



UNITED STATES MARINE CORPS
MARINE CORPS AIR STATION
POSTAL SERVICES CENTER BOX 8003
CHERRY POINT, NORTH CAROLINA 28533-0003

ASO 5100.1A
SS
16 NOV 2009

AIR STATION ORDER 5100.1A

From: Commanding Officer, Marine Corps Air Station Cherry Point
To: Distribution List

Subj: COMMAND ERGONOMICS INJURY PREVENTION PROGRAM

Ref: (a) OPNAVINST 5100.23G
(b) NAVMC DIR 5100.8

Encl: (1) Marine Corps Air Station (MCAS) Cherry Point Ergonomics Program
(2) Definitions
(3) Designation Letter Template

1. Situation. The Commandant of the Marine Corps set a goal of achieving a 50% reduction in work related-injuries and worker's compensation payments within the Marine Corps. The references will be used for guidance.
2. Cancellation. AirStaO 5100.1.
3. Summary of Revision. This Order has been completely revised and should be reviewed in its entirety.
4. Mission. MCAS Cherry Point shall significantly reduce work related injuries and compensation costs through preemptive ergonomic injury prevention training, media, and workspace designs.
5. Execution
 - a. Commander's Intent and Concept of Operations
 - (1) Commander's Intent. The Safety and Standardization Directorate will establish a comprehensive Ergonomics Program for MCAS Cherry Point. The purpose of this program is to reduce work related injuries and worker's compensation payments through ergonomic injury prevention training, media, and workspace designs.

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(2) Concept of Operations. This Order delineates guidance required for the effective execution of an ergonomics program. Participation in this program will be at the widest extent possible. All directorates shall participate in the ergonomics program and will designate at least one representative to the Ergonomics Committee. The Ergonomics Committee will work Command ergonomic issues and prioritize emerging and special ergonomic needs.

b. Tasks

(1) All Commanding Officers, Directors/Department Heads. Designate, in writing, a representative to the Command Ergonomics Committee.

(2) Director of Safety and Standardization. Establish an Ergonomics Program. Designate an Ergonomics Program Coordinator to monitor the activities of the Ergonomics Committee, and ensure that the Commanding Officer is advised on ergonomic issues as they develop. Ensure that the Ergonomics Program Coordinator approves all exceptional or special needs ergonomic furniture and equipment purchases.

(3) Ergonomics Program Coordinator. Serve as Chairperson of the Ergonomics Committee. Ensure that the Ergonomics Committee meets quarterly. Distribute the minutes of those meetings via e-mail. Review workspace designs and participate in the approval process for ergonomic evaluations submitted by Ergonomics Committee members.

(4) Representatives. Attend and participate in the Ergonomics Committee quarterly meetings. Duties include, but are not limited to, work on emerging ergonomic issues, ergonomics training, recommending ergonomic furnishings and equipment, participate in the prioritization of furniture and equipment needs, and identify projected equipment needs.

(5) Facilities. Manage equipment planning and programming and administer the Personnel Support Equipment (PSE) process. Coordinate with the Ergonomics Program Coordinator on the purchase of exceptional or special needs ergonomic furniture and equipment, and ensure that procured furniture and equipment, and workspace design is consistent with accepted ergonomic practices to control exposure to injury.

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(6) Telecommunication and Information Systems Directorate.
Provide technical assistance and recommendations for equipment necessary to support the Ergonomics Program.

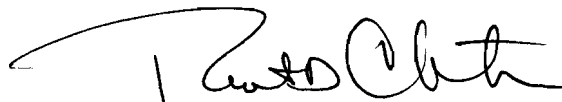
c. Coordinating Instructions. For personnel with specific ergonomic needs, the requesting employee's workspace will be analyzed by the Ergonomics Committee Member responsible for that area. The Ergonomics Committee member will forward their recommendations to the Ergonomics Program Coordinator to authorize. The Ergonomics Coordinator will forward the recommendations on to Facilities Development for purchase as funding is available. When the accommodations (chair, workstation, etc) are received and issued, the receiving department will be responsible for producing the DD Form 1348-1 document and providing it and the receipt documentation for the equipment to Station Property (Supply Directorate). That equipment will then be loaded to the garrison property account for the work section in which the employee is located. As with any other Government provided equipment, the accommodation stays with the employee for as long as the employee remains employed with "Station". For example, if an employee transfers from one Station activity to another Station activity, the accommodation equipment transfers with the employee and therefore the accommodation equipment would then transfer from one garrison property account to another.

