#### Update on UK Effort

### Robert Smith Qinetiq

(interpreted from an email by Bruce Thompson who is responsible for any misinterpretation)

## Status of Previously Reported MAPOD Study on Cold Worked Holes

- Aircraft on which study was being conducted had its life extended
- The economics changed, making it more attractive to repair or replace wings
- MAPOD effort abandoned

#### **Current Activity**

- Tear down of fatigue test wing
  - Actual crack sizes
- Extensive scans at different load levels
- Plan to analyze NDT and size data to estimate POD
- Closure effects do to cold work expected to be an important factor

#### Complicating Factor

- Stress analysis predicted 45-degree corner cracks at faying surfaces
- Actually saw a wide range of angles and some mid-bore cracks
- Lesson learned regarding placing an over reliance on the results of the stress analysis

# For Presentation at the Next Meeting

- Comparison of tear down POD (real cracks in real structure) with POD based on EDM notches with a mark-up for closure
  - Bear in mind low sample numbers