



Implementation of New ICAO Aviation Specialists Training Strategies for Ukrainian Civil Aviation

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Ukraine belongs to a few countries of the world with a full cycle of aviation technology. It takes the leading place in the world's market in the transport and regional passenger aircraft sector. According to the level of development of aircraft industry, Ukraine belongs to the most developed countries.



Some models of aircraft Antonov type are ahead of similar world models for three or four years. Aircraft industry is one of the most profitable and, at the same time, the most capital-intensive industries of mechanical engineering.



The aviation industry comprises more than 60 companies, which account for about 25 per cent of people employed in mechanical engineering in Ukraine.

The basis of the industry consists of five large enterprises, for which two thirds of the workers in the industry is concentrated. Potential aviation industry mostly includes:

- regional passenger and transport aircraft,
- on-board radio-electronic equipment, focused on the use of satellite communication systems, navigation and observation,
- helicopters and drones.





MULTIPURPOSE

AH-26 1969 AN-26

TRANSPORT -AH-28 1973 AN-28

АН-32 **1976** AN-32 транспортный

TPAHCNOPTHЫЙ TRANSPORT

AH-3 1980 AN-3 MHOFOLIEREBON MULTIPURPOSE

THANSPORT

AH-74 1983 AN-74

MULTIPURPOSE

AH-71 1985 AN-71 CAMORET APAO EW AIRCRAFT

АН-225 **1988** AN-225 ТРАНСПОРТНЫЙ ТRANSPORT

АН-32П **1993** AN-32Р ПОЖАРНЫЙ FIRE-FIGHTING

AH-38 **1994** AN-38 MHOTOUETEBOR MULTIPURPOSE

4H-70 1994 AN-70

TPAHCHOPTHЫЙ TRANSPORT

H-140 **1997** AN-14 ПАССАЖИРСКИЙ PASSENGER

H-74TK300**2001**AN-74TK

АН-148 2004 AN-14 ПАССАЖИРСКИЙ

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The prospective developments of the industry include:

- Aircrafts such as Antonov-74, 38, 70, 124, 140, 148, 158, 178, 225 and their modifications,
- serial production of D-27, D-18T engines of the fourth series, Al-450, Al-222-25, VK-2500,
- Ukrainian helicopters.



THE RESULTS OF THE UKRAINIAN AIR TRANSPORTATION ACTIVITY FOR 2016 YEAR

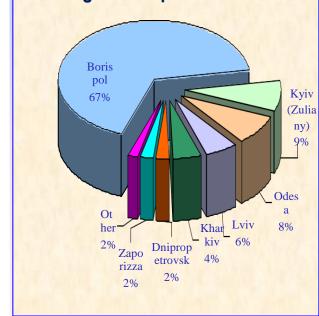




This year 29 Ukrainian airlines operated on the market of passenger and cargo air transportation. According to the statistics for 2016, 79,500 commercial flights were performed by Ukrainian airlines.

Commercial flights of Ukrainian and foreign airlines were served by 19 Ukrainian airports and airfields. According to the results of the year, the number of departure and arrive aircrafts amounted to 133.2 thousand flights

The share of the leading airports in the total volumes of passenger transportation through the airports of Ukraine



| Recruitment of students of aviation specialties in Ukraine (2016) | | | | | |
|---|-------|----------|--------|--|--|
| Field of Study | Total | Bachelor | Master | | |
| Mechanical engineering | 3235 | 2116 | 1119 | | |
| Aviation and rocket - space | 619 | 263 | 356 | | |

| Aviation and rocket - space technology | 619 | 263 | 356 |
|--|-----|-----|-----|
| Avionics | 154 | 79 | 75 |
| Aviation | 592 | 233 | 359 |

transport Total

| engineering | | | |
|--|-----|-----|-----|
| Aviation and rocket - space technology | 619 | 263 | 356 |

Global Challenges

Airspace activity
Aviation industry
Transportation
Communication
Energy
Safety & Security
Environmental
Health
Natural Resources
Economy



Technologies

Making, modification, usage, and knowledge of tools, machines, techniques, crafts, systems, and methods of organization.



