	Do.
(6) *"Go" condition test stand work.* Working on any test stand above the 15-meter (50-foot) level or any stand work while the system is in a "go" condition	25	Do.
(7) *Arming and dearming propulsion systems.* Arming, dearming or the installation and/or removal of any squib, explosive device, or a component thereof connected to, or part of, any live or potentially expended liquid or solid propulsion system	25	Do.
(8) *Demolition and destruct tests.* Demolition, hazards classification, or destruct type tests where the specimen is nonstandard and/or unproven and the test techniques do not conform to standard or proven procedures	25	Do.
Work in Fuel Storage Tanks:		
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	25	Do.
Firefighting:		
(1) *Forest and range fires.* Participating as a member of a firefighting crew in fighting forest and range fires on the fireline	25	Do.
(2) *Equipment, installation, or building fires.* Participating as an emergency member of a firefighting crew in fighting fires of equipment, installations, or buildings	25	Do.

(3) *In-water under-pier firefighting operations.* Participating in in-water under-pier firefighting operations (involving hazards beyond those normally encountered in firefighting on land, e.g., strong currents, cold water temperature, etc.)	25	Do.
Work in Open Trenches:		
Work in an open trench 4.6 meters (15 feet) or more deep until proper shoring has been installed	25	Do.
Underground Work:		
Work underground performed in the construction of tunnels and shafts, and the inspection of such underground construction, until the necessary lining of the shaft or tunnel has eliminated the hazard	25	Do.
Underwater Duty:		
(1) *Submerged submarine or deep research vehicle.* Duty aboard a submarine or deep research vehicle when it submerges	25	Do.
(2) *Diving.* Diving, including SCUBA (self-contained underwater breathing apparatus) diving, required in scientific and engineering pursuits, or search and rescue operations, when:	25	Do.
(a) at a depth of 6 meters (20 feet) or more below the surface; or,		
(b) visibility is restricted; or,		
(c) in rapidly flowing or cold water; or,		
(d) vertical access to the surface is restricted by ice, rock, or other structure; or,		
(e) testing or working with hardware which presents special hazards (such as work with high voltage equipment or work with underwater mockup components in an underwater space simulation study).		
Sea Duty Aboard Deep Research Vessels:		
Participating in sea duty wherein the team member is engaged in handling equipment on or over the side of the vessel when the sea-state is high (6.2 meter-per-second winds (12-knot winds) and 0.9-meter waves (3-foot waves) and the work is done on deck in relatively unprotected areas	25	Do.

Collection of Aircraft Approach and Landing Environmental Data:		
When operating or monitoring camera equipment adjacent to flight deck in the area of maximum hazard during landing sequence while conducting photographic surveys aboard aircraft carriers during periods of heavy aircraft operations	25	First pay period beginning after July 1, 1969.
Experimental Landing/Recovery Equipment Tests:		
Participating in tests of experimental or prototype landing and recovery equipment where personnel are required to serve as test subjects in spacecraft being dropped into the sea or laboratory tanks	25	Do.
Land Impact or Pad Abort of Space Vehicle:		
Actual participating in dearming and safing explosive ordinance, toxic propellant and high pressure vessels on vehicles that have land impacted or on vehicles on the launch pad that have reached a point in the countdown where no remote means are available for returning the vehicle to a safe condition	25	Do.
Height Work:		
Working on any structure of at least 15 meters (50 feet) above the base level, ground, deck, floor, roof, etc., under open conditions, if the structure is unstable or if scaffolding guards or other suitable protective facilities are not used, or if performed under adverse conditions such as snow, sleet, ice on walking surfaces, darkness, lightning, steady rain, or high wind velocity	25	Do.
Flying, participating in:		
(1) *Pilot proficiency training.* Flights for pilot proficiency training in aircraft new to the pilot under simulated emergency conditions which parallel conditions encountered in performing flight tests	25	Do.
(2) *Delivery of new aircraft for flight testing.* Flights to deliver aircraft which has been prepared for one-time flight without being test flown prior to delivery flight	25	Do.
(3) *Test flights of new modified, or repaired aircraft.* Test flights of a new or repaired aircraft or modified aircraft when the modification may affect the flight characteristics of the aircraft	25	Do.

(4) *Reduced gravity—parabolic arc flights—subjects/observers.* Reduced gravity flight testing in an aircraft flying a parabolic flight path and providing a testing environment ranging from weightlessness up through +20 meters per second^2(+2 gravity conditions)	25	Do.
(5) *Launch and recovery.* Test flights involving launch and recovery aboard an aircraft carrier	25	Do.
(6) *Limited control flights.* Flights undertaken under unusual and adverse conditions (such as extreme weather, maximum load or overload, limited visibility, extreme turbulence, or low level flights involving fixed or tactical patterns) which threaten or severely limit control of the aircraft	25	Do.
(7) *Flight tests of expandable aircraft tires.* Landing to test aircraft tires designed to deflate upon retraction, undertaken to appraise the normal deflate-reinflate cycle and also to evaluate the capability to make a satisfactory landing with the tires deflated	25	Do.
(8) *Landing and taking-off in polar areas.* Landing in polar areas on unprepared snow or ice surfaces and/or taking-off under the same conditions	25	Do.
Experimental Parachute Jumps:		
Participating as a jumper in field exercises to test and evaluate new types of jumping equipment and/or jumping techniques	25	Do.
Ground Work Beneath Hovering Helicopter:		
Participating in ground operations to attach external load to helicopter hovering just overhead	25	Do.
Sling-suspended transfers. When performance of duties requires transfer from a helicopter to a ship via a sling on the end of a steel cable or from a ship to another ship via a chair harness hanging from a highline between the ships when both vessels are underway	25	First pay period beginning after Oct. 11, 1969.
Carrier suitability trials aboard aircraft carriers. Participating in carrier suitability trials aboard aircraft carriers when work is performed on the flight deck during launch, recovery, and refueling operations	25	Do.

Cargo handling during lightering operations. Off-loading of cargo and supplies from surface ships to Landing Craft—Medium (LCM) boats involving exposure not only to falling cargo but such other hazards as shifting cargo within the LCM, swinging cargo hooks, and possibility of falling between the LCM and cargo vessel	25	Do.
Work in unsafe structures: Working within or immediately adjacent to a building or structure which has been severely damaged by earthquake, fire, tornado, flood, or similar cause, when the structure has been declared unsafe by competent technical authority, and when such work is considered necessary for the safety of personnel or recovery of valuable materials or equipment, and the work is authorized by competent authority	25	First pay period beginning on or after Apr. 11, 1976.
Tropical Jungle Duty: Work outdoors in undeveloped jungle regions outside the continental United States. Work must involve both of the following:		
(1) An unusual degree of physical hardship caused by high heat, humidity, or other inclement conditions; and		
(2) An unusual danger of serious injury or illness due to:		
(a) Travel on unimproved roads or rudimentary trails in rugged terrain (e.g., walking on narrow trails in steep mountainous areas, fording deep, fast-moving rivers, and crossing deep crevasses via log or other unsafe means);		
(b) Immediate presence of dangerous wildlife (e.g., venomous snakes, poisonous insects, and large carnivores); or		
(c) Known exposure to serious disease for which adequate protection cannot be provided.	25	June 14, 1989.