## Informasjon til Sikkerhetsforum

Oppfølging etter møtet 9. april 2015 Helsefare fra smøroljene MIL-PRF-23699 benyttet i luftfart og på aeroderivative gassturbiner.





Halvor Erikstein organisasjonssekretær/ yrkeshygieniker SYH halvor@safe.no Oljearbeidere, flypassasjerer og flymannskap eksponeres for turbinoljer







www.youtube.com/watch?v=AZqeA32Em2s
www.youtube.com/results?search\_query=aerotoxic&page=1

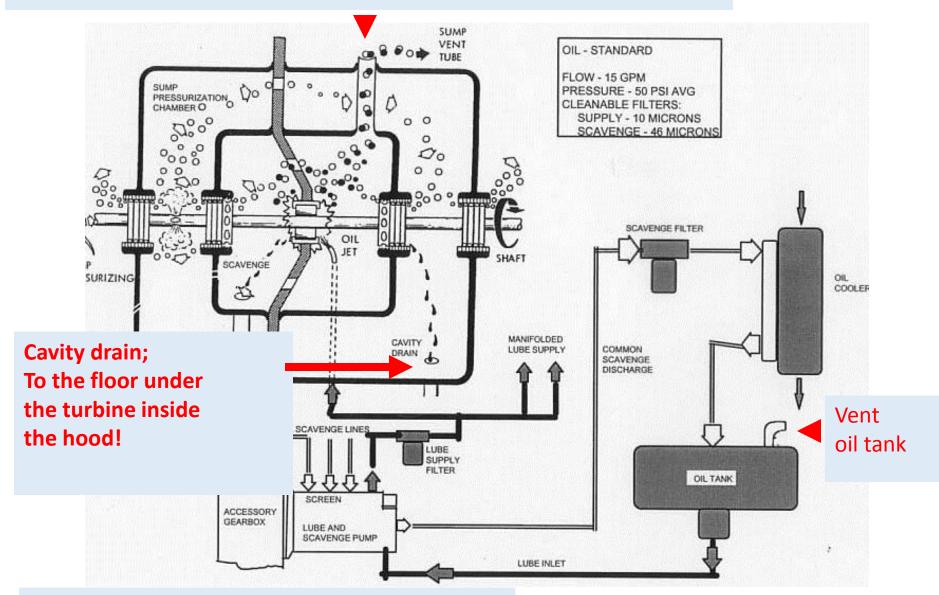
MIL - L (PRF) - 23699....

Syntetiske oljer med organofosfater benyttes både i luftfart og på aeroderivative gass turbiner



https://www.google.no/#q=aeroderivative+gas+turbine

### Sump vent into the **exhaust**. Earlier routed "out"



All seals leaks, but the amount varies

## Forgiftning av flymannskap

## Passengers' lives ARE at risk from toxic fumes in cabin, coroner investigating death of BA pilot tells airline chiefs

- · Sheriff Stanhope Payne has warned of dangers of exposure to cabin fumes
- Senior coroner for Dorset said regulars could face 'damage to their health'
- Mr Payne is investigating death of 43-year-old BA pilot Richard Westgate
- He has written to BA and Civil Aviation Authority asking for 'urgent action'
- Coroner has outlined five matters of concern over fumes in plane cabins

By BEN SPENCER and ANDY DOLAN FOR THE DAILY MAIL

PUBLISHED: 10:36 GMT, 22 February 2015 | UPDATED: 01:58 GMT, 23 February 2015



Share











Airlines must take action to prevent passenger deaths from toxic fumes inside aircraft cabins, a coroner has warned.

Pressurised air tainted with jet fuel is risking the lives of everyone travelling on planes, Sheriff Payne said.

Demanding an urgent response from airline bosses, the Dorset coroner said: 'In my opinion there is a risk that future deaths will occur unless action is taken.'