6. Administration and Logistics. None.

7. Command and Signal

a. Command. This Order is applicable to Marine Corps Air Station Cherry Point.

b. Signal. This Order is effective the date signed.



ROBERT D. CLINTON
Executive Officer

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MCAS Cherry Point Ergonomics Program

1. Purpose. This enclosure establishes the elements of an Ergonomics Program. The Ergonomics Program seeks to prevent injuries and illnesses by identifying, evaluating, and controlling ergonomic hazards within the workplace.

2. Discussion

a. A Work-related Musculoskeletal Disorder (WMSD) is a musculoskeletal disorder caused or made worse by the work environment. A WMSD can cause severe and debilitating symptoms such as pain, numbness, and tingling; reduced worker productivity; lost time from work; temporary or permanent disability; inability to perform job tasks; and an increase in workers compensation costs. Ergonomics is the science of fitting workplace conditions and job demands to the capabilities of workers. Ergonomics seeks to adapt the job and workplace to personnel by evaluating tasks, tooling, and equipment and ensuring that workplace design and equipment are within the capabilities and limitations of personnel.

3. Responsibilities

a. Safety and Standardization Department

- (1) Administratively direct the Ergonomics Program.
- (2) Identify existing and potential work-related musculoskeletal risks.
- (3) Investigate all cases of WMSD.
- (4) Assist Ergonomics Committee members in other than routine worksite evaluations to eliminate sources of potential musculoskeletal disorders.
- (5) Ensure corrective action plans are implemented.

b. Command Ergonomics Committee (CEC)

- (1) Serve as a focal point for the Command Ergonomics Program.
- (2) Develop and implement the Command plan.

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(3) Conduct routine worksite evaluations to eliminate sources of potential WMSDs.

(4) Review injury and illness records related to WMSDs, develop trend analyses, and report the results to the Deputy Director, Safety and Standardization Directorate.

(5) Set priorities for identified WMSD risks for abatement.

(6) Develop methods to evaluate the effectiveness of corrective actions and document results.

(7) Audit and maintain documentation on annual surveys, trend analyses, investigations, testing of new tooling and equipment, ergonomics improvements, associated costs, and implementation status of the ergonomic plan.

(8) Provide ergonomics training and education for personnel.

(9) Ensure newly appointed supervisors, managers, and employees receive appropriate ergonomics training.

(10) Ensure annual training is administered to all employees and documentation of the training is maintained.

c. Facilities Directorate

(1) Integrate ergonomic considerations into all workplace improvements, designs for facility modifications, and construction.

(2) Ensure ergonomic considerations have been given to all equipment purchased, (e.g., furniture, tools, workstations, and material handling devices).

d. Manpower and Personnel

(1) Provide information on compensation claims and costs for work center locations associated with WMSDs to enable accurate trend analyses of WMSDs.

(2) Use local medical facility personnel recommendations in the assignment of injured workers to light or restricted duty.

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e. Department Heads, Managers, and Supervisors

(1) Ensure personnel receive ergonomics awareness training.

(2) Assist the CEC in the implementation of the CEC ergonomic recommendation projects.

(3) Request assistance from the CEC for recognizing, assessing, and monitoring WMSD exposure.

(4) Report to CEC suspected hazardous tools/equipment or operations related to WMSDs whenever WMSD risks are identified or employee complaints are voiced.

(5) Once approved ergonomics accommodations have been established, they shall be transferred with that employee to the new workstation if feasible.

(6) Report all recognized WMSD symptoms of military and civilian personnel to the Naval Health Clinic.

f. Personnel

(1) Report for scheduled ergonomics training.

(2) Request supervisory assistance when identifying potential WMSD exposures.

(3) Report unsafe work conditions to supervisors.

(4) Provide knowledge and feedback on any proposed or implemented process changes.

(5) Recognize the early symptoms and causes of WMSDs and report them to the supervisor.

4. Requirements. MCAS Cherry Point is an administrative and industrial setting with program commitments to support military personnel and their dependents and civilian personnel as a diversified workforce. The Ergonomics Program is designed to integrate those commitments and the personnel needs into a viable working program. The following requirements, as a minimum, will be implemented and maintained to meet program requirements:

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a. Ergonomic Risk Identification and Analysis

(1) Review of Injury and Associated Data. A review of the injury-mishap logs, Federal Compensation Claims, worker complaints, Industrial Hygienist surveys and safety inspections is a main element of conducting ergonomic analyses. Special emphasis will be placed on the evaluation of WMSDs. Information to be obtained will include the body part involved, nature of the injury/illness, lost work time (workdays and light duty days), and medical and compensation costs. Where mishap and compensation data reveal a trend for WMSDs, tasks will be prioritized for detailed analysis based on incidence rate, severity of the risk, and depth of support needed.

