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Military and Civilian Aerospace Medicine –
what can we learn from each other?

Anthony S. Wagstaff
MD DAvMed PhD MBA
Director, Institute of Aviation Medicine
Professor, Occupational and Aviation Medicine
University of Oslo


Glaringly
Obvious?

Aviation Medicine in Europe – 50 countries

- Military centres
- Universities
- Civilian institutions
- Commercial

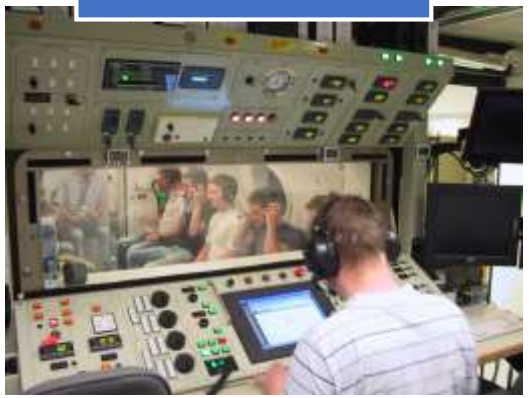
- 32 Civilian authories
- Aeromedical centres
- 1000´s AMEs

Aerospace Medicine professionals perform many activities

Advice, decisions

Medical exams

Research



Training courses

Some things are aircraft specific

-but differences shouldnt be overemphasised

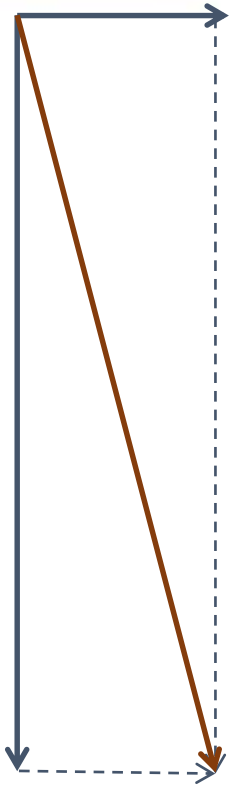
$$a = \frac{v_2 - v_2}{t} = \frac{210-231}{7{,}7\ sek} = \frac{-21m/s}{7{,}7s} = -2{,}73\ m/s^2$$

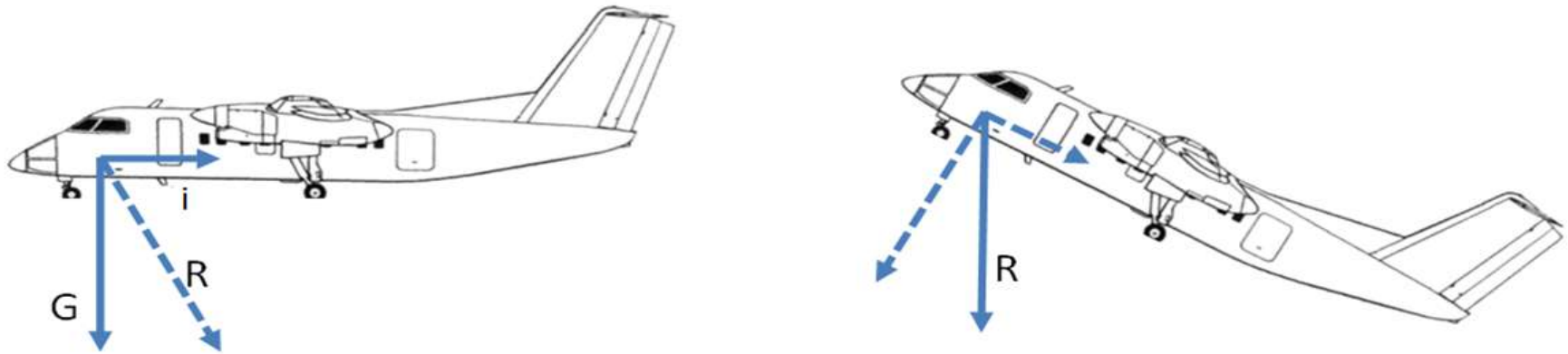
$v2 = 410kt = 210m/s$

$v1 = 450kt = 231m/s$

$$G_x = \frac{a}{g} = \frac{-2{,}73}{9{,}81} = -0{,}28$$

$$G_z = \frac{g}{g} = \frac{9{,}81}{9{,}81} = 1$$





i = Inertia
G = Gravitational force
R = Resultant force

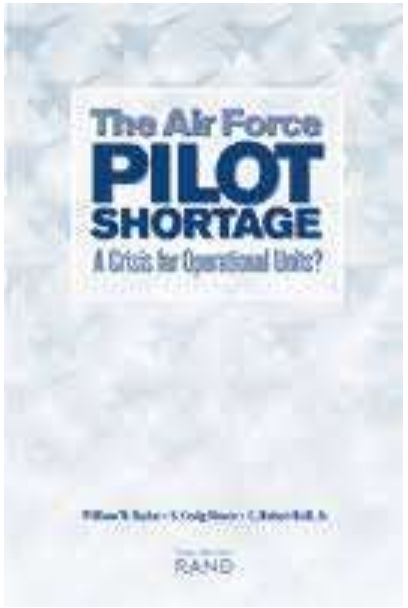
Other examples of common challenges

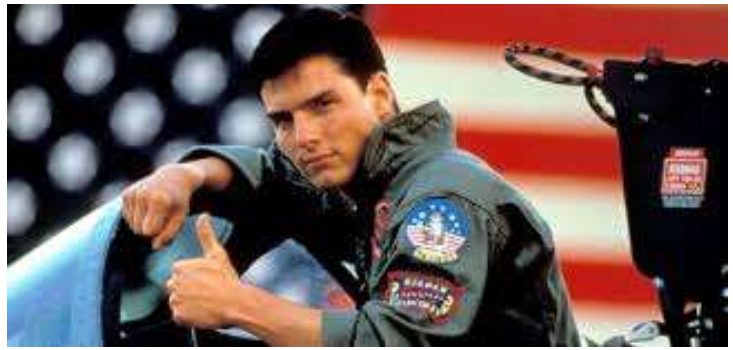
- Fatigue management
- Aviation opthalmology
- Aviation cardiology
- Pilot peer support