#### Scroll down for video



Krav ti British Airways og Britisk Luftfartstilsyn om å stille på høring om forgiftning og forebygging av forgiftning hos flymannskap og passasjerer



Sheriff Stanhope Payne, Senior Coroner for The County of Dorset

**REGULATION 28: REPORT TO PREVENT FUTURE DEATHS (2)** 

#### **REGULATION 28 REPORT TO PREVENT FUTURE DEATHS** THIS REPORT IS BEING SENT TO: 1. Chief Executive - British Airways 2. Chief Operating Officer - Civil Aviation Authority CORONER I am Sheriff Stanhope Payne, senior coroner, for the coroner area of Dorset CORONER'S LEGAL POWERS I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013. INVESTIGATION On 27th December 2012 I commenced an investigation into the death of RICHARD MARK WESTGATE, aged 43.. The investigation has not yet concluded and the inquest has not yet been heard. CIRCUMSTANCES OF THE DEATH On 12th December 2012 Richard Mark Westgate was found deceased in his room at the Bastion Hotel in Bussum, Netherlands. His body was repatriated to Dorset. He was a British Airways pilot who had been on medical leave since September 2011 suffering cognitive dysfunction, ataxia & other deficits. Post mortem examinations gave causes of death of either Pentobarbital toxicity or lymphocytic myocarditis, individually or in combination. Testing of samples taken both prior to and after death disclosed symptoms consistent with exposure

Stafford Road, Bournemouth, Dorset, BH1 1PA Tel 01202 454910 | Fax 01202 780423

lymphocytic myocarditis.

to organo-phosphate compounds in aircraft cabin air. Such exposure can cause

#### 5 CORONER'S CONCERNS

During the course of the investigation my inquiries revealed matters giving rise to concern. In my opinion there is a risk that future deaths will occur unless action is taken. In the circumstances it is my statutory duty to report to you.

The MATTERS OF CONCERN are as follows. -

- (1) That organo-phosphate compounds are present in aircraft cabin air.
- (2) That the occupants of aircraft cabins are exposed to organo-phosphate compounds with consequential damage to their health.
- (3) That impairment to the health of those controlling aircraft may lead to the death of occupants.
- (4) There is no real time monitoring to detect such compounds in cabin air.
- (5) That no account is taken of genetic variation in the human species, such as would render individuals tolerant or intolerant of the exposure.

#### 6 ACTION SHOULD BE TAKEN

In my opinion urgent action should be taken to prevent future deaths and I believe your organisation has the power to take such action.

#### 7 YOUR RESPONSE

You are under a duty to respond to this report within 56 days of the date of this report, namely by 13th April 2015. I, the coroner, may extend the period.

Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.

#### 8 COPIES and PUBLICATION

I have sent a copy of my report to the Chief Coroner and to the following Interested Persons, Frank Cannon of Cannons Law Practice acting on behalf of the family of the deceased.

I am also under a duty to send the Chief Coroner a copy of your response.

The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.

9 16th February 2015

-55 a

Sheriff Stanhope Payne Senior Coroner for Dorset www.express.co.uk/life-style/health/470109/We-II-be-looking-for-TOMBSTONES-A-Boeing-engineer-s-I

### Februar 2015, England minute walks...

human rights', say...

Cutting down on sugar? Try these tasty sweet alternatives

Chocolate, sex a Top 10 ways to k heart healthy

We'll be looking for **TOMBSTONES: A Boeing** engineer's DEADLY warning about toxic cabin air

A SENIOR engineer at aircraft giant Boeing warned bosses they would be "looking for a tombstone" unless they tackled the potentially deadly issue of toxic fumes on board passenger planes, a bombshell email reveals.



