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Aerospace Medicine

ERGONOMICS PROGRAM



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This instruction establishes the policies, responsibilities and procedures for identifying, evaluating and controlling specific ergonomic problems.

1. Objective. It is the intent of this program to eliminate or materially reduce worker exposure to conditions that lead to cumulative trauma disorders (CTDs) and work-related musculoskeletal disorders (WMSD) and illnesses through engineering controls and changes in work practices, whenever feasible, thereby complying with the provisions of DoD Instruction 6055.1, “*DoD Occupational Safety and Health Program.*”

2. Explanation of Terms. Abbreviations and special terms used in this instruction are defined in the [Attachment 1](#).

3. Responsibilities.

3.1. The WR-ALC Vice Commander:

3.1.1. Support the ergonomics program manager who chairs the Ergonomics Working Group under the Air Force Occupational Safety and Occupational Health Council (AFOSH).

3.1.2. Support the ergonomics program according to AFI 48-145, *Occupational Health Program*; AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health Program*, and DoDI 6055.1.

3.1.3. Ensure that funds and personnel are available to correct ergonomic problems.

3.2. The Medical Group Commander: Appoint and support the ergonomics program manager who chairs the Ergonomics Working Group.

3.3. The Ergonomics Program Manager:

3.3.1. Manage and implement the ergonomics program and chair the Ergonomics Working Group.

- 3.3.2. Maintain ergonomic project files.
 - 3.3.3. Manage the ergonomics budget with the help of a budget assistant.
 - 3.3.4. Integrate ergonomic consideration when reviewing new equipment procurement and facility modification and construction.
 - 3.3.5. Evaluate the program on a quarterly basis.
 - 3.3.6. Ensure that metrics are being used to assess the program and report progress to the AFOSH Council and commander.
 - 3.3.7. Attend a minimum of 40 hours of formal ergonomics training with annual refresher courses.
 - 3.3.8. Coordinate with the appropriate organization prior to conducting ergonomic analyses of work sites.
- 3.4. The Ergonomics Working Group:
- 3.4.1. Consist of the following:
 - 3.4.1.1. The Occupational Medicine Representative (physician or physician assistant).
 - 3.4.1.2. Bioenvironmental Engineering Flight Representative.
 - 3.4.1.3. Ground Safety Representative.
 - 3.4.1.4. MA Designated Environmental Safety and Occupational Health (ESOH) Representatives, and Air Base Wing.
 - 3.4.1.5. Employee Designee/Union Representative.
 - 3.4.1.6. Public Health Representative.
 - 3.4.1.7. Engineering Representative.
 - 3.4.1.8. Civilian Personnel Office Representative.
 - 3.4.1.9. Physical Therapist.
 - 3.4.1.10. Administrative Budget Assistant.
 - 3.4.1.11. Procurement Office Representative.
 - 3.4.2. Establish installation ergonomic priorities relative to mission requirements.
 - 3.4.3. Categorize, inventory, and complete risk evaluations of work sites.
 - 3.4.4. Develop metrics to assess the program.
 - 3.4.5. Convene as directed by the ergonomics program manager to review and update the ergonomics program, and review the ergonomic project files.
 - 3.4.6. Conduct ergonomic analyses of selected work sites as directed by the ergonomics program manager in order to obtain and incorporate involved employees', supervisors', and ergonomic sub committee members' observations into a final recommendation.
 - 3.4.7. Attend mandatory ergonomic training as directed by the ergonomics program manager.
 - 3.4.8. Provide team recommendations to supervisors, directors, and other appropriate officials.

