

MEDICAL CERTIFICATION of PILOTS IN RUSSIA

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MEDICAL CERTIFICATION of PILOTS IN RUSSIA (history)

- **Aviation Medicine** in Russia has **100-year-old history**
- Day of origin of aviation medicine in Russia is considered **July, 14th, 1909:**
- The attention to the necessity of physical examination of pilots has been brought at the session of All-Russian aero club.

This decision has been written down:

«to recognize as necessary: to perform flights only under condition of their (pilots') physical examination».



Medical examination of the aviation personnel

The primary goals:

1. *Fit assessment for flight (duties for ATCOs).*
2. *Revealing of early forms of diseases, risk factors and functional health disturbances for the purpose to recommend and accomplish the proper actions to improve and to preserve health of aviation personnel.*

Organization of aviation medical services and aeromedical certification in Russia

Now Russian aeromedical certification system has **three units:**

1. *Medical examination by Flight Expert Medical Commission*
2. *Semi-annual medical inspection and medical dynamic supervision*
3. *Preflight medical check
(medical control)*

**Federal level
Aviation Medicine Group**

**Central level
Central Clinical Hospital of Civil
Aviation and Central Flight Expert
Medical Commission (Moscow)**

**Flight Expert
Medical
Commission,
Aviation
doctors**

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40 Flight Medical Commissions

First unit

Medical examination by Flight Expert Medical Commission

- **Medical examination is performed by experts - the internist, the neurologist, the surgeon, the otolaryngologist, the ophthalmologist, psychologist.**
- **Each expert of the commission does the Medical examinations of pilot**
- **Expert makes decision on fitness / unfitness of the pilot.**

Continued

- ***The final decision on the pilot fit (unfit) to flights is taken out jointly by the Flight Expert Medical Commission.***
- ***After medical examination commission gives medical conclusion, which is a part of pilot's certificate.***

Periodicity of Medical Examination:

- ***For class 1 medical certificate – 12 month (professional pilots and other flight crew members)***
- ***For class 2 medical certificate – 24 month (Private pilots and cabin crew members)***
- ***For class 3 medical certificate – 24 month (ATCO)***

Medical examination

- *Medical examination includes the list of diagnostic investigations:*

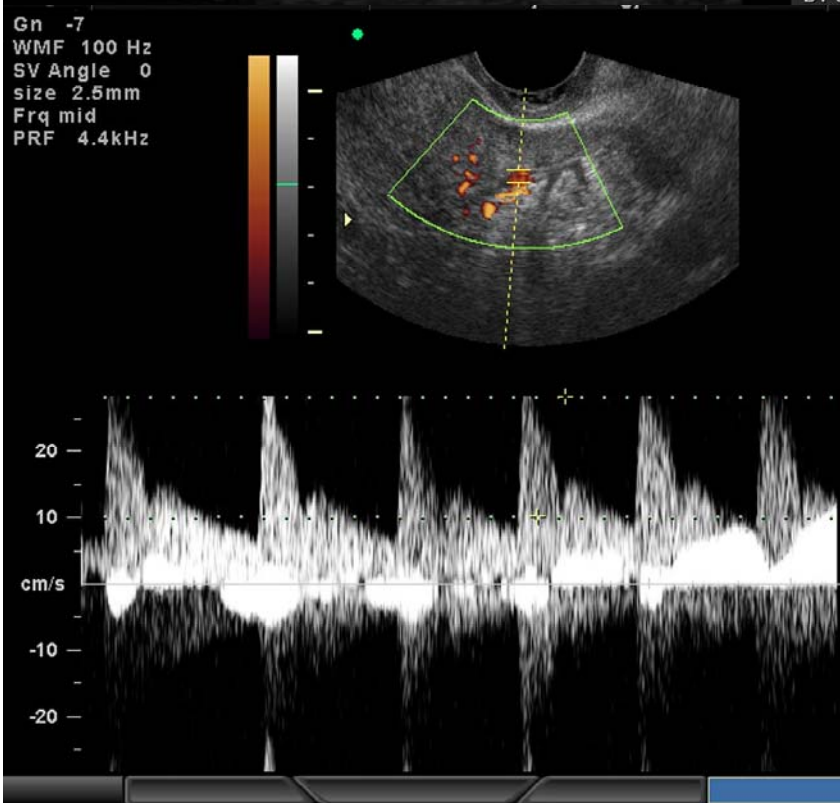
- *Blood test, urine test, glucose, ECG, X-rays, stomatologic and gynecologic inspection, tonal audiometry, vestibulometry, anthropometry (growth, body mass, breast circle, spirometry, dynamometry of brushes), ophthalmological examination;*
- *EEG - at initial examination*

