



Aircraft Engineering

# Line Maintenance

Keeping assets in service

## Scheduled and un-scheduled line maintenance



# Scheduled maintenance

## Facility

- Human Factors
  - Time
  - Weather



# Scheduled maintenance

## Resource

- Suitably qualified staff
  - Licensed/Mechanic ratio
  - Industry shortages



# Scheduled maintenance

## Tooling

- Availability of required tooling
- High cost, low usage items

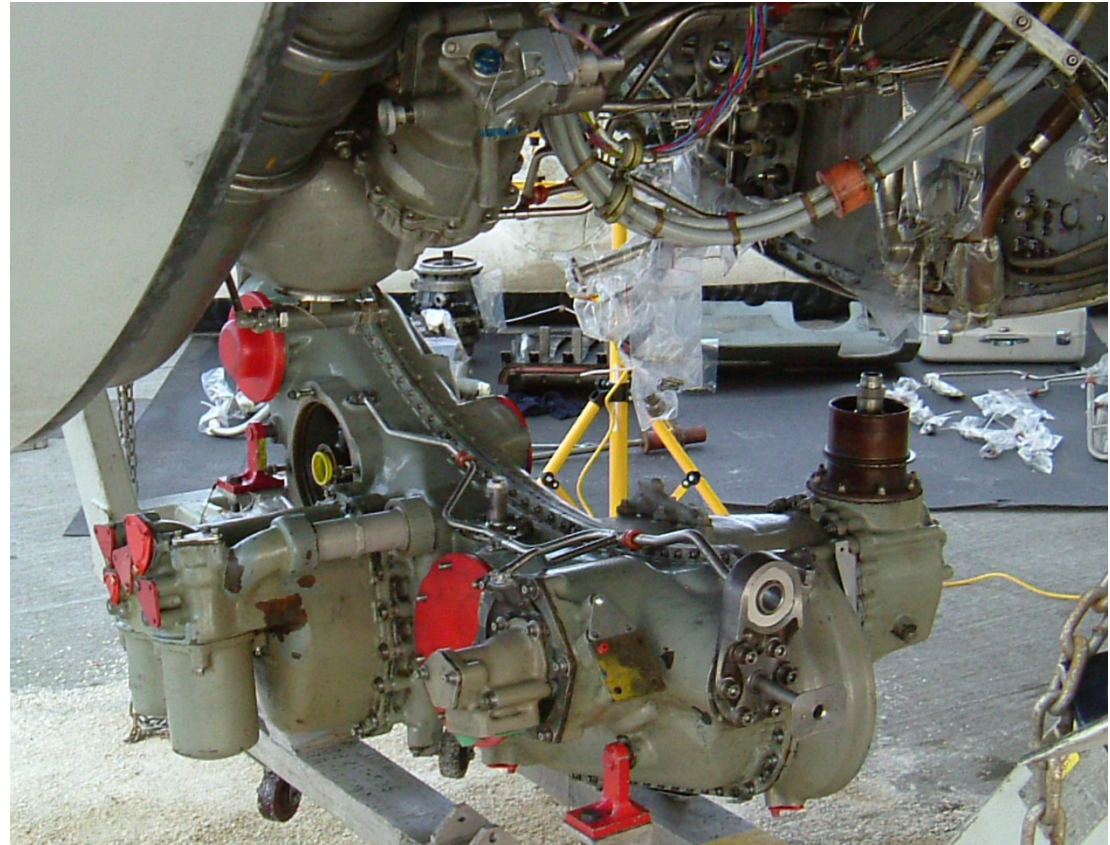


# Scheduled maintenance

## Parts

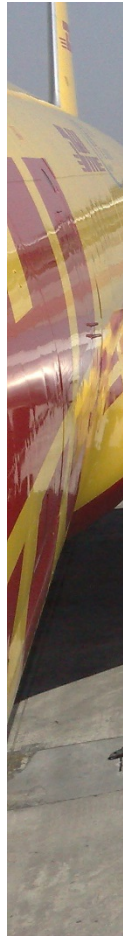
### Customer sourced

- PBH
- Owned stock
- Parts pooling
- Quality of components
  - Fail on fit
  
- Delivery of parts
  - Stock levels and locations
  - Effective shipping arrangements



# Unscheduled maintenance

- Facility
  - On site access equipment
- Resource
  - Suitably experienced and approved staff
- Tooling
  - Availability of required tooling
- Parts
  - Full and concise list of required parts



