

PAKISTAN CAA - ICAO BULLETIN

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Message from DG CAA



Air Marshal (R)
Asim Suleiman
DG CAA

The global advancement and progress in the field of aviation safety has put the regulators in a challenging situation. Indeed such challenges demand enhanced awareness and well thought-out comprehensive procedures to regulate the stakeholders. This makes it imperative for CAA personnel to remain well conversant with current ICAO regulations and global requirements. The creation of ICAO Cell and circulation of a quarterly Bulletin through this Cell is a step towards gearing up ourselves for upcoming safety challenges, latest trends, and initiatives being taken in the field of aviation. I expect all members of CAA to make best use of the information and contribute meaningfully to further make the activity more productive. I am confident that the information herein would give an impetus to our efforts in establishing Pakistan Civil Aviation Authority as one of the leading Aviation Regulators in the world.

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From Editor's Desk

Dear Colleagues,

It is my pleasure to share the first 'Pakistan CAA-ICAO Bulletin' with you. The objective of this quarterly Bulletin is to provide you with a concise account on different aspects of the International Civil Aviation Organization (ICAO) on aviation activities in general and regulatory in particular. In line with our priorities, the first issue looks at the evolution of USOAP to a Continuous Monitoring Approach (CMA) and its Critical elements. The challenges faced by most of the States in the eight audit areas of USOAP is another aspect covered in the Bulletin, which could be of immense help in our effort to achieve a satisfactory level of CMA compliance. To keep our readers well informed, an ICAO analysis on increasing demand of aviation and setting standards for CO₂ emissions, on the subject of 'Climate Change' have also been included. PCAA ICAO Cell would encourage the readers to provide any valuable information pertinent to the subject to make the Bulletin more informative on subjects related to aviation in general and ICAO in particular. We hope that the online version will further become a handy source of information keeping all readers updated on news & developments in aviation with reference to ICAO and other Aviation forums.

Pakistan CAA observes International Civil Aviation Day

Pakistan CAA observed the International Civil Aviation Day on 7th December, 2016. DG CAA urged CAA personnel to put in all their energies for improving their performance and commitment to the CAA in order to enhance its brand image.



Why has USOAP evolved to a continuous monitoring approach (CMA)?

The evolution of the USOAP to a Continuous Monitoring Approach (CMA) provides an ideal solution to collecting more regular information regarding the level of safety oversight provided by ICAO Member States. Under this new approach, cyclical audits will be supplemented with an ongoing process of gathering safety information. This will allow stakeholders in international civil aviation to base their decisions on the latest information available. The CMA aims to provide a continuous report of a State's effective implementation.

The objective of the USOAP is to promote global aviation safety through continuous monitoring of the Member States' safety oversight capabilities. The CMA enables ICAO to collect vast amounts of safety information, which is provided primarily by States.

Critical Elements of ICAO USOAP CMA

Critical Elements (CEs) are essentially the defence tools of a State's safety oversight system required for the effective implementation of safety-related standards, policy and associated procedures. Each Member State should address all CEs in its effort to establish and implement an effective safety oversight system that reflects the shared responsibility of the State and the aviation community. CEs of a safety oversight system cover the whole spectrum of civil aviation activities, as applicable. The CEs of a State's safety oversight system, as outlined in Annex 19 'Safety Management', Appendix 1, are as follows:

- CE-1 Primary aviation legislation
- CE-2 Specific operating regulations
- CE-3 State system and functions
- CE-4 Qualified technical personnel
- CE-5 Technical guidance, tools and provision of safety-critical information
- CE-6 Licensing, certification, authorization and/or approval obligations

- CE-7 Surveillance obligations
- CE-8 Resolution of safety issues

Issues Identified in Eight Audit Areas of USOAP CMA

The following eight audit areas have been recognized in the USOAP. Challenges being faced by most of the States associated with these audit areas as identified by the USOAP activities are also shown.

LEG - Primary Aviation Legislation & Civil Aviation Regulations

- Developing and maintaining a comprehensive and up-to-date set of regulations.
- Identifying differences with SARPs, notifying them to ICAO and publishing significant differences in the Aeronautical Information Publication (AIP).
- Establishing and implementing policies and procedures for issuing exemptions.
- Establishing and implementing enforcement policies and procedures.

