

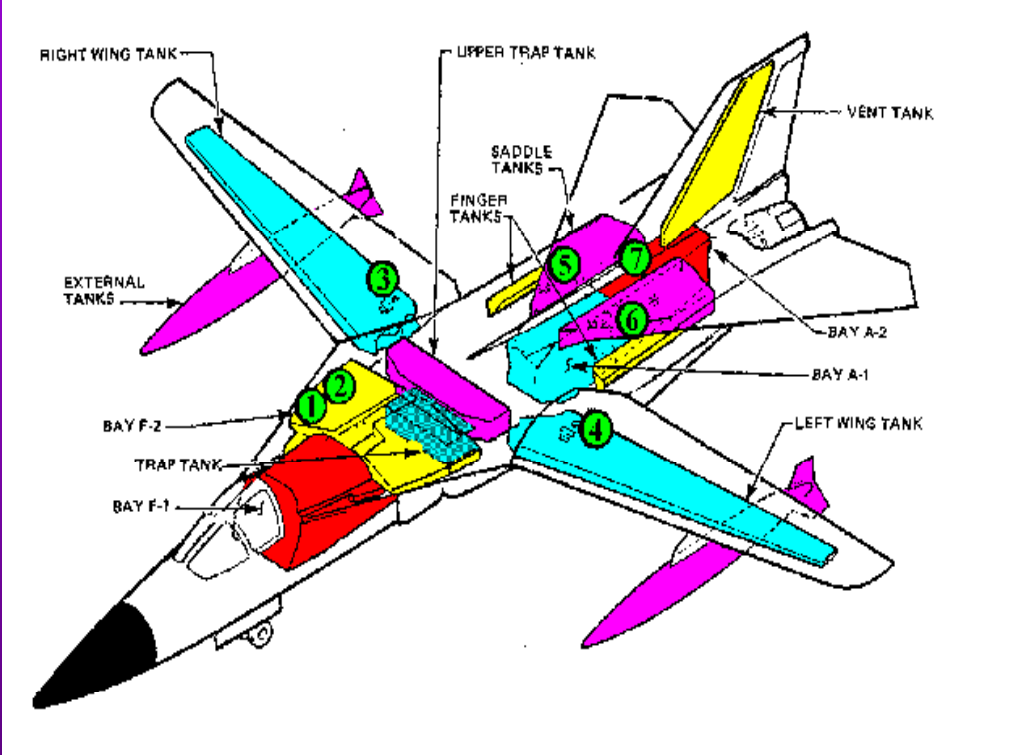
# FIII FUEL TANK REPAIR AND WORKER'S HEALTH

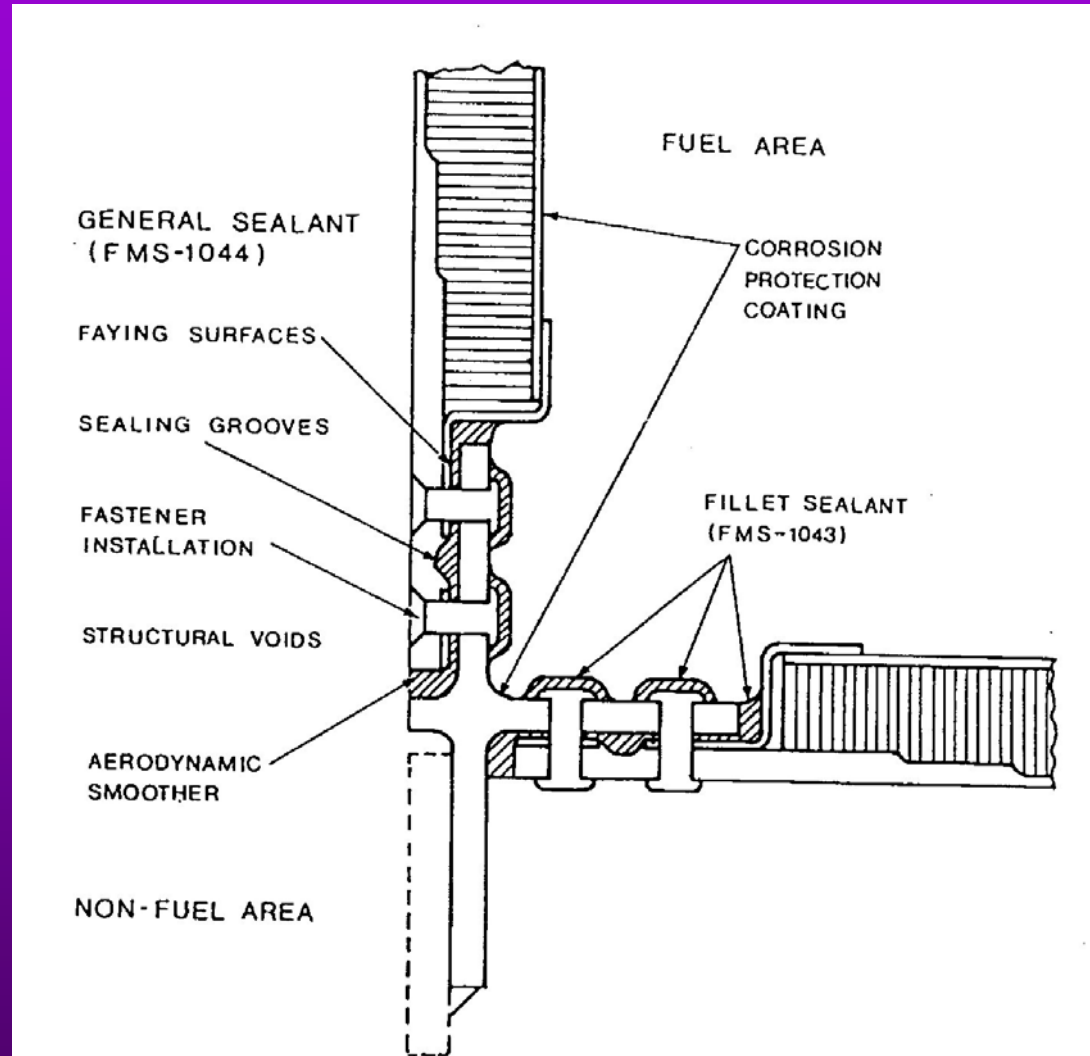
Dr James Ross

19 May 04

**REPORT OF THE  
F111 DESEAL/RESEAL  
BOARD OF INQUIRY:**

**CHAPTER 2:  
THE FAILURE OF  
THE AIR FORCE  
MEDICAL SERVICE**





# HISTORY OF DESEAL - RESEAL

- 1st program 1977-82
- wing program 1988-92
- 2nd program 1991-93
- Spray seal program 1996-99

# HISTORY OF DESEAL - RESEAL

- Recognition that conditions were difficult
- Anecdotal reports of impact of work on:
  - ◆ health
  - ◆ social interactions
  - ◆ environment

# HISTORY OF DESEAL - RESEAL

- Concerns expressed late 1998
- Further health concerns and occupational hygiene survey late 1999
- Initial investigation Feb 2000 (work ceased)
- Board of Inquiry Jul 2000
- Epidemiological Study Sep 2000
- Health care program Sep 2001

# Concerns

- Had an unsatisfactory review in late 1998:
  - ◆ Blood tests – LFTs
  - ◆ Workplace review
  - ◆ Concerns dismissed
- Discussions between workers: consistency of symptoms
  - ◆ Irritability
  - ◆ Forgetfulness
  - ◆ Headaches
  - ◆ Continued stories of ill health from previous workers
- New supervisor, concerned with the process

