

# Nondestructive Inspection

Yesterdays necessary evil, or  
today's best kept secret for  
maintenance planning?

# Rusty Jones, FAA

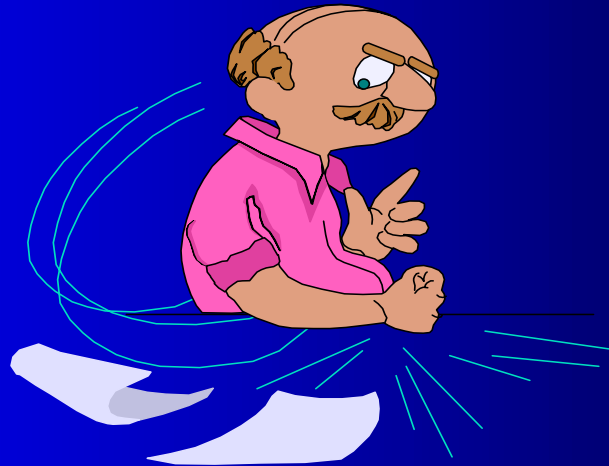
- National Resource Specialist NDI
- Aging Aircraft (structures)

◆ NDI NONDESTRUCTIVE INSPECTION

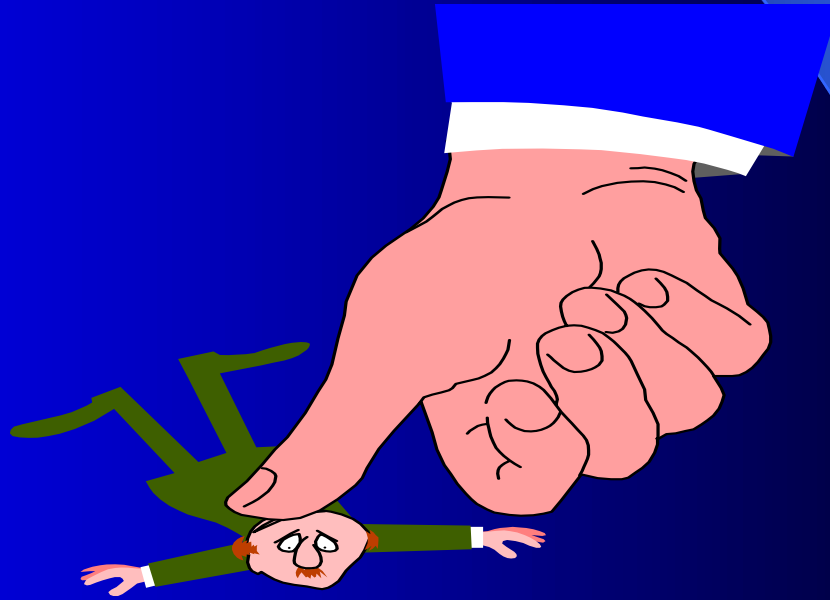
◆ NDE NONDESTRUCTIVE EVALUATION

◆ NDT NONDESTRUCTIVE TESTING

- ◆ NDI NOT DONE IMMEDIATELY
- ◆ NDI NO DARN INTELLIGENCE
- ◆ NDT NOT DONE TODAY
- ◆ NDT NOT DONE TOMORROW



◆ NDE NEAR DEATH EXPERIENCE



# National Resource Specialist NDI

- Consults for FAA and Industry on the six primary NDI methods
- Visual
- Eddy Current
- Ultrasonic
- Radiography
- Magnetic Particle
- Liquid Penetrant

# Background



# Aging Aircraft

- Airplanes are aging both commercial and military.
- Cost associated with aging programs is increasing
- Better inspections allow for better use of manpower and down time

# Three C's in airplane Maintenance

- **Cost**

1. Down time
2. Inventory
3. New aircraft

- **Cracking**

1. Early detection saves money and eases repairs

- **Corrosion**

1. Early detection allows for monitoring and preplanned down time

# Enhanced Maintenance Planning

- Improves long term planning
- Resource management
  1. Preplan needed materials eliminating large inventories.
  2. Better planning of manpower.
  3. Improved cost management.

# Participants

- Nancy Wood, Senior Project Engineer, The Boeing Company
- David G. Moore, Principal Member of Technical Staff, Sandia National Laboratories