Science + Education



New Knowledge







History and Traditions

2000 – National Aviation University

1994 – Kyiv International University of Civil Aviation

1965 – Kyiv Institute of Civil Aviation Engineers

1947 – Kyiv Institute of Civil Air Fleet

1933 – Kyiv Aviation Institute

1898 – Mechanical Faculty of Kyiv Polytechnic Institute





Honor of The University

N.Akhiezer - Mathematics

D.Grave

- O.Antonov Airplane Design
- **T.Bashta** Hydraulics
 - Mathematics
- M.Kravchuk Mathematics

O.Kukhtenko - Cybernetics

V.Chelomei

G.Pukhov - Energetics

Space-RocketSystem Design





Honor of The University



Dr. Olumuyiwa Benard Aliu.

President of Civil Aviation Council

International Organization







The National Aviation University (NAU)

is the largest aviation university in Ukraine. It has trained many specialists for more than 140 countries during 85 years of its existence.



Structure of The University

10 educational research institutes, 2 faculties, ICAO Institute, 15 research institutes and centres, 7 colleges and academies, 2 lyceums and gymnasiums.





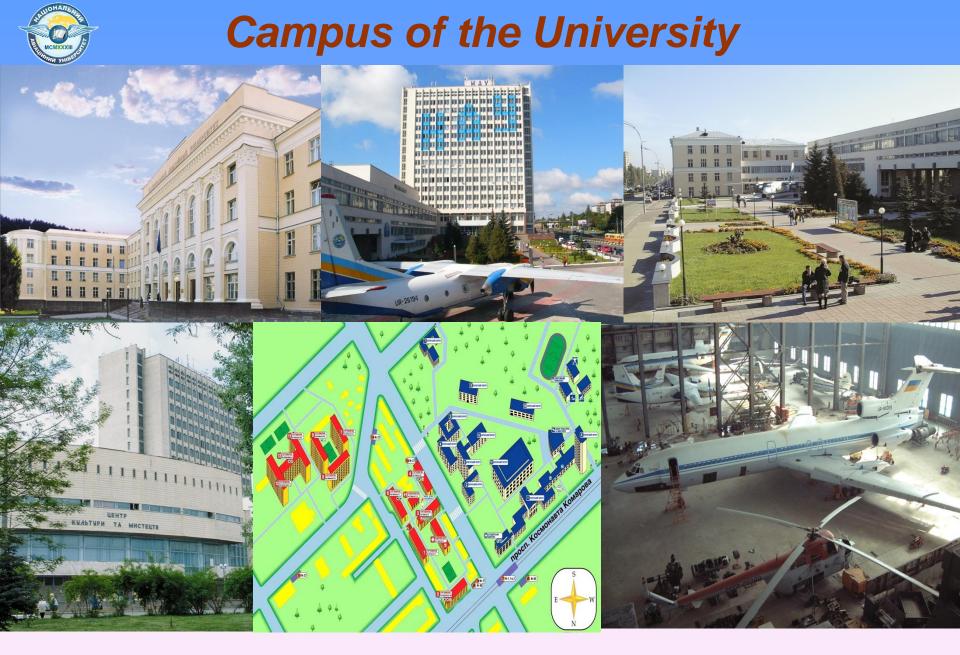




Scientific - Teaching Staff

The academic process at the University is provided by teaching staff (2000 lecturers) including 45 Academicians and Corresponding Members of the Academy, 170 Doctors of Sciences and Professors, more than 700 PhD holders and Associate Professors.

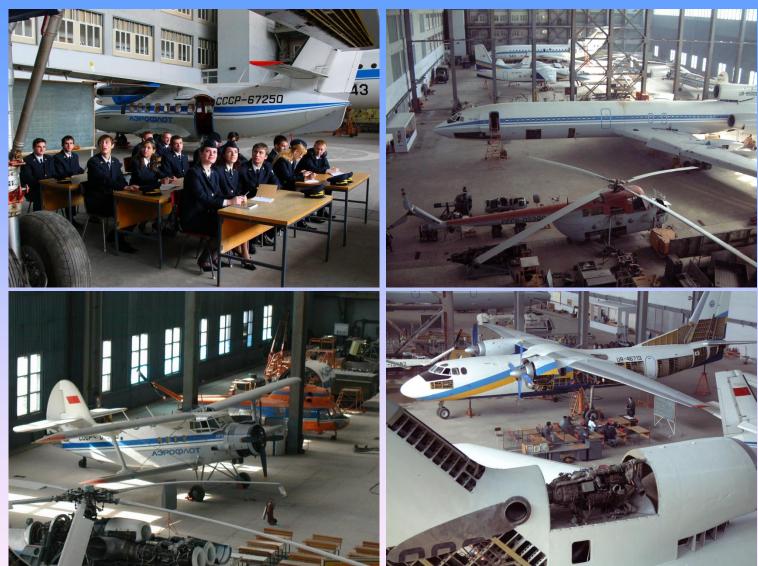




The area occupied by the University is about 100 hectares with14 academic buildings.



