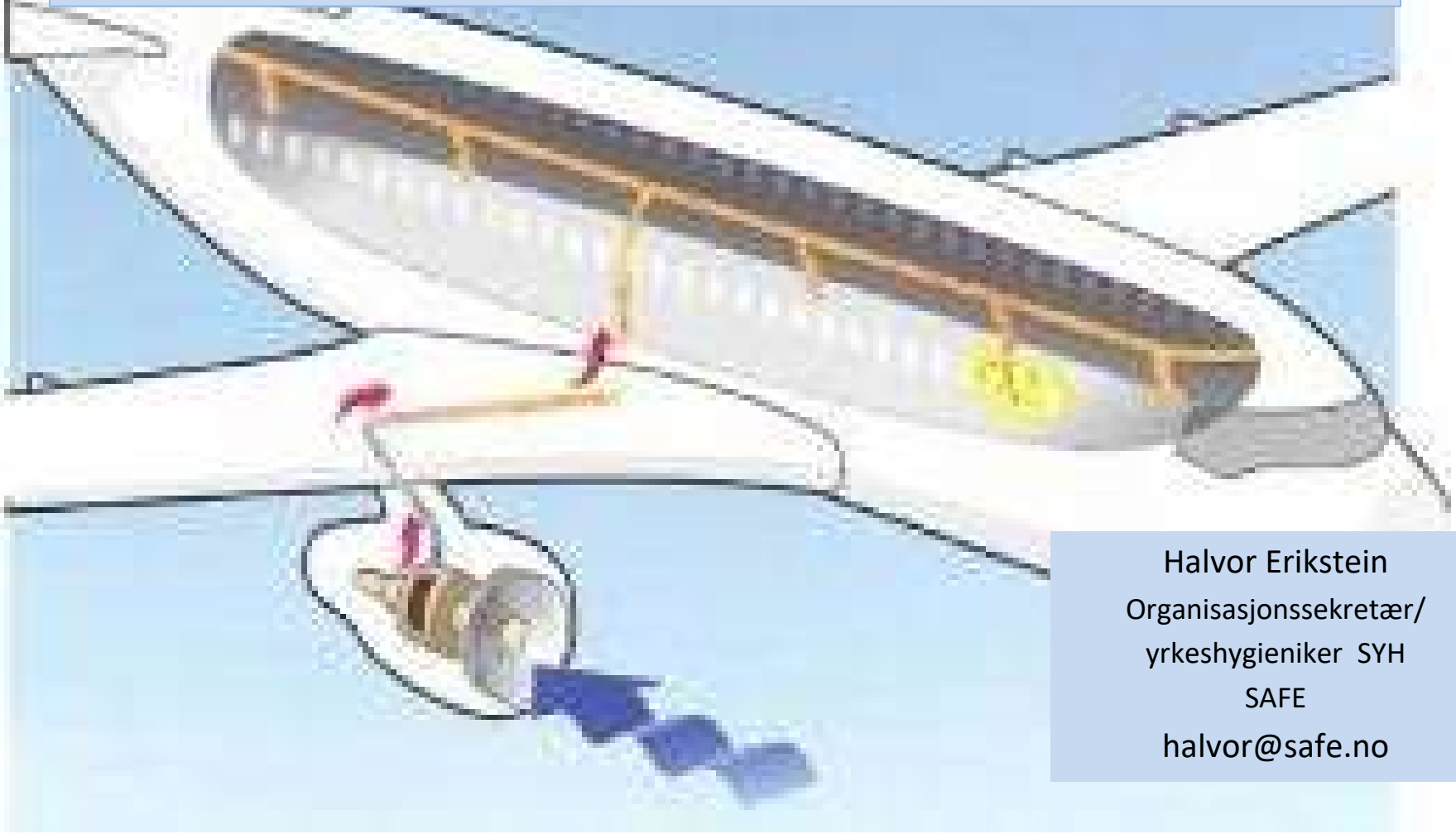
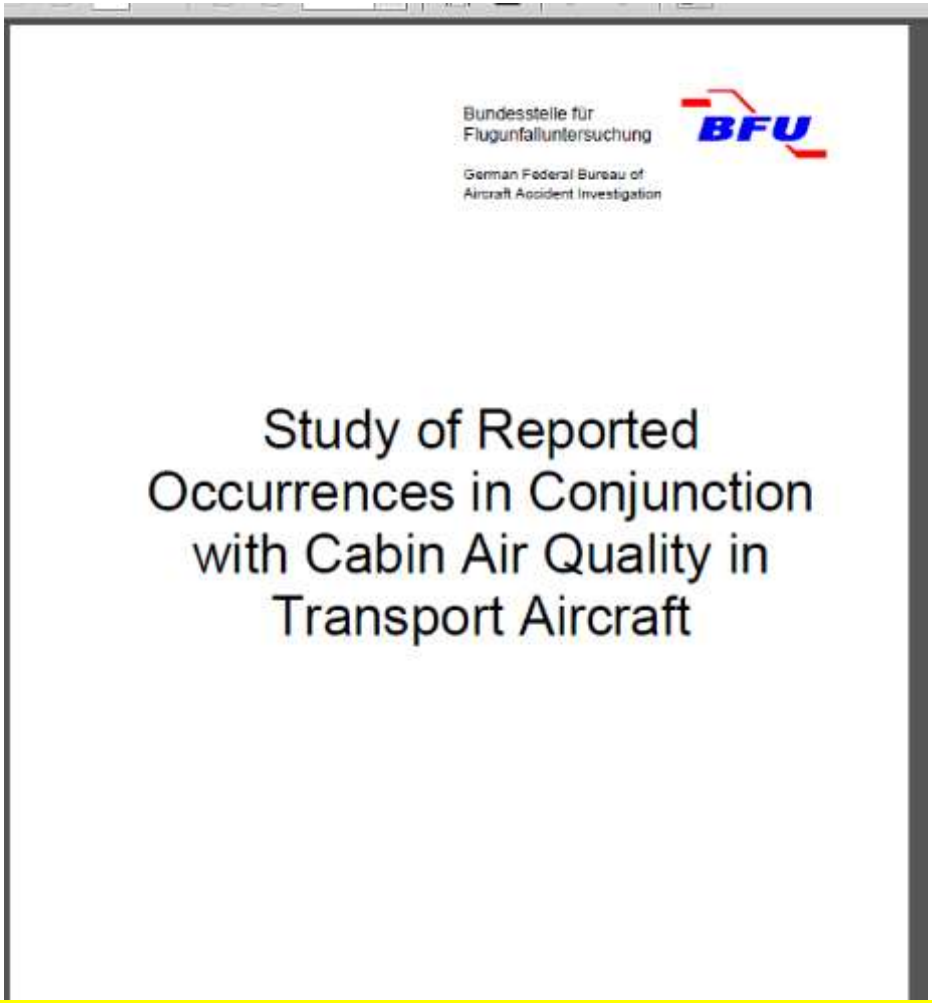
Norsk Yrkeshygienisk Forenings årskonferanse, Rica Parken, Ålesund 27.-29. oktober 2014

