

## LAW IN SPACE ACTIVITIES

**Space law** can be described as the body of law governing space-related activities. Much like general international law, it comprises a variety of international agreements, treaties, conventions, and United Nations General Assembly resolutions as well as rules and regulations of international organizations.

**Space Activities** are an example of cooperation between different Nations to achieve a common goal: exploring what goes beyond our Planet. In human space flights this cooperation is made possible by a common understanding of procedures related to the training of human crews.

**During this Course, students will analyze topics belonging the theme of Aerospace Psychology, such as: CRM** Crew Resource Management (effective communication, leadership, team management, stress management, time management, decision making, situation awareness); **TEM** Threat and Error Management; **Risk Assessment; Risk Management.**

These topics are also studied in the context of **multi-ethnic, multi-cultural and multi-lingual environments** that Aerospace manned missions have had for many years now, but that Commercial Airlines Companies, as an example, are only about to experiment (avant-garde cases in this are Etihad Airways, Emirates and Qatar Airways).

**Students will also become familiar with the following Space Law Treaties and Principles:**

the Committee on the peaceful uses of Outer Space, embodied in the United Nations Organization; the "Outer Space Treaty" (governing the activities of States in the exploration and use of Outer Space, including the Moon and other Celestial Bodies); the "Rescue Agreement" (governing the rescue of astronauts, the return of astronauts and the return of objects launched into Outer Space); the "Moon Agreement" (governing the activities of States on the Moon and other Celestial Bodies);

# PROF. LORENZO MEZZADRI

## PERSONAL INFORMATIONS

**Date of birth:** 02.07.1974

**Place of birth:** Parma (Italy)

**Nationality:** Italian

**Marital Status:**

**Current Address:**

**Private e-mail:**

**Mobile Phone:**

## HIGHER EDUCATION

University of Santa Cruz (UCSC), California - USA

**Doctorate (Ph.D.)** (3 years) - Cognitive Neurosciences (June 2002)

Thesis: "Clinical Hypnosis and Communicational Skills"

University of Santa Barbara (UCSB), California - USA

**Bachelor's Degree** (5 years) - Cognitive Psychology (July 1998)

Thesis: "Human Resources Management: Skills for a New Era"

High School – **Classical Lyceum-Gymnasium "Sant'Orsola"**

Parma - ITALY

## CURRENT ACTIVITIES

**Professor** (Adjunct Professor) in Law in Space Activities, Sapienza State University, Faculty of Aerospace Engineering (since 2017) - Rome IT.

**Professor** (Visiting Professor) in Aerospace Psychology at the Moscow State University "MGU"  
Department of Cognitive Psychology - Moscow RU.  
(since January 2007)

**Professor** at the Superior School of War of the Italian Army - Firenze IT.

**Professor** at the Flight Safety Inspectorate of the Italian Air Force - Roma IT.

**Trainer and Consultant** of "Crew Resource Management", "Human Performance & Limitations" and "Train the trainers" courses for managers, pilots, flight attendants and EASA Licensed Technicians for the following airlines and manufacturers:

- Abu Dhabi Aviation (AB 412 and AW 139 Helicopter Operator) - Abu Dhabi EAU.
- Aeroflot Russian Airlines - Moscow RU.

- AirSp&a (SPRM for pilots of AT-802A Fire Boss enrolled in fire-fighting activities) - Roma IT.
- Aga Khan Foundation (Helicopter Operator) - Islamabad PK.
- Agusta Westland (Helicopter Manufacturer) - Sesto Calende IT.
- Aviotrace Swiss (EASA Part 147) - Mendrisio CH.
- EasyJet - London Luton - UK
- Etihad Airways - Abu Dhabi EAU.
- RUAG - (EASA Part 66 Part M Part 145) - Lodrino and Emmen CH.
- S7 (was Sibir) - Moscow and Novosibirsk RU.
- Sorem Water Bomber (CRM for pilots of Canadair CL415 and CL215 engaged in fire-fighting activities)
- Sukhoi (SuperJet 100 aircraft manufacturer) - Venice and Moscow IT and RU.
- Swiss Aviation Airforce (SPRM for F18A Hornet military pilots) - Emmen CH.

