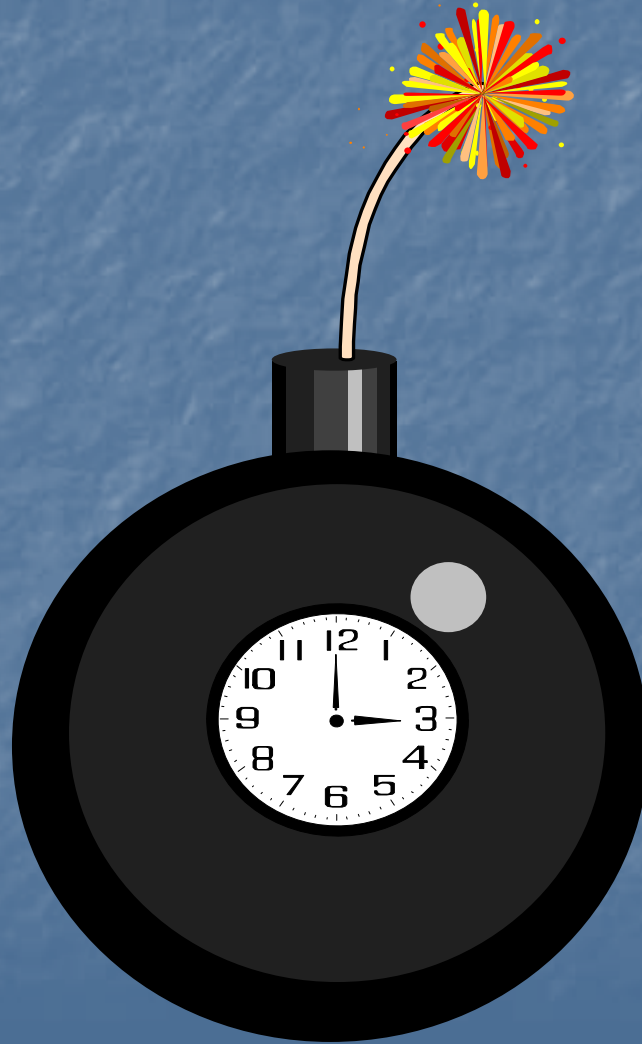
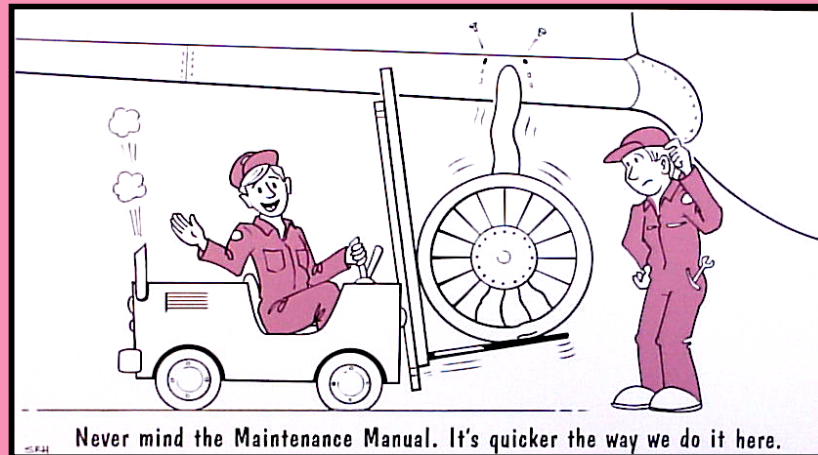


NORMS



“The Dirty Dozen”

1. Lack of Communication
2. Complacency
3. Lack of Knowledge
4. Distraction
5. Lack of Teamwork
6. Fatigue
7. Lack of Resources
8. Pressure
9. Lack of Assertiveness
10. Stress
11. Lack of Awareness
12. Norms



Safety Nets



Always work as per the instructions or have the instructions changed.



Be aware that 'norms don't make it right.'

Routine Violations

- Are the things which have become the normal way of doing something within the person's work group.
- They can become routine for a number of reasons e.g. cutting corners saves time and energy. The procedure may be overkill and skilled people tend to think they know best.

Routine Violations

- Often occur with such regularity that they are automatic. Violating this rule has become a group norm. Routine violations are condoned by management.

Routine Violation Example

- Not performing an engine run after a borescope inspection (“it never leaks”).
- **Lesson Learned:** AAIB/AAR 3/96, British Midland, B737 -400 suffered a loss of oil pressure on both engines. Aircraft diverted without incident. A/C had been subjected to borescope inspections on both engines the previous evening and the high pressure rotor drive covers had not been installed.

Situational Violations

- Occur due to the particular factors that exist at the time e.g. time pressure, high workload, unworkable procedures, inadequate tooling, poor working conditions.
- These occur often when in order to get the job done a procedure cannot be followed.

Situational Violation Example

- A technician with a tight deadline discovered he needed a special tool to accomplish the task. The tool was not available and proceeded to do the job anyway.
- **Lessons Learned:** AAIB Bulletin 5/97, British Airways, B747, the 4L door handle moved to the 'open' position during climb. An investigation revealed that the door torque tube had been incorrectly drilled/fitted. The AMM required a drill jig to be used when fitting a new undrilled torque tube, but the jig was not available.

Optimizing Violations

- These involve breaking the rules for 'kicks'.
- They are often quite unrelated to the actual task.
- A person just uses the opportunity to satisfy a personal need.

Optimizing Violation Example

- A tug driver who has to go from A to B and gets a kick out of driving there fast and takes risks.
- Joking Pilots who flout safety rules deviating from standard operating procedures.

Optimum Violation Example

- **Lessons Learned:** Pinnacle Airlines Flight 3701 crashes on Oct. 14, 2004 after losing power in both engines of their Bombardier CRJ-200 while on a ferry flight. They whooped and joked on what became a joy ride, pulling the jet into steep climbs and attempted to fly at the plane's highest altitude, 41,000 feet.