

GIOVANNI DI ANTONIO, FRAeS

EDUCATION

- 2007–2008 **Master on Composites and Nanotechnologies for Aerospace** EQF level 7
University of Rome “La Sapienza” - School of Astronautical Engineering, Rome (Italy)
Carbon nano-tubes physics and technology; advanced nano-structured composites and aerospace applications.
- 2004–2007 **Degree in Astronautical Engineering** EQF level 7
University of Rome “La Sapienza” – School of Astronautical Engineering, Rome (Italy)
Full marks with honours.
- 1990–1998 **Degree in Aeronautical Engineering** EQF level 7
University of Rome “La Sapienza” - Faculty of Engineering, Rome (Italy)
Full marks with honours.

PROFESSIONAL QUALIFICATIONS

- EASA (European Union Aviation Safety Agency) Inspector
- ENAC Safety Internal Trainer
- ENAC Auditor in accordance with UNI EN ISO 19011.
- Ministry of Public Education, High School Teaching Diploma on *Aeronautical Structures and Flight Mechanics*
- Order of Engineers of Rome, qualification as an Engineer

WORK EXPERIENCE

- 2006–Present **Airworthiness Certification Expert**
ENAC - Italian Civil Aviation Authority, Rome (Italy)
- Team Leader of the Commercial Suborbital Transportation Task Force (CSTTF) in charge of developing the National regulatory framework for the commercial suborbital transportation and access to space under the mandate of the Ministry of Infrastructure and Transport.
 - Member of ICAO/UNOOSA Space Learning Group.
 - Promoter and Founder Member of the European Group on Suborbital Flight Regulation (EGSFR) and Chair for 2019.
 - Member of the European Commercial Spaceport Forum (ECSF) and Chair for 2019.
 - Support to the Ministry of Infrastructure and Transport on the topics of National Space Security & SSA (Space Situational Awareness) / SST (Space Surveillance and Tracking) / STM (Space Traffic Management).
 - Airworthiness Surveyor. EASA Structures Expert for Initial and Continuing Airworthiness of Small and Large Aircraft (among others: Leonardo A119/109 from 2006 until 2019, Leonardo EH101/AW601, Leonardo AW139, Piaggio Aerospace P180, Canadair CL 415)
 - EASA DOA (Design Organization Approval) Inspector for Piaggio Aerospace, Alitalia and Leonardo

Aircraft Division. DOA Advisor for Structures.

- National Focal Point of ICAO's USOAP-CMA (Universal Safety Oversight Audit Programme - Continuous Monitoring Approach) for ICAO's Annexes 5, 7, 8, 10, 16.
- Co-Editor representative on the International Register of Civil Aircraft (IRCA) edited by ENAC Italy, CAA UK and Bureau Veritas France (from 2014 until 2019).
- National Focal Point of JARUS (Joint Authorities for Rulemaking on Unmanned Systems). Member of WG 3 (Airworthiness) and WG 7 (CONOPS) from 2013.
- Member of the government working group for UAM (Urban Air Mobility) project implementation under the mandate of the Ministry of Innovation and Digitalization.
- Program Manager and Expert for UAS Authorizations in the Specific category also involving Autonomy and AI.
- Member of the CAA and Industry group for the development of UAS National Standard Scenarios (STS) in the Specific Category in accordance with the SORA methodology.
- Member of the Advisory Board of the European H2020 project "AW-DRONE. Contributing to a well-reasoned set of Airworthiness Standards for mass-market drones".
- Member of the Advisory Board of the Drones Observatory of the Politecnico of Milan (PoliMi)
- Member of the group of the European National Aviation Authorities (NAAs) for the National implementation of the EU Drones Regulation, Reg. (EU) 2019/947 and Reg. (EU) 2019/945).
- Member the Focus Group of the Faculty of Aerospace Engineering of the University of Rome "La Sapienza" for the development of academic training paths linked to the job's world.
- Member of the working group on Hypersonic Vehicles of CESMA (Centre for Aeronautical Military Studies) and Coordinator of the WP4 "Regulation", from 2014 until 2016.
- Member of the working group on Human Space Flight of CESMA (Centre for Aeronautical Military Studies) from 2014 until 2016.