Facilities of the University



The University has got a unique hangar, aviation ground equipment facilities, aerodynamic and training complexes, the State Museum of Aviation.

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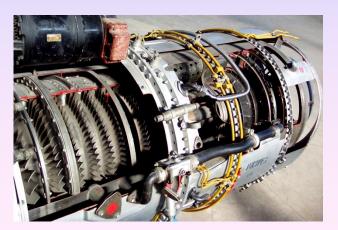
Research and Training Equipment of the University





More than 80 airplanes and helicopters; 42 aircraft engines; Air Traffic Controllers tower simulators are used in the training process.











The University Library



The scientific and technical library has about 3 million books.











Ukrainian State Museum of Aviation



According to CNN 2016 ratings, the State Museum of Aviation is ranked the 6th in the world.



The innovative basis of international educational activity of the National Aviation University is the development and integration into the educational process.

Strategic directions of NAU development include:

Aerospace and Information Technologies;

Ecobiotechnologies;

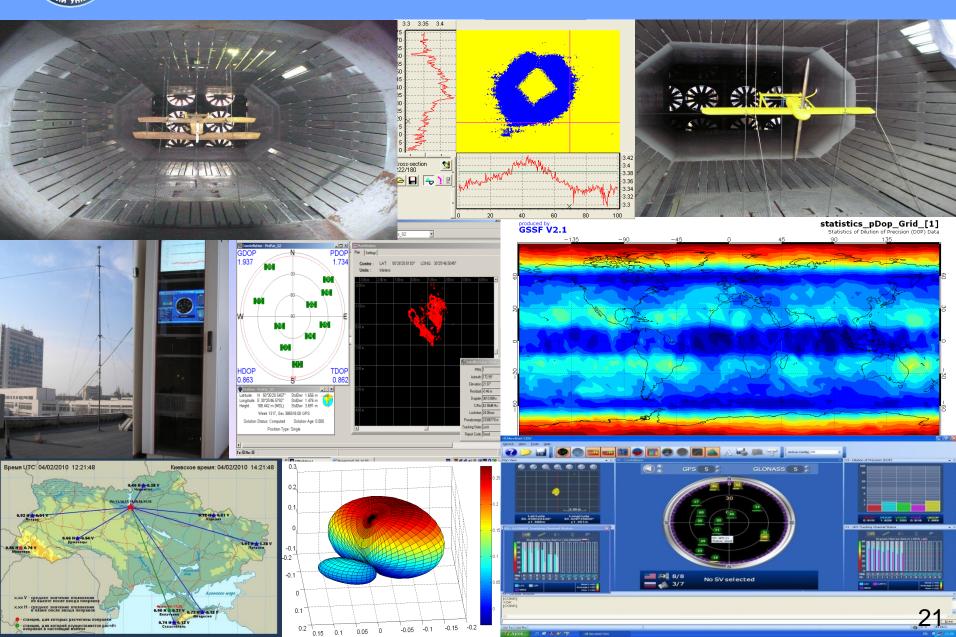
Energy Saving Technologies;

Science of Materials.

The development of scientific research activity of the National Aviation University provided due to the attraction to scientific projects of doctoral students, post-graduate students and students.



Aviation and Space Technologies



Unmanned Aerial Vehicles









UAV M-7B5 «Sky Patrol»

m₀- 200кg



HAVIM 40 "Evo"