# ALARM RAISED

- Occupational Hygiene report:
  - ◆ PPE not appropriate for the exposures
  - ◆ Some procedures not being followed
- Medical Officer involvement
  - ◆ Several workers attended the base clinic, saw the same doctor.
- The penny drops.

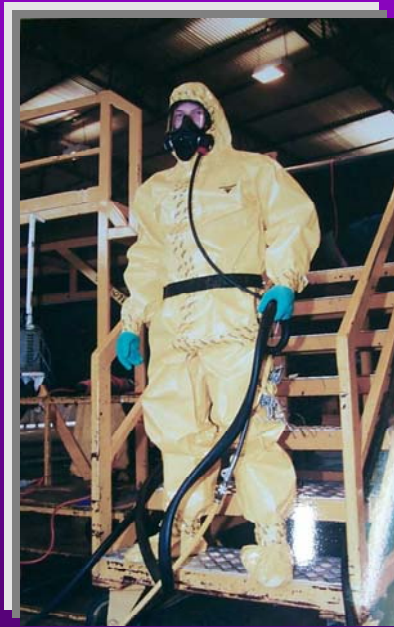
# CLINICAL PRESENTATION

- Neuropsychological
  - ◆ Memory
  - ◆ Irritability
  - ◆ Concentration
- Dermatological
- Respiratory

# HAZARDS

- Chemicals
  - ◆ SR51 (thiophenol)
  - ◆ Jet Fuel
  - ◆ Toluene, MEK, Glycols etc
  - ◆ Isocyanates
  - ◆ Chromates
- Musculoskeletal injury
- Psychological impact
- Explosion
- Heat

# PPE USED TO ENTER FUEL TANKS



- Bulky
- Hot
- No communication
- Still has breakthrough for some chemicals

# ANALYSIS

- Relevant constellation of symptoms
- Opportunity for exposure
- Self reported symptoms v like group not exposed
- Medical care over the preceding year

- A more accessible part of the aircraft



# SOME PROBLEMS IDENTIFIED IN SPRAY SEAL PROGRAM

- Ventilation of tanks
- Monitoring of LEL
- Time in tanks
- Breakthrough for some chemicals
- Lack of adherence to SOPs
- Lack of training
- Lack of Occ Hygiene and Occ Med oversight

