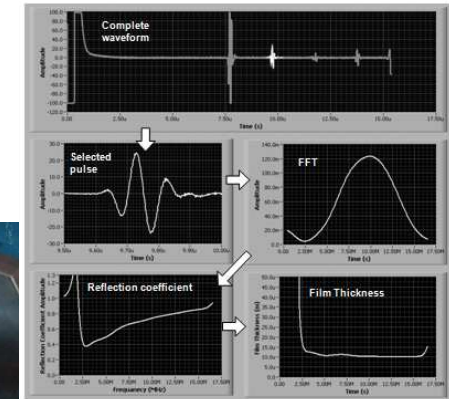
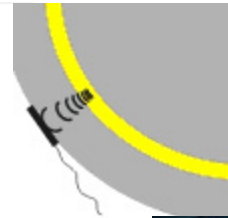


# Bearing Health in Wind Turbines

## A Difficult Operating Regime

- Rotor bearings in wind turbines are typically rolling element bearings
- Rotational speeds are low
- Load cycles vary – wind direction
- These are undesirable conditions for a rolling element bearing to operate in
- Bearing Failure



## Investigation

- Monitoring of fluid films
- Determination of bearing health
- Intervention points

## Future Work

- Minimisation of metal to metal contact
- Lubrication on demand