By TED JEORY

Published: 04:01, Sun, April 13, 2014



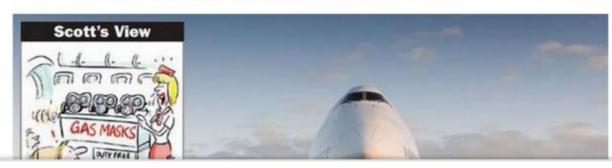






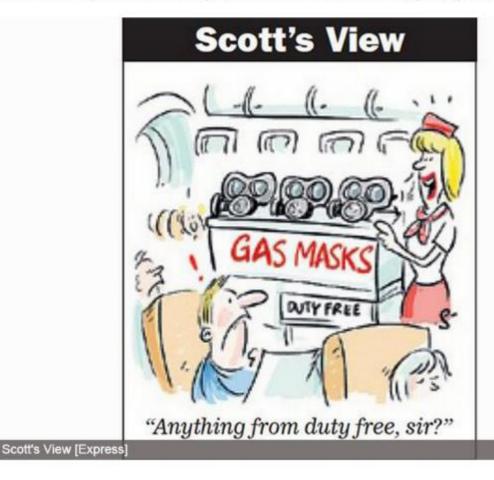






The official report states the "entire crew" was taken to hospital for toxicology tests after landing and that the "captain noticed some difficulty in completing the tech log.

It continues: "Eyes were smarting...balance was affected to a slight degree."



Two days later, similar symptoms were reported on another Airbus.

