



Submission 114

Inquiry into RAAF F-111 Deseal/Reseal Workers and their Families

Name:

Name withheld

Joint Standing Committee on Foreign Affairs, Defence and Trade
Defence Sub-Committee

My Story

My name is [REDACTED] Originally joined RAAF 12 July 1977 aged 17yrs.

Training Wagga 23 Sept 1977-dec 1978

Even during training there was no OH and S in regards to solvent/fuel contact regularly cleaning floors with MEK and rags and washing components in Avtur and Avgas.

The dizziness and the tingling were part of the job and of course you certainly knew where the cuts in your fingers were.

1978-492 SQN First Posting/ first job where [REDACTED] and myself used MEK and Toluene 50/50 mix poured over hessian bags on Orion nose radomes to soften rubberised paint for removal and repair. No PPE or breathing gear, terrible headaches and dermatitis. Corrosion control servicing followed with tank entries and gooping no ppe utilising PRC sealants which were aerosmoothed by spitting licking fingers and running along goop seams...yellow tongues were the norm. Acetone and MEK used to clean surface and also "yellow peril" stripper, Alodine 1200s plus Deoxidine and for prepping of surface for painting which we did with zinc chromate and polyurethane still no PPE of any sort.

1981-481 SQN [REDACTED] and I posted together to mirage maintenance where we defuelled and refuelled Mirage III0 and IIID always stunk of fuel, gooped seams with PRC sealant (yellow tongue) used Isopropyl Nitrate for Sabre display aircraft really bad headaches, breath taken away still no PPE.. [REDACTED] gets depressed a lot drinks a lot the culture accepted it [REDACTED] kills family in MVA after piss up, placed in same ward as survivor of MVA [REDACTED] commits suicide. Sent to Drop tank hangar where tempers were always frayed no ventilation fuel everywhere, use MEK to clean inhibitor from new tanks which we leak check in hangar. Always white dried out skin, headaches with dizziness no PPE. Sent to 481 hydraulics where I got to breath H515 in confined spaces as well as Freon for cleaning and "safety solvent" no PPE.

By the mid to late 80's Polyurethane paint was found to have killed Navy painters so PPE was starting to come in...Canister masks, which slowed the fumes down but tracks of paint, were still evident going in to your nose.

Other things were found to be carcinogenic which were removed from use such as C5a anti seize compound and CLR Breakfree (I believe armourers ADG and others still use this). We did our jobs IAW instructions someone else was watching for our welfare in regards to chemical contact and medical monitoring. .NOT.

1987-ARDU worked on Dakota R4 and lesser servicings acetone and red lead dope used to "redope flight controls". Changed beryllium stabilator bearings on F111 A9-132 . White spirits and Freon used to clean surfaces prior to inspection. Removed and refitted depleted uranium counter balances on Mirage Trials aircraft. We now used "leak check" a form of soapy water to assist in aerosmoothing PRC sealant on all aircraft.

1991-2AD Orion Flt

Deeper level maintenance which included continuous fuel tank entries often with "wet tank entries" the work level was extremely high and quite often tempers were very high.

A high number of members that had been there a while had bad dermatitis earning such nicknames as "the incredible shrinking man" the PPE at this stage had progressed to a filtered air tower (should it be deemed necessary to use it) MSA minder to monitor LEL which incidentally was useless with AVTUR as proved later and white cotton overalls which did not stop fuel contact just reduced static buildup.... This is still utilised today in some units...no footwear to be worn due to chance of damaging fuel quantity indicators so socks were always sodden with AVTUR.

Aircraft washes utilised Jet clean B and White spirits facemasks and partially water proof overalls at washpoint gloves that tended to melt.

Late 1992 38 SQN this time we washed in AVGAS and used Carbolene to de-carbon Augmenter exhaust components on Caribou engines which always leaked copious quantities of used oil commonly referred to as a "Pratt and Whitney hot oil shampoo" with which we were always covered...burnt/ used oil has been proven a carcinogen as is the Benzene in Avgas which we breathed while cleaning and refuelling etc.