Saken som ikke blir borte: Om helse og sikkerhet ved forgiftning fra turbinoljer med organofosfater. Hva er siste nytt?



Halvor Erikstein
Organisasjonssekretær/
yrkeshygieniker SYH
SAFE
halvor@safe.no

BFU (tyske havarikommisjonen for luftfart)



http://www.bfu-web.de/EN/Publications/Safety%20Study/Studies/140507_Fume_Events.pdf?__blob=publicationFile

Synopsis

Over the last few years, the German Federal Bureau of Aircraft Accident Investigation (BFU) has received an increased number of reports of so-called fume events[1]. These kinds of events include smell, smoke or vapour inside the airplane and health impairments of occupants of transport aircraft. In addition, this topic is increasingly discussed among flight crew, occupational unions, the media and in political committees.

The study is based on the Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation. Taken into account were 845 accidents, serious incidents, and incidents, which have been reported to the BFU between 2006 and 2013.

A conjunction with cabin air could be determined in 663 reports. In 180 reports health impairments were described although a conjunction with cabin air quality could not be determined.

In 460 of the 663 reported fume events smell development and in 188 cases smoke development was reported. In 15 cases there was neither smell nor smoke but there were certain health impairments which may possibly have a conjunction with a fume event.

For this study, the BFU has divided the reported occurrences into the following categories:

- Fume events affecting flight safety
- Fume events possibly affecting the occupational safety of crew members
- Fume events affecting the comfort of aircraft occupants
- Fume events and possible long-term effects on aircraft occupants

The data analysis for this study showed that the criteria for a serious incident were met by some of the fume events, because the cockpit crew decided to don their oxygen masks, or one pilot was partially incapacitated. In very few cases the safety margin was reduced such that a high accident probability - in terms of the legal definition - existed.

[1] Subsequently referred to as fume event

There were clear indications of health impairments in terms of occupational health for flight and cabin crew. Individual reports indicated health impairments of passengers.

The BFU is the opinion that compared to all reports a significant number affected the comfort of passengers only. These are reports which describe, for example, unpleasant but harmless smells.

In 10 of all fume events reported to the BFU, the reporting person reported long-term health impairments at a later date. All these incidents were fume events where either oil smell or "smell like old socks" were reported. In eight of these 10 cases the BFU learned that the reporting person is being medically treated.

With the current means and methods available for air accident investigation, it is not possible to investigate incidents which date back a while. The BFU is of the opinion that the principles of clinical toxicology would have to be applied to clarify a possible long-term effect of fume events.

The fume events taken into account in this study showed that no significant reduction of flight safety occurred. The study shows that fume events occur and can result in health impairments. With the methods of air accident investigation, the BFU cannot assess the possible long-term effects of fume events.

The German Federal Bureau of Aircraft Accident Investigation has issued four safety recommendations. They refer to:

- An improved identification and avoidance actions of cabin air contamination possibly hazardous to health.
- A standardised reporting procedure
- Improvement of the demonstration of compliance of cabin air quality during the certification process of transport aircraft
- Assessment of a possible conjunction between long-term health impairments and fume events by a qualified institution.

Hva har flypassasjerer og oljearbeidere felles? De utsettes for turbinoljer med organofosfater!

http://www.youtube.com/watch?v=AZqeA32Em2s
http://www.youtube.com/results?search_query=aerotoxic&page=1

Evakuering av SK4743, Gardermoen 7. mai 2014

EVAKUERT: Flypassasjerene ble evakuert via sklie, etter at kabinen ble fylt med røyk idet et SAS-fly på vei til Brüssel skulle ta seg ut på rullebanen på Gardermoen i morges. Foto: Dagbladet-tipser

Informasjonssjef Knut Morten Johansen i SAS sier dette om hendelsen:

- Det blir jo en spekulasjon. Det de kabinansatte sier er at røyken hadde en lukt som den som brukes når de trener. Den er ikke giftig eller skadelig på noen måte.

- Passasjerer og besetning kan ha blitt utsatt for giftgass

SAS-fly evakuert etter røykutvikling i kabin i dag tidlig.