#### Norsk Flygerforbund om forgiftning av flymannskap, 26.02.2015

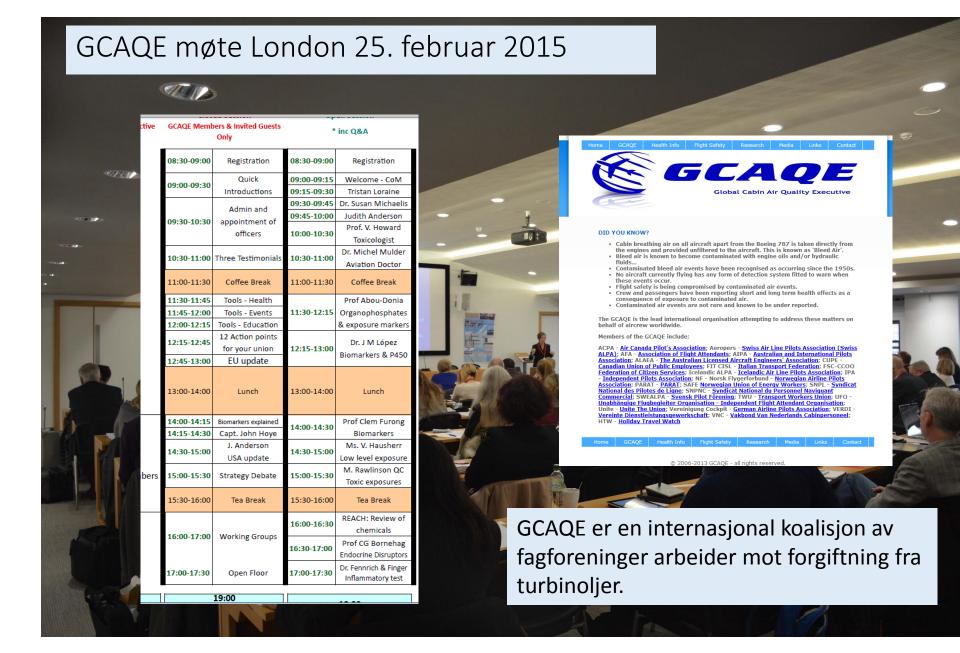


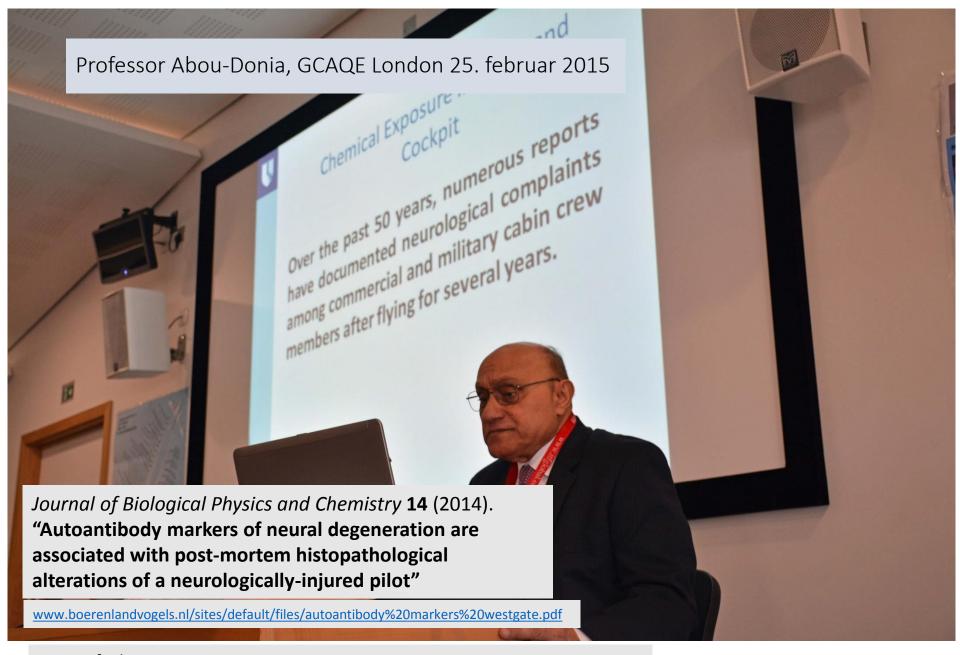
**FORURENSET KABINLUFT:** Noen ganger er det synlig røyk, andre ganger ikke. Noen ganger lukter det som sure sokker, andre ganger er det luktfritt. Dette bildet viser hvordan det artet seg da passasjerer og bestening ble utsatt for en giftgasshendelse i september 2010 på en amerikansk flygning. Tom Heradstveit i Flygerforbundet vil at myndighetene skal ta grep. Foto: Privat

# Norsk pilot om giftige gasser i fly: - Kollega lå rett ut og rørte seg ikke på et år

Norsk Flygerforbund mener britisk pilot-død må få myndighetene til å ta grep.

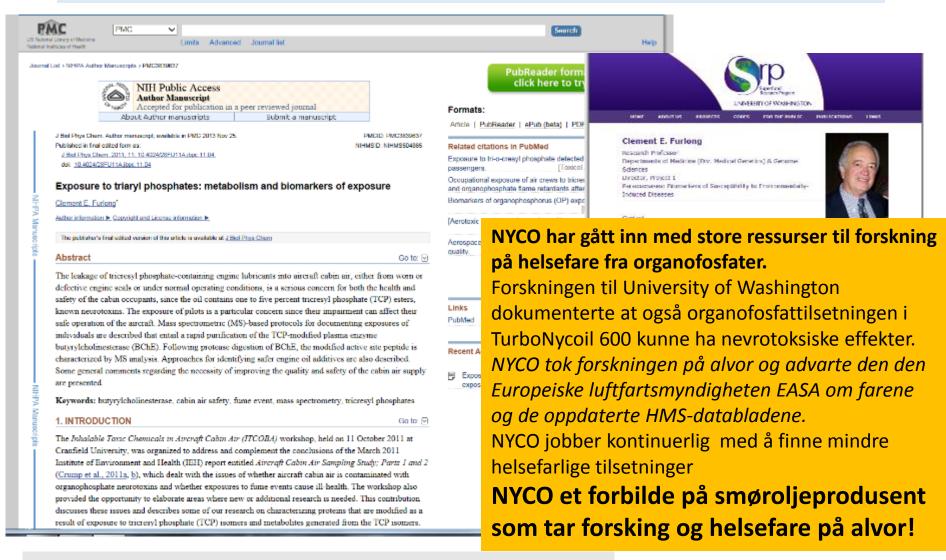






Om prof. Abou-Donia: <a href="https://www.dibs.duke.edu/research/profiles/80-mohamed-bahie-abou-donia">www.dibs.duke.edu/research/profiles/80-mohamed-bahie-abou-donia</a>

SAFE har sammen med mange andre støttet forsking på helserisiko fra turbinoljer. Prosjekt startet i 2006 og nytt i 2014. University of Washington, Seattle.