Отделение функциональной диагностики



(Continued)

- ***After 40-years volume of medical investigations increases: biochemical blood testing, ultrasonic investigation, gastroscopy, rectoromanoscopy, functional testing, psychological.***
- ***Other investigations on clinical indications***



(Continued)

***After the age of 55-years
professional pilot has medical
examination in Central
clinical hospital of Civil
aviation (Moscow)***







Кабинет компьютерной томографии





Second unit

Medical supervision

- Within a year the aviation doctors makes the obligatory medical inspections, treatment and prophylactic actions and recommendations of Flight Expert Medical Commission to improve health
- They insert a mark in medical certificate with regards to pilot's fitness / unfitness to flight duties for 6 months.



Отделение гипербарической оксигенации



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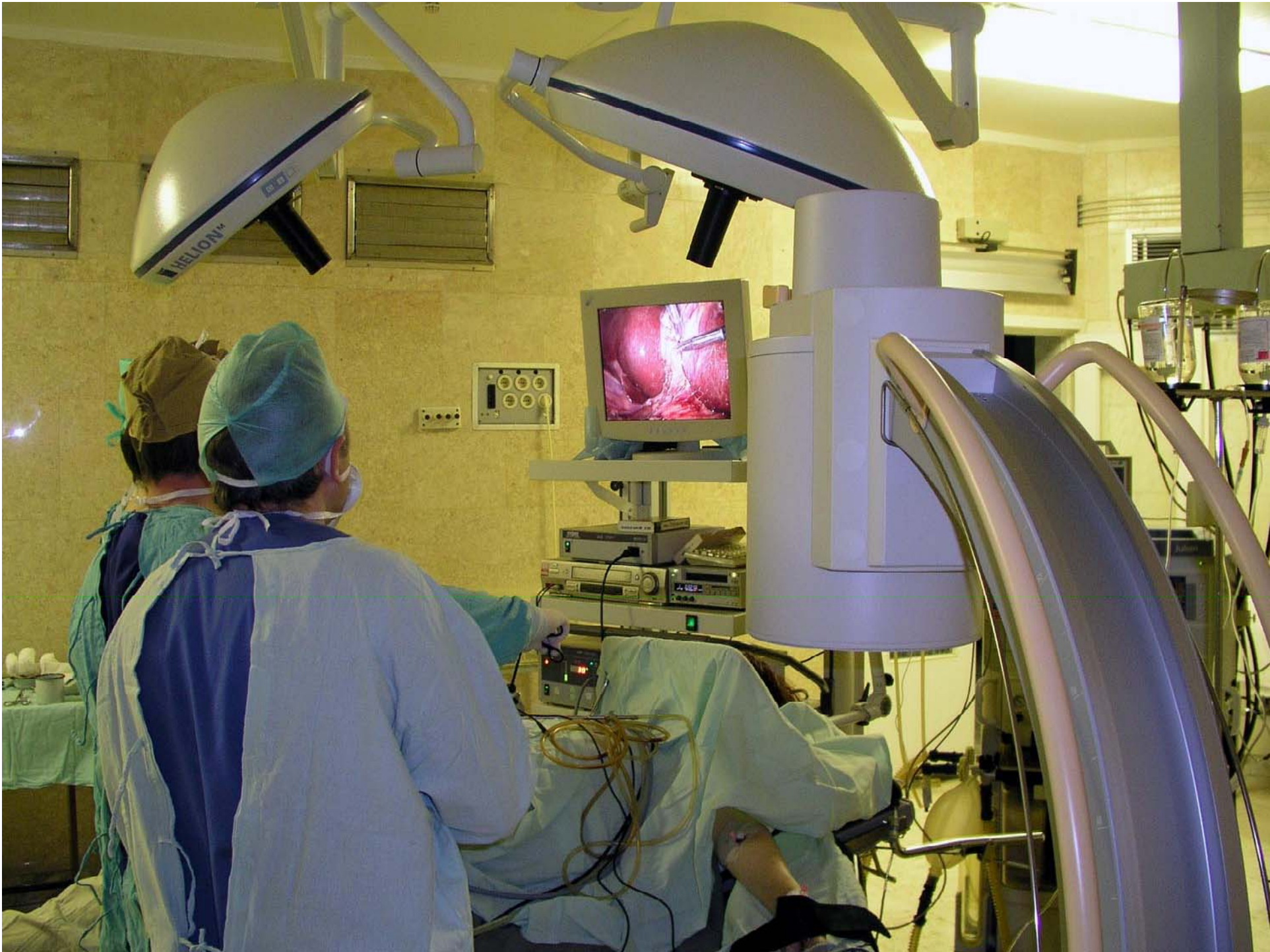
Third unit