ASLE HANSEN
ash@dagbladet.no

http://www.dagbladet.no/2014/05/06/nyheter/innenriks/sas/evakuering/giftgasser_i_fly/33141694/

VIL VARSLES: Sjeflege Trond-Eirik Strand i Luftfartstilsynet ønsker at flyansatte som har helseplager de relaterer til forurenset pusteluft om bord skal ta kontakt. Foto: Tor O. Iversen/Luftfartstilsynet

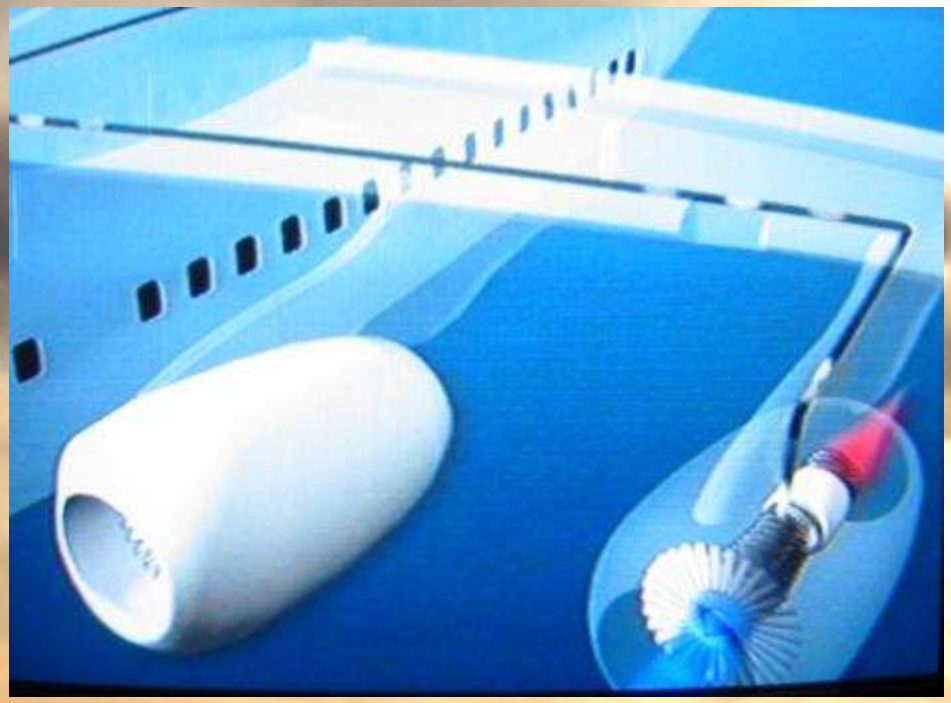
- Vi er kjent med at norsk personell sliter etter giftgasshendelser i fly

Sjeflege Trond-Eirik Strand i Luftfartstilsynet ønsker kontakt med flyansatte som har symptomer.

ASLE HANSEN
ash@dagbladet.no

mandag 9. juni 2014, kl.11:19

http://www.dagbladet.no/2014/06/09/nyheter/innenriks/utenriks/fly/helse/33709667/



http://www.ptil.no/getfile.php/Presentasjoner/Sikkerhetsforum/referat%2001-2010/Informasjon%20om%20Aerotoxic%20syndrome%2C%20Safe.pdf

“VENTER”. Diffuse utslipp av smøroljer er svært helseskadelige

Turbinoljedamp

20 års kamp for rettferdighet (2008) ”Åpent lende”

http://safe.no/index.cfm?id=305217

25 års kamp for rettferdighet (2013) ”Ta ansvar!”

http://safe.no/index.cfm?id=400175

Yrkessykdomsak Harry Stiegler Brevik
Kan en ha tillit til et selskaps HMS styring når det lukker øynene for Harry og andre skadde?

5 turbinteknikere fra Statfjord

Tre levd med multiple sclerose (MS) diagnoser i mer enn 20 år, men mener de er feildiagnostisert.

To ble sendt til undersøkelse med mistanke om MS.

Alle er sikre på at det jobben som har forårsaket helseskadene

Avvist som yrkesbetinget fordi det vi vet i dag ikke var kjent.

Tristan Lorraine, Susan Michaelis , Judith Anderson

DID YOU KNOW?