http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3839637/



## REACH på GCAQE møte London 25. februar 2015 Modular Plan of Action Universiteit Utrecht Aerotoxic syndrome? Netherlands Center for Occupational Diseases

har gitt RIVN <u>www.rivm.nl/en/</u> i Nederland oppgaven koordinere oppfølging av REACH-gelverket på turbinoljer benyttet i luftfart og på aeroderivative turbiner

n REACH: <a href="https://www.miljodirektoratet.no/no/Tema/For-naringsliv/Kjemikalieregelverket-REACH/">www.miljodirektoratet.no/no/Tema/For-naringsliv/Kjemikalieregelverket-REACH/</a>

## REACH arbeidsplan



## Aim and focus plan of action

RIVM: coordinating role (not performing research)

#### Focus:

- Scope:
  - > Aviation: pilots, cabin crew, passengers and ground technicians
  - Other sectors where jet engines are used, e.g. drilling rigs, power stations, marine
- Effects:
  - not only neurotoxicity, but also biological (effect) monitoring, environmental monitoring;
- Substances:
  - not only TCPs, but also other chemicals, and stressors like ozone concentration, disrupted circadian rhythm, stress, hypoxia.

CEN/TC 436. Europeisk krav om utvikling av en reell standard på «cabin air quality» og kjemisk eksponering i fly



## CEN/TC 436 «Project Committee – Cabin Air Quality on commercial aircraft – Chemical Agents»

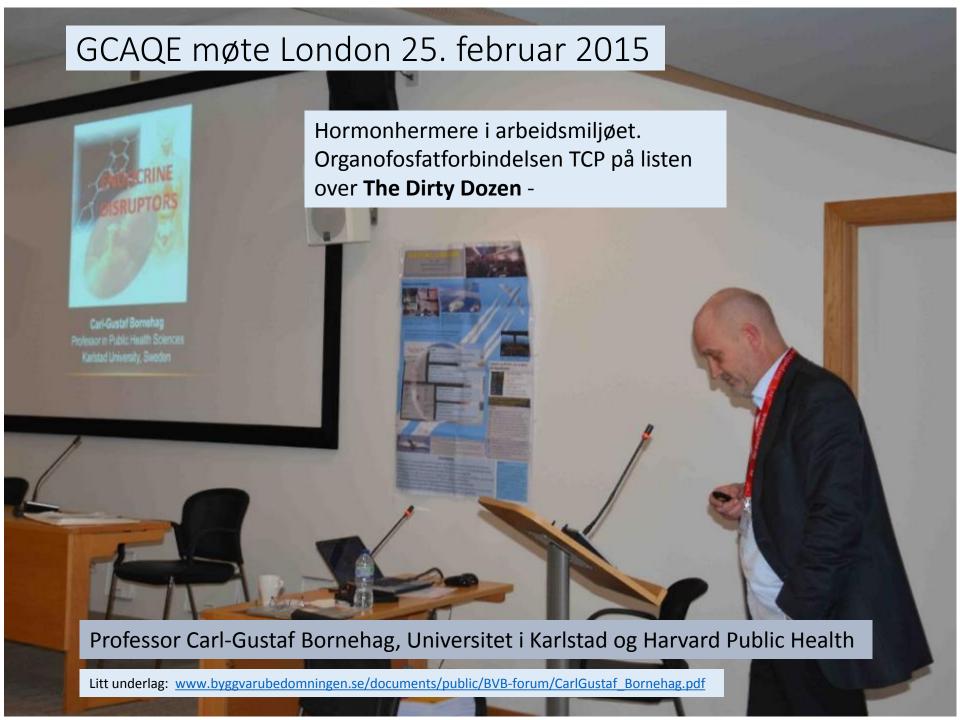
#### DECISION BT 66/2014

<u>Subject</u>: Creation of a new CEN/TC 'Project Committee - Cabin Air Quality on commercial aircraft - Chemical Agents'

BT/TCMG, on behalf of BT.