Medical control before flight

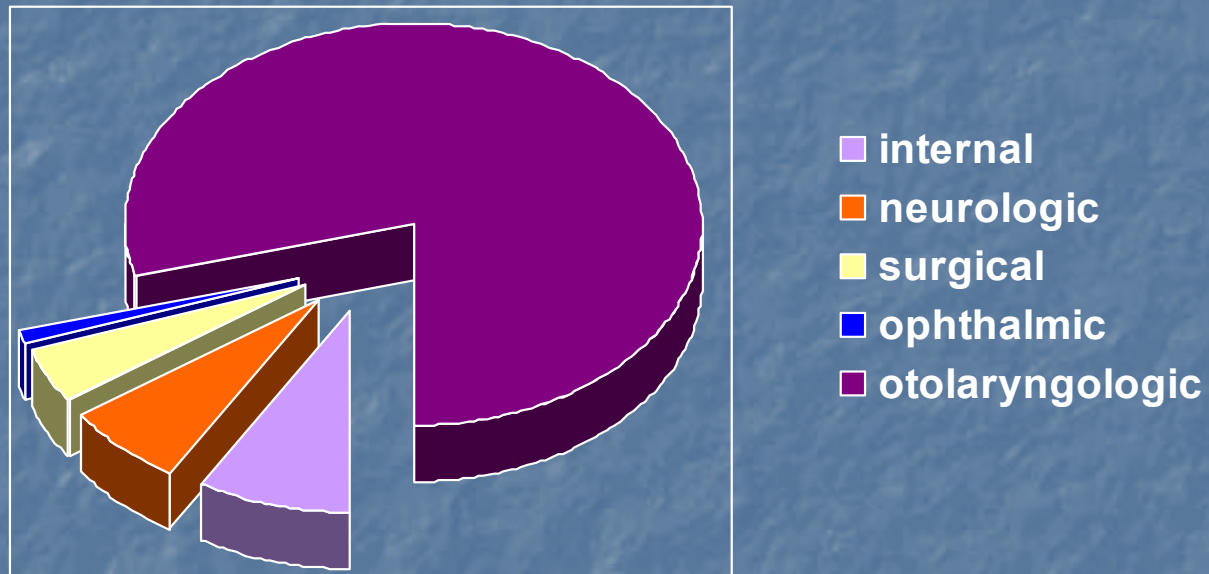
- **Before flight doctor's assistant does medical inspection (control) flight crew.**
- **Medical examination of alcohol (drugs) use: selective and/or at suspicion.**

Medical examinations of pilots in Russia in 2009

- 21 000 pilot - medical examinations
 - 44 years - middle age
 - 550 total number of unfit pilots
 - 55 years - middle age of unfitness
for pilots



The reasons (diseases) of pilot's unfitness in 2009



Otolaryngologic Diseases (79%)

- Pilot's Otolaryngologic Diseases are only sensorineural hearing loss (NSH). Hearing loss due to the impact of aviation noise, the age changes of an organ of hearing and idiopathic hypertension and an atherosclerosis of arteries
- Such pilots receive professional illness with indemnification of health loss and professional working capacity. Pilots are retired and receive social and economic support from the state.



Комната психофизиологической разгрузки

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(conclusion)

Russian medical certification system does not make a fit assessment only, but also permits to diagnose diseases in early stages and is directed to health preservation.



**THANKS FOR
YOUR
ATTENTION!**