Early 1995 486 SQN Without doubt the worst posting ever with 17hr days, no leave in lieu and fuel tank entries without outside spotter no PPE no ventilation outside in the sun in summer this was extremely common the number of suicides there should have been an indication of the horror we faced on a day to day basis.
Jetoil 2, H515, AVTUR and numerous greases and lubes utilised daily and wet (unventilated inches of fuel present) tank entries under direct order.

Late 1996 503 WG deep level strip on C130H continuous tank entries white overalls and stand by respirator in case of emergency yet again wet and breathing AVTUR, MSA minder still utilised where safety level set at 1% LEL indicating mask to be worn >1% LEL indication which it never showed.

1999 ALLMSQN all well here fairly safe in an office

2001 33SQN Tank entries not so frequent but did undertake 2 to 3 with white overalls no boots ventilation with respirator supplied through Universal Fuel Tank repair Trolley, back up respirator through Sabre unit but now a Eagle monitor as the MSA Minder "wouldn't know AVTUR if it fell in it". Still able to enter tanks without breathing gear when <1% LEL indicated.

Drip stick refuels still being carried out whereby fuel splashed on tarmac at every refuel or capacity check...not popular overseas at all especially US where dangers are being taken seriously.

Recommended gauge refuel (like everyone else uses)has fallen on deaf ears.

Since this time I have been employed in an instructional role and recently an advocate for safety in fuel tanks via Confined Space Entry instruction.

Australian Aerospace and QDS were visited to ensure all personnel on Richmond were informed of hazards and PPE needs to discover they still utilise MSA minder and did wet tank entries...the MSA Minder read <1%LEL yet the Eagle monitor when introduced to the same location at the same time went to the 2nd alarm indicating in excess of 5% LEL the danger area for explosion IAW 7207.001 RAAFSUP 5.

As it stands today antistatic overalls still worn plus respirator above 1% LEL immediate evacuation of tank >5%LEL and standard ventilation practices care of UFTRT and venturi hangar air driven devices.

Proposed "dry" overalls, bootees and better ventilation practices similar to F111 utilised equipment (used for years) not yet but hopefully soon?.

Update NOV 2006 we now have fuel proof overalls ,effective air mover units, new personnel friendly dribble drain and depuddling unit care of ESF program....but have discovered that fuel suppliers have reduced the exposure standard of AVTUR to 12.5 PPM from 100 PPM so now NO entries unless masked up with Breathable air.

I have fathered 3 children the 1st DOB 29 MAY 1979 fine 2nd DOB 11 AUG 93 very bad Asthma, 3rd DOB 04 JUN 98 Inoperable Optic Nerve Glioma (brain tumour) and learning difficulties, has survived 4 yrs so far since diagnosis, although blind in one eye and a malfunctioning Pituitary Gland.

My wife DOB 19 OCT 1966 has had CINIII and one Fallopian tube and Ovary removed due to Dermoid cyst plus 2 miscarriages 1 each prior to child 2 and 3

Personally I have suffered from depression, short term memory loss, heart palpitations, mood swings and anxiety and was prescribed anti- depressants as a large percentage in RAAF have been according to civilian employee medical sources. I am AHA Medical cat 1 deployable unrestricted.

The MATF investigation I initiated (Nov 2004) through the then AM Houston has found that the information and anecdotal information I supplied was valid and that recommendations should be strongly adhered , specifically medical monitoring.