- Cabin breathing air on all aircraft apart from the Boeing 787 is taken directly from the engines and provided unfiltered to the aircraft. This is known as 'Bleed Air'.
- Bleed air is known to become contaminated with engine oils and/or hydraulic fluids...
- Contaminated bleed air events have been recognised as occurring since the 1950s.
- No aircraft currently flying has any form of detection system fitted to warn when these events occur.
- Flight safety is being compromised by contaminated air events.
- Crew and passengers have been reporting short and long term health effects as a consequence of exposure to contaminated air.
- Contaminated air events are not rare and known to be under reported.

The GCAQE is the lead international organisation attempting to address these matters on behalf of aircrew worldwide.

Members of the GCAQE include:

ABRAPAC - Brazilian Association of Pilots of Civil Aviation; ACPA - Air Canada Pilot's Association; Aeropers - Swiss Air Line Pilots Association (Swiss ALPA); AFA - Association of Flight Attendants; AFAP - Australian Federation of Air Pilots; ALAEA - The Australian Licensed Aircraft Engineers' Association; CUPE - Canadian Union of Public Employees; FIT CISL - Italian Transport Federation; FSC-CCOO Federation of Citizen Services; Icelandic ALPA - Icelandic Air Line Pilots Association; IAM - International Association of Machinists and Aerospace Workers; IPA - Independent Pilots Association; NF - Norsk Flygerforbund - Norwegian Airline Pilots Association; PARAT - PARAT; SAFE Norwegian Union of Energy Workers; SNPL - Syndicat National des Pilotes de Ligne; SNPNC - Syndicat National du Personnel Naviguant Commercial; TWU - Transport Workers Union; UFO - Unabhängige Flugbegleiter Organisation - Independent Flight Attendant Organisation; Unite - Unite The Union; Vereinigung Cockpit - German Airline Pilots Association; VNC - Vakbond Van Nederlands Cabinpersoneel; HTW - Holiday Travel Watch

www.gcaqe.org

www.aerotoxic.org

Countess of Mar

Prof. Abou-Donia, Duke University

Journal of Toxicology and Environmental Health, Part A, 76:363–380, 2013

ISSN: 1528-7394 print / 1087-2620 online
DOI: 10.1080/15287394.2013.765369

Taylor & Francis
Taylor & Francis Group

AUTOANTIBODIES TO NERVOUS SYSTEM-SPECIFIC PROTEINS ARE ELEVATED IN SERA OF FLIGHT CREW MEMBERS: BIOMARKERS FOR NERVOUS SYSTEM INJURY

Mohamed B. Abou-Donia[1], Martha M. Abou-Donia[1], Eman M. ElMasry[1], Jean A. Monro[2], Michel F. A. Mulder[3]

[1]Department of Pharmacology and Cancer Biology, Duke University Medical Center, Durham, North Carolina, USA
[2]Breakspear Medical Group Ltd., Hemel Hempstead, Hertfordshire, United Kingdom
[3]Aviation Medical Consultation, Bussum, The Netherlands

This descriptive study reports the results of assays performed to detect circulating autoantibodies in a panel of 7 proteins associated with the nervous system (NS) in sera of 12 healthy controls and a group of 34 flight crew members including both pilots and attendants who experienced adverse effects after exposure to air emissions sourced to the ventilation system in their aircrafts and subsequently sought medical attention. The proteins selected represent various types of proteins present in nerve cells that are affected by neuronal degeneration. In the sera samples from flight crew members and healthy controls, immunoglobin (IgG) was measured using Western blotting against neurofilament triplet proteins (NFP), tubulin, microtubule-associated tau proteins (tau), microtubule-associated protein-2 (MAP-2), myelin basic protein (MBP), glial fibrillary acidic protein (GFAP), and glial S100B protein. Significant elevation in levels of circulating IgG-class autoantibodies in flight crew members was found. A symptom-free pilot was sampled before symptoms and then again afterward. This pilot developed clinical problems after flying for 45 h in 10 d. Significant increases in autoantibodies were noted to most of the tested proteins in the serum of this pilot after exposure to air emissions. The levels of autoantibodies rose with worsening of his condition compared to the serum sample collected prior to exposure. After cessation of flying for a year, this pilot's clinical condition improved, and eventually he recovered and his serum autoantibodies against nervous system proteins decreased. The case study with this pilot demonstrates a temporal relationship between exposure to air emissions, clinical condition, and level of serum autoantibodies to nervous system-specific proteins. Overall, these results suggest the possible development of neuronal injury and gliosis in flight crew members anecdotally exposed to cabin air emissions containing organophosphates. Thus, increased circulating serum autoantibodies resulting from neuronal damage may be used as biomarkers for chemical-induced CNS injury.