1999-2019 Lecturer

- University of Rome "La Sapienza", Master on Management of Civil Aviation Editions 2017, 2018, 2019, 2020. *Initial Airworthiness (Type Certification)*.
- University of Rome "Tor Vergata", Master on UAS Design, Applications and Regulation Edition 2019. *Specific Operation Risk Assessment (SORA)*.
- University of Rome "La Sapienza", "Flight Safety & Airworthiness Master Programme (FSAMP) – Train the Trainers (Erasmus+ Programme Edition 2017. *Airworthiness Module*.
- EAG European Air Group, 12th Advanced Aviation Medicine Course on Space and Operational Medicine, Rome, 2016. *Future of commercial suborbital space flight - National perspectives*
- University of Rome "La Sapienza", Master on Composites and Nanotechnologies in Aerospace Editions 2009, 2010, 2011, 2012. *Certification of Composite Aircraft Structures*.
- University of Rome "La Sapienza, Faculty of Engineering, Space Flight Mechanics Course 1999-2002. Lecturer and Member of examination committee.

2001–2006 System Engineer

MBDA Missile Systems, Rome (Italy)

- System Engineer responsible for structures and electro-mechanical units of the FSAF/SAMP-T/ASTER surface-to-air missile system.
- Project management activities dealing with international customers, partners and suppliers of Defense sector: OCCAR (Organisation Conjointe de Coopération en matière d'Armement), EUROSAM, TAD (Thales Air Defense), Oto Melara, etc.

- Drafting and reviewing technical documentation: Statement of Works, System Requirements and Procurement Specifications and related compliance reports.
- System qualification activities per MIL-STD-810.
- Air transportation trials on C130 and C160 aircraft and road trials at Italian and France test sites: DGA-CEV Centre d'Essais en Vol Toulouse; 46th ItAF Aero-Brigade, Pisa; CEPOLISPE Rome; DGA – ETAS Etablissement Technique d'Angers.
- Development of shelter ballistic protection systems.

2000–2001 **Project Engineer of Agusta A109 helicopter**

AgustaWestland, Cascina Costa di Samarate, Varese (Italy)

- Project management activity for development and certification of A109E helicopter type design changes i.a.w. DOA procedures.
- Qualification process of critical components.
- Prototype helicopters configuration control.

1999–2000 **Engineer**

3I – Iniziative Industriali Italiane / Sky Arrow, Monterotondo, Rome (Italy)

- Development and certification activities for Sky Arrow 650 aircraft design changes per JAR-VLA.
- Drafting certification documents and technical reports for structures, powerplant and flight testing and discussion with the CAA.
- Fuselage static test set up.
- Powerplant flight tests (about 15 hours flown).
- Noise tests plan per ICAO Annex 16.
- Radio station licence activities.
- Updating of the Company Quality Handbook and related design organisation procedures.

CONFERENCE SPEAKER

- New Space Economy European ExpoForum, Rome 10 Dec. 2019. *Italian Regulatory Framework for the Commercial Space Transportation.*
- ESA International Conference of Flight Vehicles, Aerothermodynamics and Re-Entry Missions and Engineering (FAR 2019), Monopoli, Italy, 2 Oct. 2019. *Spaceports and Commercial Space Transportation* (Panelist).
- Politecnico of Milan (PoliMi), 1st National Drones Observatory Workshop, Milan, 4 July 2019, *The EASA regulation for UAS Ops and the Italian transition.*
- 3rd International Symposium on Hypersonic Flight: from 100.000 to 400.000 ft, Pozzuoli - Italy, 30-31 May 2019. *The Foundations of the National Regulatory Framework for Commercial Suborbital Transportation.*
- Politecnico of Milan (PoliMi), National Drones Observatory Kick-off, Milan, 22 March 2019. *UAS Regulation Perspectives.*
- DLR Summer Colloquium, Braunschweig – Germany, 30-31 Aug. 2018. *Suborbital Transportation Development in Italy.*
- CIRA SPACE Workshop, Capua – Italy, 12 Sep. 2018. *L'evoluzione del quadro regolamentare nazionale per il trasporto suborbitale (The evolution of the suborbital transportation National regulatory framework).*
- 9th IAASS (International Association for the Advancement of Space Safety) Conference, Toulouse (France) 18-20 October 2017. *A model for setting a regulatory framework for the development of suborbital operations in Italy.*