- 3.4.9. Provide the WR-ALC Commander with a quarterly program update.
- 3.5. The Occupational Medical Services:
 - 3.5.1. Develop written protocol for the early recognition, evaluation, treatment, and follow-up of WMSDs.
 - 3.5.2. Provide guidance and direction to identify, control, and recognize ergonomic problems.
- 3.6. The Public Health Office:
 - 3.6.1. Administer screening health surveys as appropriate.
 - 3.6.2. Coordinate the use of engineering controls, administrative controls, and personal equipment with the Safety Office, Bioenvironmental Engineering Flight and supervisors to reduce ergonomic risks.
 - 3.6.3. Coordinate with the Safety Office and the Bioenvironmental Engineering Office to provide appropriate ergonomics training for all levels of employees.
- 3.7. The Bioenvironmental Engineering Flight:
 - 3.7.1. Provide guidance and direction to identify, control and recognize ergonomic problems.
 - 3.7.2. Coordinate with the Safety Office and the Occupational Medicine Service (OMS) and Public Health Flight to provide appropriate ergonomics training for all levels of employees.
 - 3.7.3. Integrate ergonomic considerations when reviewing new equipment procurement and facility modification and construction.
 - 3.7.4. Integrate ergonomic concepts into routine operations.
 - 3.7.5. Coordinate the use of engineering controls, administrative controls, and personal equipment with OMS, Safety Office, and supervisors to reduce ergonomic risks.
 - 3.7.6. Gather information about WMSD in the workplace and identify workers at risk of developing a CTD.
 - 3.7.7. Record industrial ergonomic risks in the case files.
- 3.8. The Safety Office:
 - 3.8.1. Provide guidance and direction to identify, control, and recognize ergonomic problems.
 - 3.8.2. Coordinate with Occupational Health Section and the Bioenvironmental Engineering Flight to provide appropriate ergonomics training for all levels of employees.
 - 3.8.3. Direct integration of ergonomic concepts into routine operations.
 - 3.8.4. Coordinate the use of engineering controls, administrative controls, and personal equipment with the OMS, Bioenvironmental Engineering Flight, Ergonomics Working Group and supervisors to reduce ergonomic risks.
 - 3.8.5. Gather information about WMSD in the workplace and identify workers at risk of developing a CTD.
 - 3.8.6. Record metrics to assess the program. Maintain and review injury and illness records related to ergonomic problems to develop trend analyses of injuries and illnesses related to CTDs

and report any findings concerning trends or problem areas to the Ergonomics Working Group, at least quarterly.

3.9. The Engineering Departments: Integrate ergonomic considerations into design of new equipment, and implement recommendations to eliminate or reduce ergonomic risks when feasible.

3.10. Facility Managers: Will integrate ergonomic considerations into facility modifications and construction, and implement recommendations to eliminate or reduce ergonomic risks when feasible.

3.11. The Civilian Personnel Office: Incorporate the ergonomics team recommendations and concerns in the employee placement process.

3.12. Directors and Division Chiefs:

3.12.1. Incorporate ergonomic considerations into facility modification, renovation, construction projects, or purchases for hand tools, equipment, and furnishings.

3.12.2. Implement recommended controls for reducing risk associated with ergonomic problems. Justification directed to the ergonomics officer is required for all recommendations not implemented.

3.12.3. Ensure employee participation in mandatory ergonomic training.

3.13. Supervisors will:

3.13.1. Routinely review ergonomic risk and coordinate with appropriate Safety Staff in the reduction of that risk.

3.13.2. Notify the Ergonomics Working Group of employee reported ergonomic concerns and suggested controls.

3.13.3. Ensure recommended engineering controls, administrative controls, and personal equipment is used to reduce ergonomic risks.

3.13.4. Ensure employee participation in mandatory ergonomic training.

3.13.5. Consider ergonomic risk when selecting an employee for tasks.

3.13.6. Inform the Ergonomics Working Group as to any changes or plan of changes in the status of a recommendation which pertains to individuals work area one-month after ergonomic formal recommendation is received by the supervisor.

3.14. Employees will:

3.14.1. Modify work habits as recommended to reduce ergonomic risks.

3.14.2. Use engineering controls, administrative controls, and personal equipment to reduce ergonomic risks.

3.14.3. Notify supervisor of any workplace condition that may involve ergonomic risk and/or suggestion for control.

3.14.4. Participate in the medical surveillance program.

3.14.5. Attend mandatory training and participate in suggested conditioning activities.

4. Procedures.

- 4.1. Supervisor/management training on the ergonomic program will be provided by the Occupational Health Section, Bioenvironmental Engineering, or Safety Offices. This training will include definitions, a description of procedures in the program, a review of common ergonomic problems and considerations needed for solutions.
- 4.2. All employees at Robins AFB will be trained in ergonomic awareness. This training will be provided by either the Occupational Health Office, Bioenvironmental Engineering, Safety Office, or a qualified contractor. The training will include definitions, a review of common ergonomic problems and solutions and employee responsibilities in the ergonomics program.
- 4.3. Whenever an employee suspects an ergonomic issue needs to be addressed, they should first contact their immediate supervisor about the problem.
- 4.4. The supervisor will contact the appropriate office to request a review of the area.
- 4.5. The ergonomics representative will visit the work site to discuss the problem and to make recommendations, whenever necessary (see [Attachment 2](#)).
- 4.6. The ergonomics program manager will send a recommendation memorandum (see [Attachment 2](#)) and a copy of the work site visit to the employee, supervisor, chiefs, directors, and various agencies in order to implement the recommendation as soon as practical and consistent with approved funding within the responsible organization's budget.
- 4.7. The ergonomics program manager will report to the WR-ALC Vice Commander the status of ergonomic implementation quarterly or as requested.
- 4.8. Status reports on the progress of implementation of recommendations will be coordinated by Bioenvironmental Engineering office. These reports will be disseminated as necessary.