## Dealing with unforeseen events

***“Unforeseen events can be good or bad, but they’re all surprises.”***

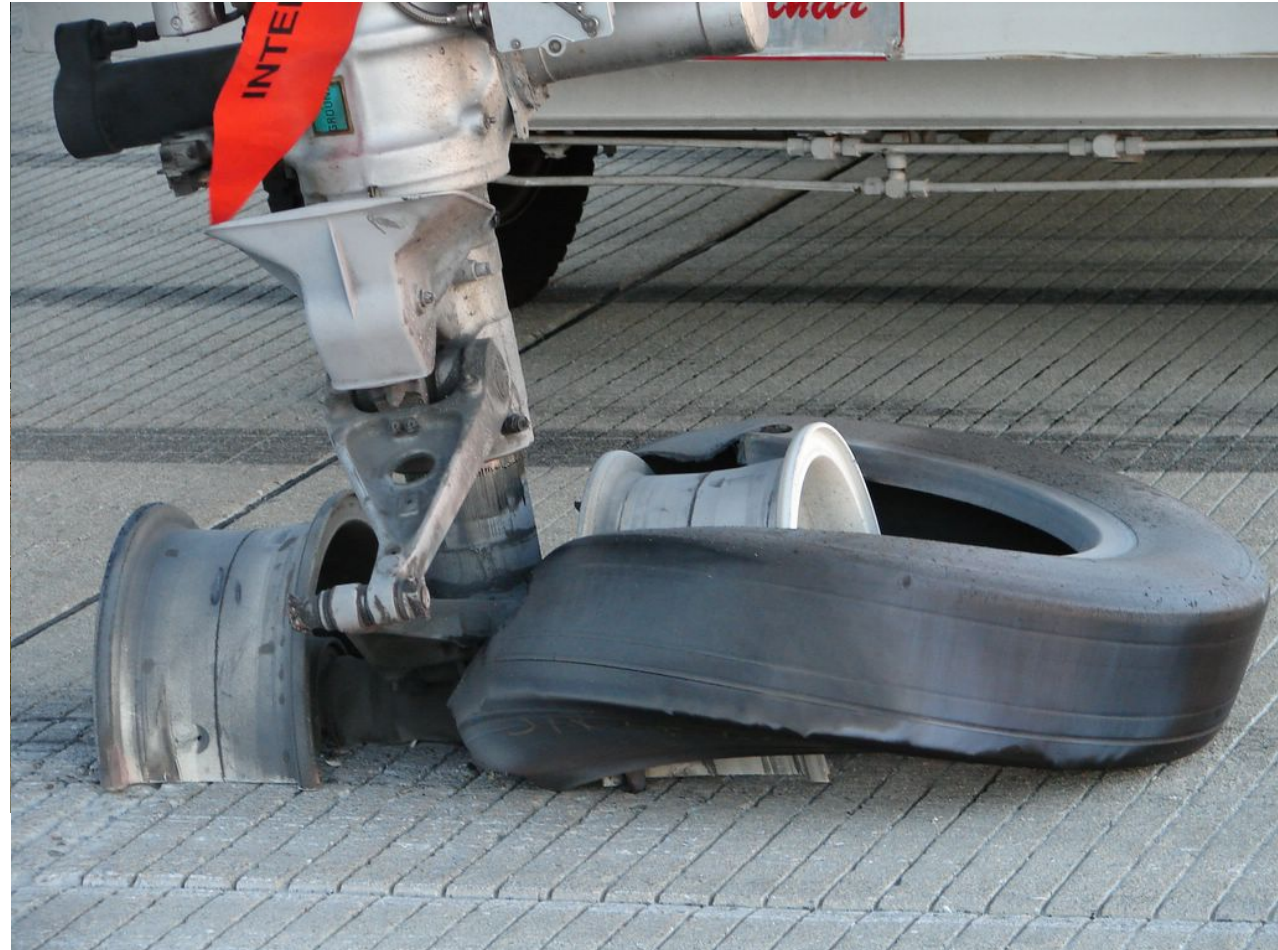


# Dealing with unforeseen events



# Dealing with unforeseen events

- **LRU events**
  - Catastrophic failures
  - Nose wheels worn to limits!



# Dealing with unforeseen events

- **Non LRU events**
  - Severe damage by Ground Support Equipment
    - Passenger door areas
    - Lower cargo hold door apertures



## 2017 and Future Developments

- Remote access to all documentation and recording
- VR/AR technology
  - Training
  - Maintenance
- RFID
  - Tracking of assets



## Key business areas for MRO's

- “New” technology
  - On wing repairs of composite airframes
  - Integration with OEM data sources
- Cabin interiors
  - Cabin standards
  - Premium cabins
  - IFE integrity

Questions?