- having considered
  - the proposal for a new field of technical activity submitted by AFNOR as included in BT N 9662 and circulated as draft BT C83/2014;
  - the voting results and fundamental disagreement from DS thereon and subsequent discussions at the 51<sup>st</sup> BT/TCMG;
  - that the following members have expressed commitment to participate:
     AFNOR, ASI, NBN, NSAI, DIN, SN, SIS and BSI;
- decides:
  - to create a new Project Committee, CEN/TC 436 'Project Committee Cabin Air Quality on commercial aircraft - Chemical Agents' to develop a European Standard or a set of standards dealing with the quality of air on commercial aircraft concerning chemical agent such as: bleed-air, environmental control system (ECS) processed air, cabin air;
  - that the Project Committee shall report after each meeting to the CEN Technical Board;
  - that any proposed deviation on the part of the new Project Committee from the provisions in the Form A, be reported to CEN/BT for endorsement;
  - to allocate the Secretariat of CEN/TC 436 to AFNOR;
  - to ask the new CEN/TC 436 to submit its programme of work for BT approval by 2015-06-30.

This decision is applicable as from: 2014-12-16



#### "...the only thing filtering this toxic soup out of the

### cabin are the lungs of the passenger and crew"

Alisa Brodkowitz, US Attorney

1 in 2000 flights is recorded as a 'fume event', where toxic oil from the jet engines leaks into the cabins

Airlines and governments are aware of the dangers and risks but provide no warnings to passengers or aircrew

Exposure to jet engine oil fumes in a confined space is poisonous to humans - the effects can be deadly

Film Premiere



View all Screenings >

## Support the Cause

Become a member today

Medical and Legal Contacts

10% discount in the shop

A new live FAQ section

Free Download of "Aerotoxic Syndrome - Aviation's Darkest Secret'

JOIN TODAY

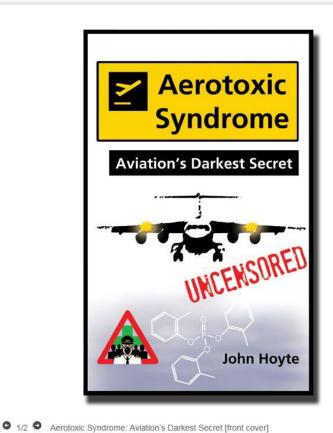


## Svært bra og nyttig bok!



HOME ABOUT SHOP LATEST FAQS MEDIA CONT

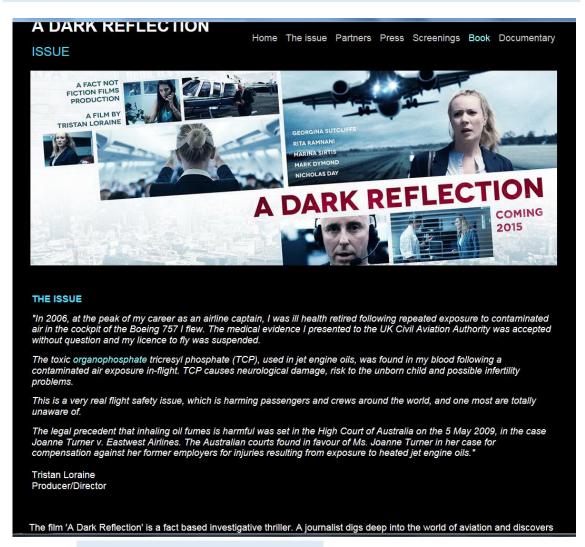




http://aerotoxic.org/product/aerotoxic-syndrome-aviations-darkest-secret/

http://aerotoxic.org/wp-content/uploads/2014/06/Foreword-David-Learmount-minpro.pdf

## Filmen «A Dark Reflection»



www.adarkreflection.com/issue.html

www.factnotfictionfilms.com/doco.html

#### Organofosfateksponering godkjent som årsak til yrkessykdom i England

Status: This is the original version (as it was originally made). This teem of legislation is currently only available in to original format.

STATUTORY INSTRUMENTS

#### 2012 No. 647

#### SOCIAL SECURITY

The Social Security (Industrial Injuries) (Prescribed Diseases) Amendment Regulations 2012

The Secretary of State for Work and Pensions makes the following Regulations in exercise of the powers conferred by sections 108(2), 122(1) and 175(1) and (3) of the Social Security Contributions and Benefit Act 1992(1).