DEPARTMENT OF DEFENCE
No. 285 SQUADRON

MINUTE

[REDACTED]

[REDACTED]

For information:
CO [REDACTED]

REQUEST FOR AKNOWLEDGEMENT OF ADVERSE HEALTH EFFECTS DUE TO SOLVENT EXPOSURE RICHMOND FUEL WORKERS

1. On the 9th of November 04, members of 285 Sqn Richmond technical and flight-training instructors received CAF for an informal discussion. I, [REDACTED] brought forward my concerns at the lack of acknowledgment that non Re-seal/de-seal personnel were equally affected by unprotected contact with toxic solvents and had similar medical conditions to RSDS Amberley.
2. Richmond was utilised as a control group to ascertain the validity of claims by RSDS workers 1975-1999 and this control group was duly found to have been unaffected by solvent exposure (attach A), this led me to question who were in this control group. Having spent the previous 13 yrs at ALG primarily employed in hands on deeper level maintenance not one member I have worked alongside at 2AD, 503WG, 486SQN, 38SQN or 33SQN have admitted being part of the control, which would indicate that either the control group implementation was flawed or these members suffering medical conditions chose not to disclose this fact on the anonymous survey.
3. So as not to regurgitate known health effects of the various solvents to which fuel workers were exposed it is accepted that there were dangerous solvents made available for use such as;
 - a. AVTUR (JP8, F34) containing DIEGME, benzene, n-Hexane, Xylene
 - b. AVGAS containing Benzene, Lead
 - b. MEK, Carbolene, Trichloroethylene, White Spirits, Toluene, Acetone, Freon

Hazardous solvents and investigations thereof are included in (attach B).

The effects of hazardous chemicals/solvents on the families of workers exposed to fuel are wide and varied due to contact with contaminated clothing and personal contact. The most insidious is that which has occurred due to male exposure, which is passed on at conception. This has been proven in a study with regard to parental exposure to Polycyclic Aromatic Hydrocarbon (PAH)(Attach C), which is an 18yr, 7 country study by Johns Hopkins. This study supports the hypothesis that paternal preconceptual exposure increases the risk of brain tumours/cancer to offspring. The two occupations with highest exposure to PAH were motor vehicle and Aircraft mechanics.

4. Safety Bulletins which include known carcinogens and Neurotoxicants (Attach D)

5. MSDS inaccuracies are numerous and largely not trusted, as an example (Attach E) DEB Swarfega hand cleaner has a requirement to wear gloves, eye protection and respirator whilst using. This has been discovered due to the adage that "if it works good, it can't be good for you".
6. California departments of Health services have provided a Hazard Evaluation and Information Service, which includes a "Long term Solvent Questionnaire". This questionnaire has been utilised to query personnel at Richmond for neurological problems. It also includes warnings that Ethylene Glycols such as FSII in Avtur are a reproductive hazard to personnel, further more they strongly recommend no contact with DIEGME (FSII) 3mths prior to fathering children due to likelihood of childhood cancer or other defect. (Attach F)
7. Neurological Dysfunction request for review (Attach G)
8. Environmental change(PAH) which has changed immune system reaction leading to Autism of personnel's children due to contact preconceptually.(Attach H)
9. Increased risk of Melanoma, Cervical cancer, asthma and cardiovascular disease in vicinity of RAAF base. Human Health Assessment Mar 2002 for RAAF Williamtown.(Attach I)
10. Anecdotal Evidence and case reports from Richmond members supported by similar reports from USAF, Air Care International and University of Connecticut case report on inhalation of aviation fuels resulting in Pulmonary Interstitial Fibrosis. (Attach J)
11. Hazard Report describing perceived hazards, contributing factors and recommendations as yet no feedback some 5mths later. (Attach K)
12. I have been approached by dozens of members (45) in 1 day, but the feeling is of mistrust of the hierarchy which is preventing a complete reveal of the truth, the minimal returns from the F111 BOI questionnaire indicate this feeling.
13. In short I truly believe had there been sufficient education, medical monitoring and Protective clothing made available/enforced this entire situation would have been averted and certainly had the complaints by the personnel been taken seriously, averted a lot sooner than it has been. On the positive side the Training and education are now beyond reproach and PPE and GSE are not far behind.
14. All that is required now is the acceptance by AFHQ that those as well as RSDS have been affected mentally and physically to the detriment of themselves and there families plus DFDA enforced compliance to OH and S procedures.

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