ExxonMobil Fuels, Lubricants & Specialties Marketing Company
3225 Gallows Road
Fairfax, VA 22037
United States of America

ExxonMobil
Aviation

Mr. Tobias Ellwood MP
The House of Commons
London SW1A 0AA
United Kingdom

May 24th 2013

Dear Mr. Ellwood,

Thank you for your recent letter regarding cabin air quality in commercial jet aircraft. We reviewed your letter and can offer the following information in response.

Several global industry committees as well as various government agencies have studied cabin air quality and the relevant reports are readily available in the public domain. In general, these studies have concluded that it is not possible, based on existing data, to establish a direct association between cabin air exposures to aircraft engine or lubricating oil fumes and the ill-health reported by some aircraft crew or passengers. The Department of Transport[1] website references several scientific studies that have been conducted on this topic.

In particular, a report published in May 2011 detailing a real time in-flight testing study conducted by Cranfield University, concluded that: "Samples specifically taken during recorded air quality events did not have notably elevated concentrations of any of the individually measured pollutants. Therefore, with respect to the conditions of flight that were experienced during this study, there was no evidence for target pollutants occurring in the cabin air at levels exceeding available health and safety standards and guidelines".

ExxonMobil Fuels, Lubricants & Specialties Marketing Company
3225 Gallows Road
Fairfax, VA 22037
United States of America

ExxonMobil
Aviation

Numerous studies have been conducted on jet engine oils containing TCP via the oral route of administration. These were thoroughly reviewed in the report commissioned by the UK Department of Transport which is referenced above. ExxonMobil has conducted a 90-day neurotoxicity study in hens with Mobil Jet Oil 254. The study was carried out by the Virginia Tech Institute and State University. It was concluded that MJO 254 should not pose a neurotoxic hazard under realistic conditions of exposure, including those estimated to be possible from dermal and inhalation exposures.

