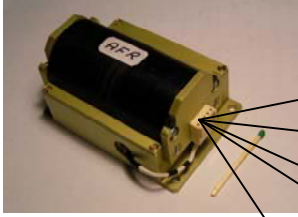




AUTONOMOUS (Fatigue Loads and) FATIGUE RECORDER CONTINUOUS FATIGUE ESTIMATION of STRUCTURES PHILOSOPHY

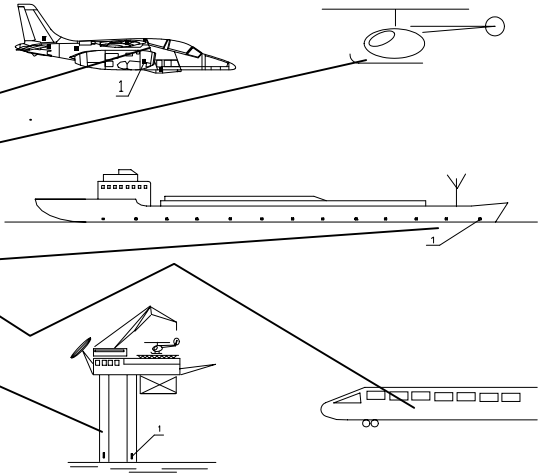
Institute of Aviation, Warsaw University of Technology, Poland

AFR



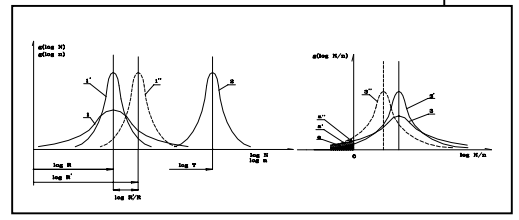
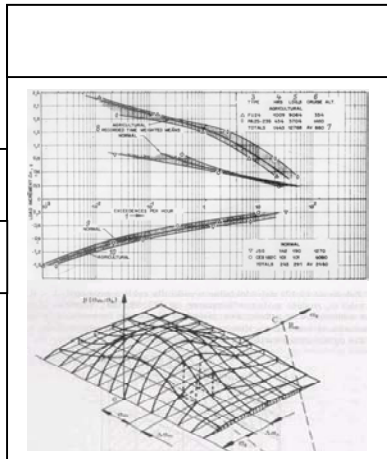
Linear Acceleration Signal and (or) Strain Gauge Signal and others

Structures



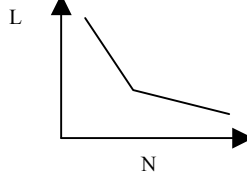
Signal Analysis

Software of AFR



- **Optimal Exploitation**
- **Control of Operational Safety**

Fatigue Characteristic of Structures or Local Point of Structures, or Results of Fatigue Tests



Fatigue Analysis

Software of AFR for portable or stationary computer

RESULTS

- *Fatigue Factor – FF (real Fatigue caused by Loads)*
 - *Fatigue Intensity Factor – FIF (real Intensity of Using)*
 - *Exploitation Time Factor - ETF (Fatigue proportional to the Time of Exploitation)*
- $FF = ETF * FIF$**

