Antonio Pelaez Portales
Aeronautical Engineer
Civil Aviation / Safety Expert

Overview

Involved in Air Navigation since the very beginning of my professional career (1995), I have enjoyed working in challenging pan-European programs (RVSM, EGNOS, Galileo, etc.) as a civil servant at the Spanish DGAC. Then, 6 years spent in INECO (a well-known Spanish transport engineering consultancy) working in relevant projects such as new Madrid Airport planning and airport safety assessments.

Next step was SENASA (public body supporting the DGAC), where I was tasked with the implementation of the Spanish Safety Occurrence Reporting System (SNS) and then assigned with other supporting activities for the Spanish CAA (ATM/Meteorological audit teams, ATS incidents investigation, Language Proficiency, SSP/SMS implementation, etc.). The scope of my current assignments is completed with international cooperation projects (being involved either as manager, consultant or trainer) in the field of capacity building and organizational design of National Aviation Authorities.

Professional experience

February 2017-Present

Project Manager, CAA Consultant, Safety Analyst, Aviation Trainer:

- Planning and implementation of a Master programme on ANS Management
- SSP Implementation workshop for Peruvian CAA (January 2019)

September 2006-January 2017

Air Navigation and Safety Analysis Manager (SENASA).

Main international projects:

- Safety and Training expert in the Consultancy Services for Establishment of a Cooperative Legal and Institutional Regional Framework for a Unified Single Upper Airspace in the COMESA Region (2016)
- Framework for Implementing the planned Separation of the Regulatory and Service Provisions functions (ANS) of the Jamaica Civil Aviation Authority (2016/17) and Kenya Civil Aviation Authority (2012)
- Safety expert in the "Study of opportunities for the optimization of Air Navigation Services in the airports of the Republic of Bulgaria" (2015)

- SSP Expert in the "Technical Assistance to the CAA Israel for the development of their State Safety Program" (May/June 2014)
- CAA Advisor and Team Leader in mission to "Strengthen of Capacity Building for the CAA of Mozambique" (2013)
- Project Coordinator for ANS in "Technical Assistance to the Ministry of Transport of Macedonia" (2007) and Implementation of the ECAA Agreement in the Western Balkans (2008-2010)".

Main domestic projects (Spain):

- Technical assistance to the DGAC of Spain (Air Navigation and Safety Occurrence Reporting System) and Ministry of Environment (Meteorological Supervisory Authority) (2006-11)
- Technical Manager of the EGNOS Training Entity. Development of training materials on EGNOS system operations and maintenance. (2007-2010)
- Single European Sky Training Provision for EUROMED States (2008-9)
- Safety Management Systems Training for Spanish Airport Service Provider (2009-11)
- Occurrence Reporting System Training for Spanish Pilot Association (2009 & 2011)
- Language Proficiency Test Centre for Pilots and ATCOs (RELTA, ELPAC and ECCAE tests) (2010-11)•

October 2001-September 2006

Head of ANS Programs Department (INECO)

- Technical expert of GIANT Project (GNSS Introduction into Aviation Sector) for the GJU (Galileo Joint Undertaking) (2005-06) involved in safety assessment activities
- Manager of Spanish Single Sky Project for the Air Navigation Directorate of Aena (comprising the reorganisation of the Spanish airspace, rationalization of facilities, development of new routes networks, etc.) (2002-04)
- Manager and Technical responsible of the Air Navigation contribution to the Study for the New Airport of Madrid (2001-06)
- Development of a 3D Collision Risk Model for Eurocontrol (2005-06)
- Technical expert of national project on Implementation of ESARR 4 Requirements into Automated ATC System (SACTA) (2005-6)
- Safety assessment in several 6th Framework Projects (OPTIMAL, C-ATM, etc.) (2002-06)
- Airport Safety Studies (La Palma, Tenerife North and La Gomera) (2004-06)

September 1995-September 2001

Head of Air Navigation Programs Service (DGAC-Spain)

- Planning of new concepts in Air Navigation
- Implementation of RVSM and development of associated National Safety Assessment
- Safety Assessment for the implementation of B-RNAV in the Canary Islands
- Coordination with Air Force for Search and Recue

January 1993-August 95

Project Engineer (GMV-Spain)

- Development of software tools for space missions
- Development of orbital simulators for satellite constellations
- Development of algorithms for precise orbit determination and attitude determination with GPS

Education & qualifications

- 1985-91: Aeronautical Engineer (University Polytechnical of Madrid, 1985-1991)
- 1994-98: Post-graduate courses in Aeronautical Engineering Doctorate Programme

Trainer Background

- Since 2018, Associate Professor at Polytechnical University, teaching Air Law and Air Transport (Air Transport and Operations Management Degree)
- Since 2017, lecturing Air Navigation Services at European University of Madrtid (Aeronautical Engineering Master Degree)
- Since 2016, ICAO Trainair Plus developer and instructor of the new ICAO Safety Management Program, composed of a CBT (author of the SSP module) and a 5 days practical course (Safety Management for Practitioners)
- 2014-17, lecturer on Safety Management at the Aeronautical Management Degree of Polytechnical University of Madrid
- Since 2007, lecturer on Air Navigation Institutional and Legal issues at Airport Operations MBD of ITAerea Aeronautical Business School
- Since 2006, lecturer of Safety management in Airport Engineering Master (School of Aeronautical Engineering, Universidad Politecnica de Madrid)
- 1998-2011, lecturer on Air Navigation Services Planning in Aeronautical Management Degree (Universidad Autonoma de Madrid)

Publications

- Unified System for Orbit Computation USOC. (Congreso Internacional de Dinámica Orbital, San José do Campo, Brasil, 1993).
- The Null Space Method for GPS Integer Ambiguity Resolution. (GPS-ION 97, Salt Lake City, EEUU, 1997)

- EGNOS, European Satellite Navigation System. (Congreso Panamericano de Ingeniería de Tráfico y Tránsito (Santander, 1998)
- EGNOS, The implementation. How to pave the way (GNSS-99, Genova)
- GALILEO, Architecture and Management (Jornadas sobre la Defensa y el Espacio, Madrid 2001)
- Potential Applications for Collaborative Decision Making: Enhancement of Airport Security. (3rd ATM R&D Symposium, Madrid, 2002)
- Risk Model for Airport Operations (Congreso de Ingeniería del Transporte, Ciudad Real, 2006)
- Analysis of Conflicts in High Density Airspaces (Congreso de Ingeniería del Transporte, Ciudad Real, 2006)
- GIANT: Introduction of GNSS into Aviation Sector (Congreso de Ingeniería del Transporte, Ciudad Real, 2006)
- GIANT: Introduction of GNSS into Aviation Sector (Eurocontrol´s Skyway Magazine, Nr 40, Spring 2006)
- Occurrence Reporting System Guidance for Reporters (AESA, November 2014)
- Analysis of Severe Storm ATS Incident in Madrid Airport (Incident Report 058/16 of the ATS Incident Board of Spain)
- Analysis of Loss of Separation Serious Incidents Based on Bayesian Network Approach (Journal of Safety Research, 2017)