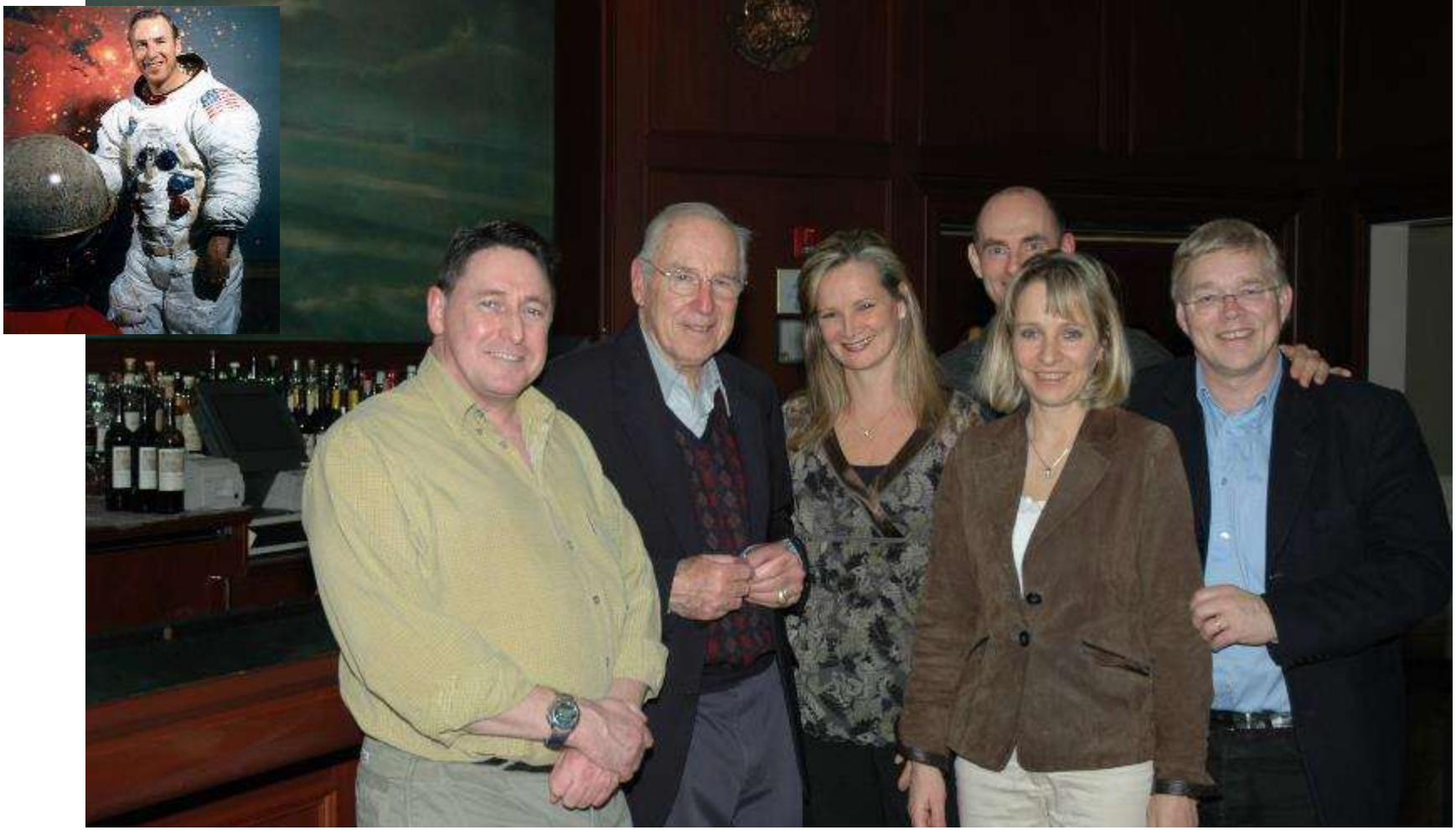
Finally, I would like to add that ExxonMobil is fully committed to being a responsible producer and marketer of lubricant products for the airline industry. Worldwide, ExxonMobil lubricating oils and products are manufactured to comply with all applicable regulations.

Sincerely,

”60 Minutes”, Australia

http://sixtyminutes.ninemsn.com.au/article.aspx?id=8762931

”Houston we have a problem”



James Lovell, Apollo 13, http://en.wikipedia.org/wiki/Jim_Lovell

Jan 2006

Saken blir ikke borte …….

http://www.headinthesandsymposium.com/event-news.html

Nyttige lenker

STØYSAKEN

Verneutstyr som
skader. Det går seint framover

http://safe.no/index.cfm?id=258732

1998

2006

26 januar 2007 .Bruk av Viking Safe-Blast er ulovlig
http://www.dagbladet.no/nyheter/2006/04/26/464555.html


SAFE og Norsk Flygerforbunds konferanse
”Åpent lende”.
Hotel Residence, Sandnes 6. - 7. og 8. mai 2008
Del 1 ”Kjemisk helsefare – eksponering og tiltak”
Del 2 ”To sider av samme sak – turbin- og hydraulikkoljer innen luftfart og petroleumsindustri”
Presentasjonene kan lasten ned her: http://safe.no/index.cfm?id=305217