**Trainer and consultant** for the Cuirassiers' Regiment (Reggimento Corazzieri - Comando Carabinieri Guardie del Presidente della Repubblica), an Italian elite military unit, honor guard of the President of the Italian Republic - Rome IT (since June 2016):

- **Psychological Criminal Profiling and Treat Reconnaissance** (since June 2017 in close cooperations with Israeli Secret Services).
- **Psychological and physiological issues on CQB (Close Quarters Battle).**

**Researcher in Human Factors and CRM in Manned Space Flights for the Russian Space Agency "Roskosmos"**

- following the psychological selection, preparation and training for long lasting space missions at the Gagarin Cosmonaut Training Center in Star City, Moscow - RU;
- participating in the preparation of the space lunches in Baikonur - KAZ;
- following space crews of the International Space Station from the Mission Control Center in Korolev, Moscow - RU.

• since 2004 in close cooperation with the Italian Astronaut Roberto Vittori, European Space Agency and NASA Astronaut, Test Pilot, General of Italian Air Force on duty.

Mission Soyuz TMA6 taxi flight to the International Space Station (ISS) on April 2005.

Leadership issues with multicultural crews on the International Space Station.  
 Psychosocial interactions during International Space Station's missions.  
 Crew resource management issues: lessons learned from the Space.

• since 2007 in close cooperation with the Russian Cosmonaut Alexei Leonov, first human space-walk on Mission Voschod 2 in March 1965, commander the Soviet half of the 1975 Apollo-Soyuz mission (Soyuz 19) the first joint space mission between the Soviet Union and the United States.

Human Factor and Crew Resource Management best practices from the Soviet and Russian Space Exploration, from Yuri Gagarin Era to Buran.

• since 2016 in close cooperation with the Italian Astronaut Paolo Nespoli, aerospace engineer and military special forces operator.

Mission Soyuz MS-05 / Expedition 52 in July 2017

Training issues in multicultural environments. Leadership. CRM. Motivation. Human Factors.

**Trainer in Selling Techniques, Communication, Leadership, Public Speaking**  
 for Vodafone Italy, Eni, Fiat, Maserati, Ferrari, Enel, Trenitalia, Toyota. (2000-2011)

**Accountable Manager and co-founder of "Urbe Aero Approved Training Organization" - ATO IT.0065**

Based in Roma Urbe Airport (LIRU). Roma IT. (Since 2009)

**Member** of "CRM and HF Advisory Board" of the Italian Civil Aviation Authority (ENAC).

**Scientific Director** of "Emergency", a sci-fi series on Sky television.

**Consultant** and **Guest Speaker** in Human Factor related aircraft's incident and accident for RAI 1, First Italian Television Channel.

**Researcher** and **Trainer** in Human Factor, Leadership and Effective Communication for the Italian Air Force following departments:

313th Group: National Aerobatic Team "Frecce Tricolori"

1st Department of Experimental Flight in Pratica di Mare airbase.

46th Air Brigade of Pisa (C130, Spartan, G222)

6th Group of Ghedi (Tornado ADV aircraft)

### **OTHER AREAS OF APPLICATION**

Within the context of the development and human resource management, I carry out regular lectures in the following areas:

- Public Speaking
- Leadership
- Corporate Communications and Public Relations
- Interpersonal communication
- NLP - Neuro-Linguistic Programming
- Neuro-marketing
- Phone skills

### **FOREIGN LANGUAGES**

**Russian:** Fluent written and spoken.

**English:** Fluent written and spoken.

**German:** Very Good written and spoken.

**French:** Fluent written and spoken.

### **ASSOCIATIONS**

Member of Rotary Club Moscow International - Moscow RU

Honorary member of Rotaract Parma East - Parma IT

Awarded of the PHF "Paul Harris Fellow" highest honor pin of Rotary International (in 2002)

### **PUBLICATIONS**

Author of various interviews and articles for the following magazines, among the others:

- Roger, Rivista Aeronautica, AirPress, Monsieur, Volare, JP4.

### **COMMERCIAL PILOT LICENSE (CPL IR ME - SEP - MEP / Theoretical ATPL).**

**ICAO English Level 6 on license.**

**ICAO Italian Level 6 on license.**

**CURRENT ON AIRCRAFT:**

Cessna Skyhawk C172

Piper Cherokee Arrow PA-28RT

Partenavia PA68

Diamond DA20 Eclipse, DA40NG, DA40-180, DA42NG, DA42-VI

Cirrus SR20, SR22, SR22T G5 and G6 editions.

**Endorsements**

EFIS G1000 - SPLC - RG - TC

I hereby declare that all the above information is true and correct to the date of February the 10<sup>th</sup> 202~~2~~

*Prof. Lorenzo Mezadri*