STEPHEN L. DAVIS
Executive Director

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 91-2, *Safety Program*

AFPD 91-3, *Occupational Safety and Health, Preventive Medicine*

AFI 92-202, *The US Air Force Mishap Prevention Program*

AFI 92-204, *Safety Investigations and Reporting*

AFI-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*

AFI 48-145, *Occupational Health Program*

DoDI 6055.1, *Occupational Safety and Health Program*, August 1998.

Memorandum, Ms. Goodman, Deputy Under Secretary of Defense (Environmental Security), 4 Feb 97, Subject: Ergonomics Program Requirements.

U.S. Department of Labor, OSHA, 1991. Ergonomics Program Management Guidelines for Meatpacking Plants. OSHA Publication #3123.

USACHPPM TG 220 (Draft). Ergonomics in Action. U.S. Army Center for Health Promotion and Preventive Medicine and the U.S. Army Safety Center.

NIOSH [1997]. Elements of Ergonomics Programs. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 97-117.

Terms

Cumulative Trauma Disorder (CTD)—Health disorders arising from repeated biomechanical stress due to ergonomic hazards.

Engineering Controls—The reduction or elimination of a hazard by changes in the workplace such as redesigning the work station, substituting tools, altering the lighting, or altering work procedures.

Environment—The circumstances, conditions, and influences that affect the behavior and performance of people in the workplace, such as vibration, noise, lighting, temperature, humidity, air flow, and work station organization.

Equipment—Includes all equipment used to perform tasks such as hand tools, machinery, and furniture.

Ergonomics—The discipline of manipulating task procedures to human capabilities to improve worker capacity and well-being, i.e.; "fit the job to the person."

Ergonomic Project File—Contains status reports of recommendations established by the Ergonomic Working Group.

Personal Protective Equipment—Devices worn by employees that provide some degree of protection from a hazard.

Repetitive Motion—A job may be considered repetitive if there are more than 1,000 repetitions (i.e.; the cycle time to complete a task is less than 30 seconds) per eight-hour shift.

Work-Related Musculoskeletal Disorder (WMSD)—Disorders of the muscles, nerves, tendons, ligaments, joints, cartilage, or spinal discs that are attributed to the work environment and the performance of work.

Attachment 2

ERGONOMICS AWARENESS

**ERGONOMICS SUBCOMMITTEE
WORKSITE MEETING AND WORKSITE VISIT**

Meeting.

The meeting was held on _____ at _____ hours.

Members Present:

Medical Rep _____ Industrial Hygiene Rep _____

Safety Rep _____ Union/Employee Rep _____

Engineering Rep _____

Civilian Personnel Advisory Center Rep _____

Worksite.

Supervisor _____ Office Symbol _____ Ext _____

Bldg _____ Bay _____ Sect _____ Floor _____

Employee Information.

Position/Title _____ Operation _____

Discussion.

Recommendations:

EXAMPLE
Recommendation Memorandum

DATE

MEMORANDUM FOR [Supervisor Office Symbol], [Name]

FROM: [Supervisor Office Symbol], [Name]

SUBJECT: Ergonomic Subcommittee Worksite Meeting/Visit

1. Reference: Department of the Air Force, [Installation Name] Regulation No. [#], Ergonomics Program, [DATE].
2. Attached are comments/recommendations from a recent worksite meeting/visit (Example 1, Attachment 2) performed for your area.
3. Request that you review these notes and initiate implementation of the recommendations.
4. Provide a status report of the implementation or justification for non-implementation of these recommendations to this office NLT DATE.
5. Question(s) and/or comments may be directed to the undersigned.

Encl

NAME
ERGONOMICS Program Manager
OFFICE

CF:

(copy furnished to employee, chief, director, etc)