SAFE HMS konferansen 5. – 6. mai 2009

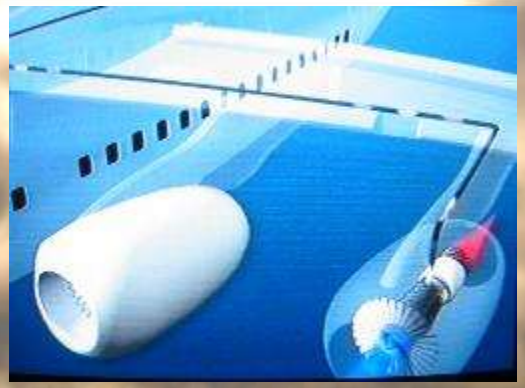
Hvor går grensen?

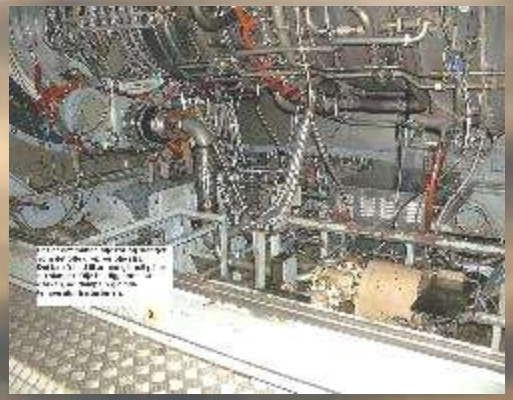
En konferanse om helse og sikkerhet ved skiftarbeid, arbeidsbelastning, arbeidstid og arbeidsmiljøeksponering.

Presentasjonene kan lastes ned her; http://safe.no/index.cfm?id=305016

Bilder og lenker til presentasjonene

Presentasjonene kan lastes ned her; tp://safe.no/index.cfm?id=305373





Informasjon til Sikkerhetsforum. Oppfølging etter møte 26. januar 2010
Aerotoxic Syndrome = samme som ”MS-saken” offshore?

http://www.ptil.no/getfile.php/Presentasjoner/Sikkerhetsforum/referat%2001-2010/Informasjon%20om%20Aerotoxic%20syndrome%2C%20Safe.pdf

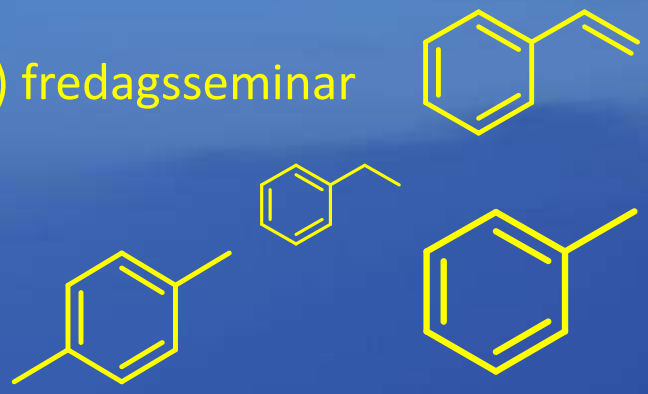
Halvor Erikstein
Sertifisert yrkeshygieniker / organisasjonssekretær
SAFE
halvor@safe.no
www.safe.no

Ototoksiske forbindelser i arbeidsmiljøet

7. januar 2011

Oljeindustriens Landsforenings (OLF) fredagsseminar

("First Friday")



Halvor Erikstein

Sertifisert yrkeshygieniker / organisasjonssekretær

Sammenslutningen av fagorganiserte i energisektoren.

SAFE

halvor@safe.no

www.safe.no

http://www.olf.no/PageFiles/8694/Halvor%20Ototoksiske%207%20jan%202011.pdf

http://www.alfnorge.no/alf/hoved/alf.nsf/ntr/1DB3DEB603C93100C125764700777306/$FILE/Syndrom%20nr%203%20-%202009.pdf