(2) Workplace Analysis. Job Safety Analysis requires observation of an employee performing the task to be studied. This type of analysis will provide critical task information on the work environment, procedures, tooling, equipment, basic safety elements, employee actions as well as task-associated discomfort. Detailed analyses will characterize risk factors, abatement recommendations, and prioritize corrective action.

b. Ergonomic Hazard Prevention and Control

(1) Effective design or redesign of a task or workstation is the preferred method of preventing and controlling harmful stresses.

(2) The methods of intervention (in order of priority) to be used are: process elimination, engineering controls; substitution, work practices, and administrative controls; e.g., adjustment of work-rest cycles, slowing work pace, task rotation.

(3) The Department of Defense does not recognize back support belts or wrist splints as personal protective equipment, or support the use of these devices in the prevention of back or wrist injuries. These devices are considered medical appliances and may be prescribed by a credentialed health care provider who will assume responsibility for medical clearance, monitoring, and proper fit.

(4) When appropriate, musculoskeletal hazards shall be assigned a Risk Assessment Code (RAC) using the safety RAC scoring system, and entered into the installation hazard abatement plan.

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c. Purchasing and Facility Modification. The Ergonomics Committee Member responsible for that area shall be responsible for reviewing the ergonomic design criteria of all new equipment and tooling to be purchased as well as assuring ergonomic design principles are included in facility design and modification drawings. All review results will be forwarded to the CEC. The CEC will be invited to participate in standard Design Review Meetings for new and modified facilities.

d. Medical Support. Employees having suspected WMSD complaints will report to the Naval Health Clinic for assessment. The Clinic will contact the CEC for task analysis and corrective actions. Documentation of the analysis will be provided to the medical staff. The Clinic will provide early physical recognition as appropriate, along with evaluation, treatment, light duty or restricted duty, and follow-up for employees with WMSDs. Private medical providers will be provided written assessments upon request.

e. Training. A viable and successful Ergonomic Program is dependent on the training and WMSD awareness of its personnel. All personnel will be provided training and, upon completion, will be able to recognize WMSDs and corrective measures. Initial awareness training will be entered in each employee's permanent record and all Marine Corps personnel shall complete annual refresher training. Additional employee retraining will be conducted if a change in workstation or reassignment occurs.

f. Program Evaluation. The CEC will conduct an annual evaluation to assess the implementation progress and the effectiveness of the program.

Definitions

Abate: To eliminate or reduce a hazard.

Abatement: The act of abating, or the state of being abated; a lessening, decrease, or reduction; removal or putting an end to; as, the abatement of an ergonomic hazard.

Accident: An unplanned event or series of events resulting in death, injury, occupational illness, or damage to or loss of equipment or property, or damage to the environment.

Administrative Control: Procedures and methods, set up by the employer, that significantly reduce exposure to risk factors by altering the way in which work is performed; examples include employee rotation, job task enlargement, and adjustment of work pace. Administrative controls should not be solely implemented to control ergonomic hazards.

Awkward Posture: Awkward posture is associated with an increased risk for injury. It is generally considered that the more a joint deviates from the neutral (natural) position, the greater the risk of injury.

Cumulative Trauma Disorders: Cumulative trauma disorders or CTDs (also termed repetitive motion injuries or RMI's), are disorders of the musculoskeletal and nervous systems that may be caused or aggravated by repetitive motions, forceful exertions, vibration, mechanical compression, sustained or awkward postures, all occurring over extended periods of time.

DoD Personnel (Civilian On-Duty): Civil Service employees of the DoD (including Reserve Component, and Reserve technicians, unless in a military duty status); non-appropriated fund employees (excluding military personnel working part-time to avoid dual reporting); Corps of Engineers Civil Works employees, Youth or Student Assistance Program employees; foreign nationals employed by the DoD Components; Navy Civil Service Mariners with the Military Sealift Command; and Army-Air Force Exchange Service employees; Active Duty, Reserve or National Guard personnel on active duty or performing inactive duty training; Service Academy cadets, Officer Candidates in Officer Candidates School and AOCs, Reserve Officer Training Corps cadets when engaged in directed training activities; and foreign national military personnel assigned to the DoD Components.