EPPSI


SAVE THE DATE!!!
EPPSI Peer Support Workshop
Frankfurt 20-21 June 2018
nts:
upport Sysytem for my organisation?
ining & currency of peers
, SMS & oversight.
Pilot Peer Support Initiative
EPPSI

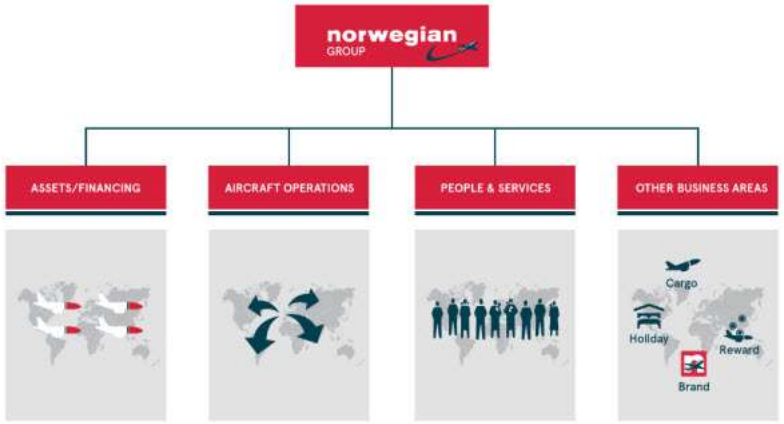
What are our coming challenges?


The Air Force
PILOT
SHORTAGE
A Crisis for Operational Units?
RAND




Asia To Lead Pilot Demand Over The Next Two Decades
Estimated new pilot demand by region from 2018 to 2037
206,000
North America
146,000
Europe
27,000
Russia & Central Asia
64,000
Middle East
261,000
Asia-Pacific
29,000
Africa
57,000
Latin America
790,000 Global Demand
635,000 Commercial
96,000 Business
59,000 Helicopter
@StatistaCharts
Source: Boeing
statista

Organization change



Space


ICAWS
PHM
AP
MENU
FUEL
REFUEL
POP-UP
DUMP
JOKER
4.5
BINGO
3.0
FUEL
JP4
TFLIR
A-S
CNTL>
EXP2
SEND>
STOR>
RECL>
ASGN>
SPNT
TGT
WHOT
SLAVE
TSD1
MODE
RESET
TSD2
OSB
STA4 GB311 - RDY
306
M 0.82
28121
SMS
HUD
HSI
AAR

Technology

Losing ground?

FLIGHT OF THE NOVELIST

STEPHEN COONTS BACK IN THE AIR WITH BASICMED

August 16, 2017 By Dan Namowitz

BasicMed, the FAA rule that gives eligible pilots an alternative to third class medical certification, has become the way for approximately 15,000 pilots to keep flying, in many cases without the aggravations and uncertainty of prolonged application-and-approval cycles, according to figures released in early August.

Germanwings flight 4U9525

Andreas Lubitz: co-pilot of Germanwings flight 4U9525 - profile

The first officer, with 630 hours' flying time under his belt, was regarded by colleagues, friends and neighbours as a normal, friendly man

This article is 2 years old

455

Louise Osborne in Berlin and Luke Harding

Thursday 26 March 2015 15.23 GMT

Co-pilot Andreas Lubitz in front of the Golden Gate bridge in San Francisco. Photograph: Facebook/Reuters

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UK To Issue Medical Certificate For New European Light Aircraft Pilot's License

By Shane Nolan

September 12, 2012 - General practitioners (GPs) in the UK will be able to assess the fitness of pilots applying for the new pan-European Light Aircraft Pilot's License (LAPL).

The license, which comes into effect on September 17, 2012 as part of major reforms to pilot licensing across the EU, will only be valid if the applicant holds a valid medical certificate. In the UK this can be obtained from his or her GP.

Only GPs with specialist training in aviation medicine, approved by the UK Civil Aviation Authority (CAA) as Aeromedical Examiners (AMEs), will be able to issue medical certificates for other types of pilot licenses, such

Pilots With Diabetes Set New World Record: 29 States in 24 Hours

Way forward

- Where can we go from here?

Foto: Forsvaret

Lack of science – possibilities for collaboration

- Research into medical examinations
- Risks in older pilots
- Decision making processes and how to work with pilots
- The stresses of flight, their effects - and prevention
- Big data

Risks are not the same

In short: Making Aviation Medicine more relevant in taking care of those risks

1. Understanding the differences
2. Developing what we do, and why
3. The systems we use, the culture we are part of

Thank you for your attention!

www.esam.aero

anthony.wagstaff@flymed.uio.no

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