

# NASA - LaRC

## SAFETY NEWSLETTER

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### ERGONOMICS

What is ergonomics? This is a new word for some of us but it can be a very important word to understand in our jobs. Ergonomics is the science of adapting equipment, procedures and surroundings to people. In general you can say that good ergonomics makes your job fit you. By designing the workplace so they fit the worker you can reduce the stress of repetitive motions when you perform your job.

#### ANALYZING ERGONOMICS

When you properly apply ergonomics it can help prevent injuries, improve efficiency, and also helps you on your off duty time. The first thing you need to do is analyze the physical and mental abilities of your people. Then evaluate the tasks as to what the physical and mental demands of the job and activities. After you have this information you need to look at the environment, this involves everything from the lighting to the tools being used.

#### REPETITIVE MOTION DISORDERS

Most of the problems we hear about with ergonomics fall into two categories. The first involves the hands from workers that use video display terminals (VTD's). The second concern is the back also from workers who set at VTD's or any setting jobs for long periods of time. The following are some ways to correct these problems and to make your work more comfortable and more efficient.

#### Work Surface:

- Allow legroom underneath.
- Use a document holder to keep the document you are working on at the same height and distance as the screen.

#### Screen height, angle, and contrast:

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#### Screen height, angle, and contrast:

- Sit about an arm's length away and tilt the screen back slightly.
- The top line of the screen should be just below eye level when sitting upright.
- Reduce screen glare by changing lighting or screen position.

#### Chair Height:

- Your feet should be flat on the floor.
- Knees level with the hips.
- Lower back should be supported.
- Avoid positions in which your body is twisted.

#### Keyboard Position:

- Your arms should rest at the sides, with elbows at right angle and wrists straight.
- Padded wrist rests are also available to support wrist and soften hard corners.

#### Extras:

- Cushion or a pillow to support the lower back.
- Footrest can be used to bring your knees up to hip level.
- Screen filter to help reduce glare.
- Use proper lifting techniques.
- Adjust your position frequently to avoid repeated stress on a single part of the body.
- Adjust your pace when possible; increase your pace gradually at a new job.
- Use jigs and fixtures such as clamps, work surfaces.
- Use cushioned grips and ergonomically designed tools.
- Pad hard corners.
- Always use the right tool for the job.

If you apply good ergonomic practices, work smart; take care of your hands and back you can reduce the risk of developing repetitive motion problems. It has been proven that after making workers more comfortable with the machines and materials they use in the workplace, redesigning workstations, and changing the way a job is performed that you get more done with less effort.

Look around your workplace and see if there are ways you can do your job that would be more comfortable, productive, safe, and ergonomically

correct. Most changes for ergonomics are in place you just need to know how to put them to work for you. There is no big money investment needed to raise a chair, relocate a desk, use a footrest, or exercise. If you think of something that would help in your job let it be known and give it a try.

### **SAFETY CLASSES OFFERED**

Just a reminder that the following safety training classes are available to be presented for you at your safety meetings.

**Confined Spaces (permit required)**

**Confined Space Awareness**

**Personal Protective Equipment (PPE)**

**Ergonomics (Office or Industrial)**

**Material Safety Data Sheets (MSDS)**

**Heat Stress**

**Cryogenics**

**Chemical Safety (Chemical Refresher)**

**General Office Safety**

If you would like to setup a class, contact your supervisor and he can schedule by contacting Butch Jones at 4-8743.