Engineering Control: A physical change to the work site/job that controls exposure to risk or injury. Engineering controls act on the source of the hazard and control employee exposure to the hazard without relying on the employee to take self-protective action or intervention. Examples include: changing the handle angle of a tool, using a lighter weight part, providing a chair that has adjustability, task lighting, etc.

Ergonomics: The field of study that seeks to fit the job to the person, rather than the person to the job. Includes the evaluation and design of workplaces, environments, jobs, tasks, equipment, and processes in relationship to human capabilities and interactions in the workplace.

Ergonomic Design: The applied science of equipment design, as for the workplace, intended to maximize productivity by reducing operator fatigue and discomfort.

Ergonomic Furnishings: A piece of equipment necessary or useful for comfort or convenience, e.g. furniture, appliances, and other movable articles in a office, shop, motor vehicle etc.

Ergonomic Program: A systematic method of preventing, evaluating, and managing Work-Related Musculoskeletal Disorders. The four elements of the ergonomics program described in this guideline are:

- worksite analysis
- hazard prevention and control
- medical management
- training and education

Hazard: Any real or potential condition that can cause injury, illness, or death to personnel or damage to or loss of equipment or property, mission degradation, or damage to the environment.

Human Engineering: A term synonymous with 'ergonomics' is the branch of this science that began in the United States and focuses on cognitive performance of humans.

Inspection: The process of determining compliance with safety and health standards through physical surveys of workplaces, operations, and facilities.

Manual Material Handling: Lifting, carrying, and moving materials without a mechanical aide.

Musculoskeletal Disorders (MSD): Injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal disc. Examples include carpal tunnel syndrome, rotator cuff tendonitis, and tension neck syndrome.

OSHA: Occupational Safety and Health Administration. The mission of the Occupational Safety and Health Administration (OSHA) is to save lives, prevent injuries and protect the health of America's workers.

Process Elimination: Analysis of an ergonomic problem into alternative possibilities followed by the systematic elimination of unacceptable alternatives.

Risk Assessment: A structured process to identify and assess hazards. An expression of potential harm, described in terms of hazard severity, accident probability, and exposure to hazard.

Risk Assessment Code (RAC): An expression of the risk associated with a hazard that combines the hazard severity and accident probability into a single Arabic numeral.

Segmental Vibration (Hand-Arm Vibration): Vibration applied to the hand/arms through a tool or piece of equipment. This can cause a reduction in blood flow to the hands/fingers (Reynaud's disease or vibration white finger). It can also interfere with sensory receptor feedback leading to increased handgrip force to hold the tool. Further, a strong association has been reported between carpal tunnel syndrome and segmental vibration.

Workplaces: Non-military-unique workplaces and operations: DoD military and civilian workplaces and operations that are comparable generally to those of the private sector. Examples include: facilities involved and work performed in construction; supply services; civil engineer or public works; medical service; and office work.

Workplace Risk Factors (Ergonomics): Actions in the workplace, workplace conditions, or a combination thereof, which may cause or aggravate a pre-existing or work-related MSD. Workplace risk factors include, but are not limited to: repetitive, forceful or prolonged exertions; frequent or heavy lifting; pushing, pulling, or carrying of heavy objects; a fixed or awkward work posture;

contact stress; localized or whole-body vibrations; cold temperature; and poor lighting. These workplace risk factors can be intensified by work organization characteristics such as: inadequate work-rest cycles; excessive work pace and/or duration, unaccustomed work; lack of task variability; machine work; and piece rate.

Work-Related Musculoskeletal Disorder (Ergonomic): An injury or illness of the muscles, tendons, ligaments, peripheral nerves, joints, cartilage (including inter-vertebral discs), bones and/or supporting blood vessels in either the upper or lower extremities, back or neck, that is associated with workplace musculoskeletal risk factors and include but are not limited to: cumulative trauma disorders; repetitive strain injuries or illnesses; repetitive motion injuries or illnesses; and repetitive stress injuries or illnesses. Refers collectively to signs, persistent symptoms, or clinically diagnosed work-related musculoskeletal disorders when they are caused or aggravated by exposure to workplace risk factors.



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PSC BOX 8003
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(Date)

From: Commanding Officer, Marine Corps Air Station Cherry Point

To: (Employee) _____

Via: Director, _____

Subj: APPOINTMENT AS DIRECTORATE ERGONOMICS OFFICER

Ref: (a) NAVMC DIR 5100.8

1. Per the reference, you are hereby appointed as Ergonomics Officer for the _____ Directorate.

2. You will be guided in the performance of your duties by the reference.

3. Your point of contact is _____
at extension _____.

ROBERT D. CLINTON
Executive Officer