- 2nd International Symposium on Hypersonic Flight: from 100.000 to 400.000 ft, Rome, 30 June - 1 July 2016. *The Development of a Regulatory Framework for Suborbital Flight Operations in Italy.*
- CESMA Workshop, Hypersonic Flight between technological competition and cooperation – The role of Italy (in Italian), *Regulation*, 20 April 2016, CIRA – Capua (Italy)
- Virtual testing, towards virtual certification AirTN Workshop, Round table, NLR, Amsterdam, 25 May 2016 (Panelist)
- 2nd ICAO/UNOOSA Space Symposium, Abu Dhabi, 15-17 March 2016. *Commercial Space Transportation in Italy. A framework in development*, (speaker).
- EASA STC Structural Substantiation Workshop, Cologne, 17-18 Sep. 2014. *Antenna Damage Tolerance. The ENAC experience.*
- 3rd International Conference on Innovative Natural Fibre Composites for Industrial Applications, Rome, 12-14 Oct. 2011. *A brief introduction on composite aircraft structure certification.*

PUBLICATIONS

- A methodology for evaluating the level of protection of 3rd parties on ground during RPAS operations, Edition 1_EN, Jan. 2016, Appendix 1 to the ENAC (Italian Civil Aviation Authority) Guideline (LG) 2017/001-NAV Ed. 2 of 9 Jan. 2020, <https://www.enac.gov.it/la-normativa/normativa-enac/linee-guida/lg-2017001-nav>
- JARUS CS-UAS Recommendations for Certification Specification for Unmanned Aircraft Systems, doc. n. JARUS-DEL-WG3-CS-UAS-D.04, Ed. 1.0 of 6 Sep. 2019 (Core Group developer) <http://jarus-rpas.org/publications>
- A Performance-Based Approach for Occupants Safety in Suborbital Transportations Proceedings of the XXV International Congress of the Italian Association of Aeronautics and Astronautics (AIDAA) 9-12 September 2019| Rome, Italy
- JARUS guidelines on Specific Operations Risk Assessment (SORA), doc. n. JAR-DEL-WG6-D.04 Ed. 2.0 of 30 Jan. 2019 (Contributor) <http://jarus-rpas.org/publications>
- *A model for setting a regulatory framework for the development of suborbital operations in Italy*, Journal of Space Safety Engineering 4 (2017) 138–145, www.elsevier.com/locate/jsse
- JARUS CS-LUAS Recommendations for Certification Specification for Light Unmanned Aeroplane Systems, doc. n. JAR_DEL_WG3_D.04 Ed. 03 November 2016 (Core Group developer) <http://jarus-rpas.org/publications>
- CESMA (Centre for Aeronautical Military Studies) Hypersonic Vehicles Working Group, WP4 *Regolamentazione (Regulation)* Editor, 2016 <http://www.cesmamil.org/wordpress/regolamentazione/>
- Preface to the book: *Prospettive per un governo dell'aviazione civile in Italia (Perspectives for a government of civil aviation in Italy)*, Department of Legal Sciences, University of Rome La Sapienza, Jovene Ed., Naples 2011.
- *Static and Dynamics Analysis of a Satellite Anchored to the Moon*, proceedings of the XIV Congress of AIMETA (Italian Association of Theoretical and Applied Mechanics), Como, 6-9 Oct. 1999.
- “*La legge di Coriolis*” (*The Coriolis’ Law*), *Le Scienze – Italian Edition of Scientific American* n. 418, June 2003. Letter of comments.

Si autorizza l'Università di Roma La Sapienza, Dipartimento di Ingegneria Meccanica e Aerospaziale alla pubblicazione del presente CV.

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