UAV M-10 "Eye" m0- 3кg



UAV M-6 "Skylarc" m0- 7κg

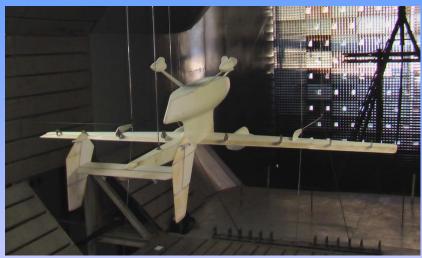


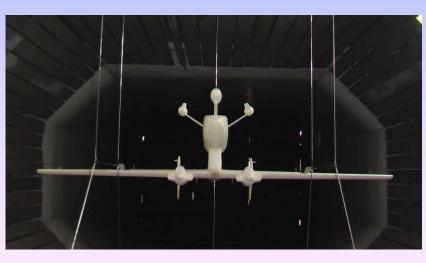
UAV M-22 "Aerotester" m0- 18κg

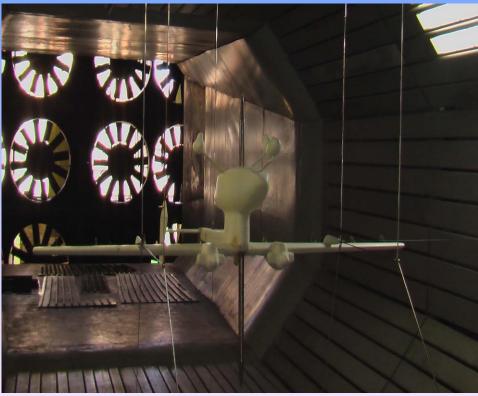
Integrated simulators of NAU



Aerodynamic complex







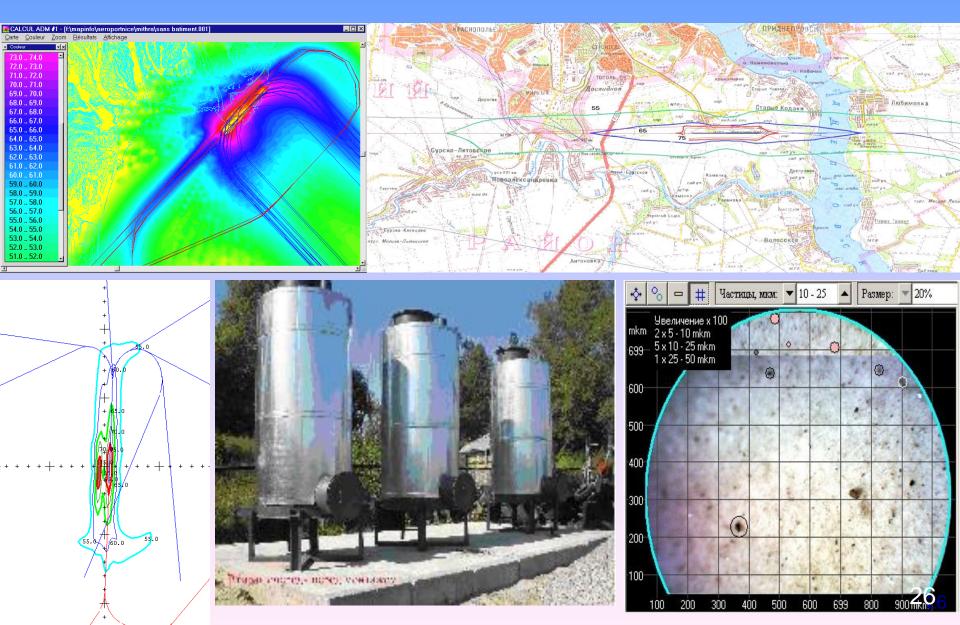


Information Technologies





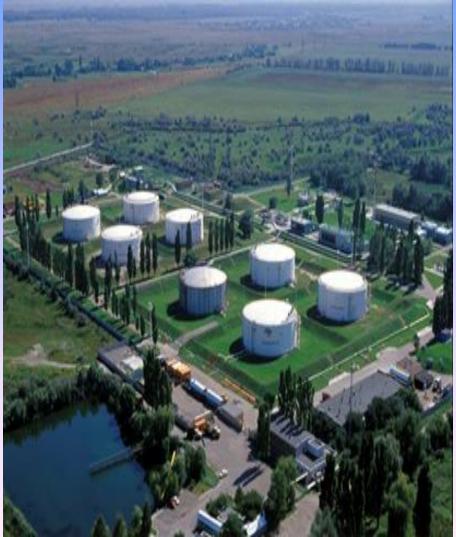
Ecological Biotechnologies





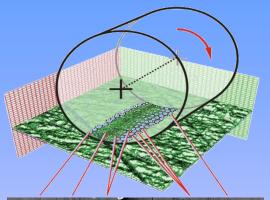
Energy-Saving Technologies.

