UNIVERZITET U BEOGRADU
SAOBRAĆAJNI FAKULTET

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OSNOVI BEZBEDNOSTI VAZDUŠNE PLOVIDBE

INTRODUCTION TO RISK AND SAFETY OF AIR NAVIGATION

– III dopunjeno i izmenjeno izdanje –

BEOGRAD
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PREDGOVOR

„Osnovi bezbednosti vazdušne plovidbe“ su autorizovana skripta sastavljena na osnovu nastavnog plana i programa predmeta „Osnovi bezbednosti vazdušne plovidbe“ koji se predaje na osnovnim akademskim studijama na Univerzitetu u Beogradu - Saobraćajnom fakuletu.

Skripta su prvenstveno namenjena studentima osnovnih akademskih studija na Modulu za vazdušni saobraćaj i transport Univerziteta u Beogradu - Saobraćajnog fakuleta. Skripta mogu biti od koristi i studentima master i doktorskih akademskih studija Saobraćajnog fakuleta, pogotovo onima koji nisu završili osnovne akademske studije na Modulu za vazdušni saobraćaj i transport. Takođe mogu biti od koristi i vazduhoplovnim inženjerima u cilju proširenja i ažuriranja znanja iz oblasti bezbednosti vazdušne plovidbe.

Materija koja je izložena u ovim skriptama odnosi se uglavnom na civilno vazduhoplovstvo i zasniva se velikim delom na međunarodnim propisima, zakonima i dokumentima u kojima je obrađena problematika vezana za bezbednost vazdušne plovidbe.

Pošto su ovi propisi i dokumenta podložni čestim izmenema i promenama, korisnicima ovih skripti se preporučuje da koriste i originalna (ažurna) dokumenta, koja su navedena u spisku literature, kako bi eventualne promene, do kojih je došlo posle izdanja skripti, uzeli u obzir prilikom korišćenja.

Jun 2020 Autor

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Definition and Basic concepts of Risk and Safety

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Introduction (1)

- **Vision 2020**:
  - In 2020, the skies are safer than ever before because safety has remained the top priority of the aircraft builders and operators and of air traffic managers.

- **Goals are**:
  - Aircraft will achieve a five-fold reduction in the average accident rate of global operators;
  - Aircraft will drastically reduce the impact of human error;
  - Higher standards of training for aircraft operations and maintenance and for air traffic management.

Introduction (2)

- **Strategic Research Agenda** - safety rests on three pillars:
  - the technology, systems design and operations;
  - regulation including certification and qualification (a special challenge will be presented in establishing systems of certification and qualification in the highly complex and integrated systems of the future);
  - the human performance to operate the whole chain of Air Transport activities

- **Two goals were defined to meet the Safety challenge**:
  - Reduction of the accident rate by 80%, addressing the first two pillars;
  - Reduction of human error and its consequences, addressing specifically the third pillar.

Introduction (3)

- **SESAR** - high level goals for the Single European Sky and its technological pillar:
  - Enable a 3-fold increase in capacity which will also reduce delays, both on the ground and in the air;
  - Improve the safety performance by a factor of 10;
  - Enable a 10% reduction in the effects flights have on the environment and;
  - Provide ATM services to the airspace users at a cost of at least 50% less

- **The definition phase of SESAR has concluded that ATM can significantly contribute to reaching these goals. SESAR is now targeting for 2020**:
  - Associated improvement in safety so that the total number of ATM induced accidents and serious or risk bearing incidents will not increase despite traffic growth;

What is Safety?