ORG - Civil Aviation Organization

- Recruiting and retaining sufficient qualified technical staff for the State authorities.
- Providing sufficient training to the technical staff of the CAA.

PEL - Personnel Licensing and Training

- Approving training programmes related to the first issuance of licences and ratings.
- Ensuring supervision and control of flight and practical test delivery by the designated flight and practical examiners.
- Implementing a surveillance programme of Approved Training Organizations (ATOs).
- Performing surveillance activities in relation to Air Traffic Controller Licences (ATCLs).
- Supervising and controlling Designated Medical Examiners (DMEs).

OPS - Aircraft Operations

- Establishing procedures for the issuance of approvals and authorizations contained in the operations specifications.
- Implementing operations evaluations for the conduct of CAT II and III instrument approaches.
- Ensuring that air operators have implemented an SMS acceptable to the State.
- Reviewing dangerous goods procedures of air operators.
- Establishing and implementing a surveillance programme.

AIR - Airworthiness of Aircraft

- Regulating the Approved Maintenance Organization (AMO)'s SMS.
- Implementing a formal surveillance programme to verify that all AMOs and AOC holders comply on a continuing basis with airworthiness related national regulations and international standards.

- Developing and implementing procedures for the verification of operations derived-equipment which are not part of the type certification of aircraft.
- Conducting ongoing surveillance of air operators' reliability programmes and initiating special evaluations or imposing special operational restrictions when information obtained from reliability monitoring indicates a degraded level of safety.
- Implementing airworthiness evaluation procedures for the conduct of CAT II and III instrument approaches.

AGA - Aerodromes and Ground Aids

- Implementing aerodrome certification requirements.
- Ensuring that aerodrome operators receiving international flights have implemented an SMS acceptable to the State.
- Establishing and implementing integrated strategies, including Runway Safety Teams, for runway incursions and collisions avoidance at aerodromes.
- Establishing and implementing a quality system to ensure the accuracy, consistency, protection and integrity of aerodrome-related safety data published in the State's AIP.
Ref: USOAP CMA: Report of Activity Results

ANS - Air Navigation Services

- Ensuring that the ATS provider has implemented an SMS acceptable to the State.
- Performing safety assessments with respect to significant changes affecting the provision of ATS.
- Performing surveillance of the State's procedures specialists or service providers (PANS-OPS).
- Performing surveillance of the provision of cartographic services.

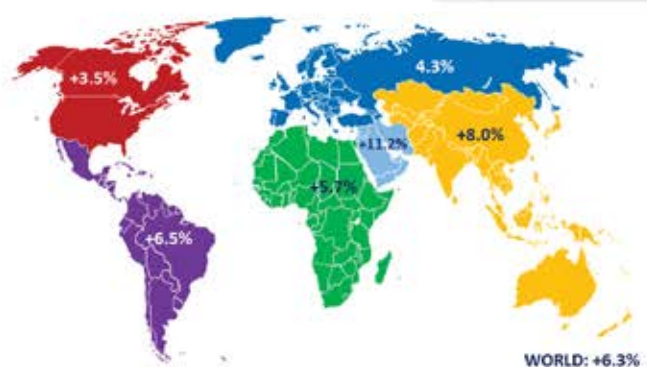
AIG-Aircraft Accident & Incident Investigation

- Ensuring the effective investigation of aircraft serious incidents as per Annex 13.
- Providing sufficient training to aircraft accident investigators.
- Ensuring proper coordination and separation between the "Annex 13" investigation and the judicial investigation.
- Establishing and implementing a State's mandatory and voluntary incident reporting systems.
- Establishing an aircraft accident and incident database and performing safety data analyses at State level.

Traffic growth in 2016

Preliminary figures released in January 2017 by the International Civil Aviation Organization (ICAO) indicated that the total number of passengers carried on scheduled services reached 3.7 billion in 2016, a 6.0 per cent increase over last year. The number of departures rose to approximately 35 million globally, and world passenger traffic, expressed in terms of total scheduled Revenue Passenger-Kilometres (RPKs), posted an increase of 6.3 per cent, with approximately 7,015 billion RPKs performed.