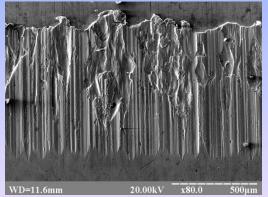


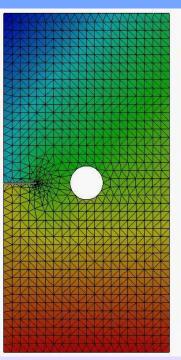


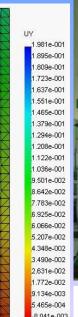


Science of Materials



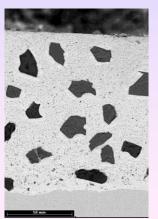




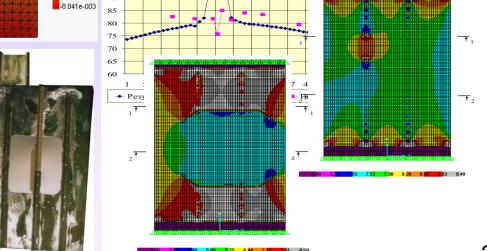












Nowadays the University provides education for 25 thousand students from more than 45 countries.

The list of specialties covers almost the whole amount of aviation specialties. The University trains future pilots, air traffic controllers and engineers, avionics specialists, radio electronics, modern airport designers, air transportation managers and logistics, cyber security specialists, aviation systems diagnostics, aviation ecologists, economists, lawyers, psychologists etc.

The National Aviation University is a unique conglomerate of aviation education and science that fully meets the needs of the aviation industry of Ukraine and many countries of the world.













Students have their practical training at the leading companies of Ukraine:

- •"Antonov"
- "Ukroboronprom"
- Airport "Boryspil"
- Airport "Kyiv"
- Ukraine International Airlines
- State Space Agency of Ukraine
- Banking institutions
- Enterprises of state and municipal property, private sector, etc.





















AIRBUS









National Aviation University participates in many international programs with foreign Universities and companies of more than 120 foreign scientific and training institutions in 40 countries (China, Germany, France, Poland, Spain, Azerbaijan, Belarus, Lithuania, Latvia, Italy, Georgia, Vietnam, South Korea, India, Turkey etc).



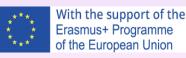
























The ICAO methodologies are being used at the University. They include educational courses are based on documents of European Civil Aviation Conference (ECAC), European Aviation Safety Agency (EASA) and EUROCONTROL.

ICAO Training Institute (Kyiv, Ukraine)



The ICAO Training Institute was established at the National Aviation University on the basis of the ICAO training centers to coordinate their activities.



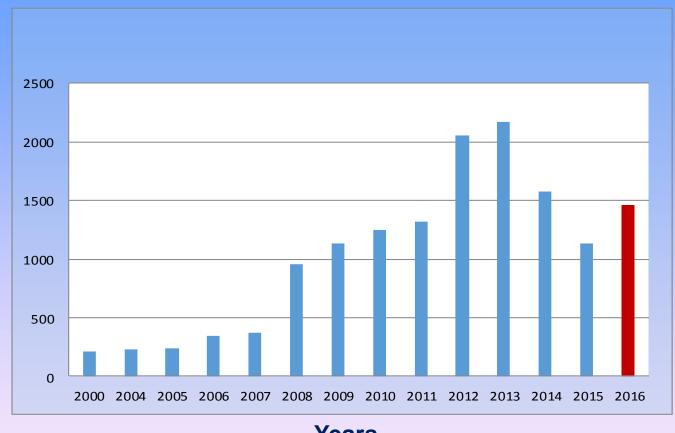
The ICAO training Institute structure is in compliance of the Manual on Establishment and Operation of Aviation Training Centres (Doc 9401AN / 921)







Number of specialists trained at the ICAO Training Institute



Years

About 9000 persons from 75 countries have been trained at the ICAO Training Institute since 2000.



Based on the basic principles of the development of the world civil aviation, formulated by ICAO as

No Country Left Behind Aviation Uniting People of the World

NAU has the opportunity to expand contacts with the European and North Atlantic Regional Office of ICAO (Paris, France) in different areas:

participation of NAU scientists as experts in ICAO expert and working groups;

providing methodological assistance for countries, that need training and retraining of aviation personnel.





THANK YOU FOR ATTENTION!

