Avoid the Dirty Dozen

12 Common Causes of Human Factors Errors

About 80 Percent of Maintenance Mistakes Involve Human Factors... and if Not Detected... Would Lead to Accidents.

Put Safety First and Minimize the 12 Common Causes of Mistakes in the Aviation Workplace

1. Lack of Communication
   Failure to transmit, receive, or provide enough information to complete a task. Never assume anything.
   Only 30% of verbal communication is received and understood by either side in a conversation. Others usually remember the first and last part of what you say.

   **Improve your communication**—
   - Say the most important things in the beginning and repeat them at the end.
   - Use checklists.

2. Complacency
   Overconfidence from repeated experience performing a task.

   **Avoid the tendency to see what you expect to see**—
   - Expect to find errors.
   - Don’t sign it if you didn’t do it.
   - Use checklists.
   - Learn from the mistakes of others.

3. Lack of Knowledge
   Shortage of the training, information, and/or ability to successfully perform.

   **Don’t guess, know**—
   - Use current manuals.
   - Ask when you don’t know.
   - Participate in training.
Lack of Assertiveness
Failure to speak up or document concerns about instructions, orders, or the actions of others.
Express your feelings, opinions, beliefs, and needs in a positive, productive manner—
• Express concerns but offer positive solutions.
• Resolve one issue before addressing another.

Stress
A physical, chemical, or emotional factor that causes physical or mental tension.
Manage stress before it affects your work—
• Take a rational approach to problem solving.
• Take a short break when needed.
• Discuss the problem with someone who can help.

Lack of Awareness
Failure to recognize a situation, understand what it is, and predict the possible results.
See the whole picture—
• Make sure there are no conflicts with an existing repair or modifications.
• Fully understand the procedures needed to complete a task.

Norms
Expected, yet unwritten, rules of behavior.
Help maintain a positive environment with your good attitude and work habits—
• Existing norms don’t make procedures right.
• Follow good safety procedures.
• Identify and eliminate negative norms.

Distractions
Anything that draws your attention away from the task at hand. Distractions are the #1 cause of forgetting things, including what has or has not been done in a maintenance task.
Get back in the groove after a distraction—
• Use checklists.
• Go back 3 steps when restarting the work.

Lack of Teamwork
Failure to work together to complete a shared goal.
Build solid teamwork—
• Discuss how a task should be done.
• Make sure everyone understands and agrees.
• Trust your teammates.

Fatigue
Physical or mental exhaustion threatening work performance.
Eliminate fatigue-related performance issues—
• Watch for symptoms of fatigue in yourself and others.
• Have others check your work.

Lack of Resources
Not having enough people, equipment, documentation, time, parts, etc., to complete a task.
Improve supply and support—
• Order parts before they are required.
• Have a plan for pooling or loaning parts.

Pressure
Real or perceived forces demanding high-level job performance.
Reduce the burden of physical or mental distress—
• Communicate concerns.
• Ask for extra help.
• Put safety first.