The Secretary of State for Work and Pensions is satisfied that the conditions referred to in section 108(2) of that Act are met.

In accordance with section 172(2) of the Social Security Administration Act 1992(2), reference has been made to the Industrial Injuries Advisory Council.

#### Citation and commencement

 These Regulations may be cited as the Social Security (Industrial Injuries) (Prescribed Diseases) Amendment Regulations 2012 and come into force on 30th March 2012.

#### Amendment of Schedule 1 to the Social Security (Industrial Injuries) (Prescribed Diseases) Regulations 1985

- 2.—(1) Part I of Schedule 1 to the Social Security (Industrial Injuries) (Prescribed Diseases) Regulations 1985(3) (list of prescribed diseases and the occupations for which they are prescribed) is mended as follows:
- (2) For the entry relating to prescribed disease A4(4) (task-specific focal dystonia) substitute-

1993 c 4. Section 123(1) is an interpretation provision and is cited for the definition of the word "prescribe". Section 175(1) was massided by paragraph 29 of Schedule 3 to the Social Security Contributions (Timeder of Functions, etc.) Act 1999 (c. 2).

was amended by paragraph 29 of Schedule 3 to the Social Security Contributions (Transfer of Functions, etc.) Act 1999 (c. 2 (2) 1992 c.5.

	Document Generated	2015-03-10
States: This is the original version (as it was originally made), then of legislation is currently only eveilable in its original for		
tions of witchiston is correctly only eventuous on its original for	mar.	

"A4.	Task-specific focal dystonia o	Prolonged periods of handwriting.
	the hand or forearm.	typing or other repetitive movements of
		the fingers, hand or arm."

(3) At the end of the entry relating to prescribed disease A14(5) (osteoarthritis of the knee) add-

	"Work wholly or mainly fitting or laying carpets or floors (other than concrete floors) for a period of, or periods which amount in aggregate to, 20 years or more."
--	--

(4) For the entry relating to prescribed disease C3 (poisoning by phosphorus or inorganic and organic phosphorus compounds) substitute—

°C3. (a)	Phossy Jaw.	Work involving the use or handling of, or exposure to, white phosphorus.
C3. (b)		

Signed by authority of the Secretary of State for Work and Pensions

Parliamentary Under-Secretary of State, Department for Work and Pensions

1st March 2012



## Når skal ny kunnskap bli tatt på alvor?



www.dagbladet.no/nyheter/2006/12/20/486661.html



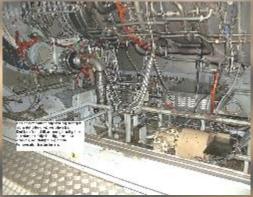
http://www.dagbladet.no/nyheter/2006/12/20/486671.html

- Skulle det bli vitenskapelig dokumentert klare sammenhenger mellom arbeidsmiljøet på Statfjord A og helseskader, vil vi selvsagt ta tak i denne nye informasjonen.
- Statoil har forståelse for at Harry Brevik og hans kolleger ikke er tilfreds med at denne saken har pågått i snart 15 år, men det er i løpet av disse 15 årene ikke påvist noen kjent sammenheng mellom symptomene og arbeidsmiljøet på Statfjord A, sier informasjonssjef Geir Gjervan i Statoil. (Dagbladet 12.12.2006)

www.dagbladet.no/nyheter/2006/12/12/485834.html







**Halvor Erikstein** 

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

Sertifisert yrkeshygieniker / organisasjonssekretær

SAFE

http://www.ptil.no/getfile.php/Presentasjoner/Sikkerhetsforum/referat%2001
www.safe.no

2010/Informasjon%20om%20Aerotoxic%20syndrome%2C%20Safe.pdf



De skadde må få sine helseskader vurdert ut fra dagens kunnskap! De skadde må få helseskadene godkjent som yrkesbetinget! De skadde må yrkesskadeerstatningen og yrkesykdomstrygd!

Så lenge industrien ikke forholder seg til ny kunnskap vil bare flere bli skadd av eksponering for turbinoljer med organofosfater.





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