Over half of the world's tourists who travel across international borders each year were transported by air. International scheduled passenger traffic expressed in terms of RPKs grew by 6.3 per cent in 2016, down from the 7.0 per cent recorded in 2015. All regions, except for Africa and the Middle East, posted slower growth than last year. Europe accounted for the largest share of international RPKs with 36 per cent, and increased by 4.3 per cent.



Asia/Pacific had the second largest share with 29 per cent, and grew by 8.0 per cent. The Middle East region carried 15 per cent RPKs share and recorded a growth of 11.2 per cent compared to 2015. North America, with a 13 per cent share, experienced the lowest pace of growth among all regions at 3.5 per cent. Carriers in Latin America and the Caribbean managed 4 per cent of world international RPKs and recorded a growth of 6.5 per cent. Africa with a 3 per cent share saw an improvement from 2.3 per cent growth registered in 2015 to 5.7 per cent in 2016.

In context to our Region, the increase in passengers, cargo and flights due to on-going mega project of 'China Pakistan Economic Corridor' (CPEC), would significantly surge the number of domestic and international flights in 2017 and onwards.

No Country Left Behind Initiative

The 'No Country Left Behind' (NCLB) campaign highlights ICAO's efforts to assist States in implementing ICAO Standards and Recommended Practices (SARPs).

The NCLB effort also promotes ICAO's efforts to resolve Significant Safety Concerns (SSCs) brought to light through ICAO's safety monitoring mechanism. The main goal of this work is to help ensure that SARP implementation is better harmonized globally so that all States have access to the significant socio-economic benefits of safe and reliable air transport oversight audits as well as other safety, security and emissions-related objectives.

In line with the NCLB initiative, the Global Aviation Training (GAT) Office has initiated an action plan to implement a group of recommendations developed by the Council, using an analytical approach to determine the main activities to support Member States in aviation training and human resources development.

Regional Performance Dashboards provide a glance of various programmes, objectives and targets currently being pursued under ICAO's 'No Country Left Behind' campaign.
Ref: <http://www.icao.int/safety/Pages/Regional-Targets.aspx>

How does ICAO develop Standards and Procedures for International Civil Aviation?

The development of international civil aviation Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS) follows a structured, transparent and multi-staged process – often known as the ICAO ‘amendment process’ or ‘standards-making process’.

This involves a number of technical and non-technical review bodies, which are either within or closely associated with ICAO (working groups, task forces, committees, panels, etc.), and which are generally composed of State and industry Subject Matter Experts (SMEs).

New items are added to the ICAO Work Programme after formal reviews by ICAO’s Secretariat, Air Navigation Commission (ANC: the main technical advisory body to the ICAO Council) and the 36-State ICAO Governing Council. Specific matters to be assessed are derived from multiple sources, including accident investigation report recommendations, ICAO Assemblies, regional bodies, individual States, and industry.

Once an expert group has submitted its recommendations on a specific work programme item, these are reviewed by the ANC and then transmitted to States and industry for review. The ANC considers all relevant feedback and fine-tunes its final recommendation for the ICAO Council’s ultimate consideration and possible adoption. Final ANC recommendations would also include full impact assessments and implementation plans.

ICAO Council Adopts New CO₂ Emissions Standard for Aircraft

The 36-State ICAO Council has adopted a new aircraft CO₂ emissions standard which will reduce the impact of aviation greenhouse gas emissions on the global climate.

Contained in a new Volume III to Annex-16 of the Chicago Convention (Environmental Protection), the aircraft CO₂ emissions measure represents the world’s first global design certification standard governing CO₂ emissions for any industry sector.

Alongside the ICAO 39th Assembly’s landmark agreement last October on the new Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), this latest CO₂ standard for aircraft will ensure a sustainable and environmentally responsible future for global civil aviation.

The Standard will apply to new aircraft type designs from 2020, and to aircraft type designs already in-production as of 2023. Those in-production aircraft which by 2028 do not meet the standard will no longer be able to be produced unless their designs are sufficiently modified.

The ICAO Program for Aviation Volunteers (IPAV)

Volunteerism is universal and has been used as a powerful tool to make significant contributions to economic and social development. As with other volunteer programmes, volunteerism in the aviation sector seeks to accomplish the goal of bringing benefits to both the client States and the volunteers.

This program provides a framework for the deployment of aviation professionals, working as volunteers, to respond to emergencies affecting the aviation system in a State, to develop capabilities in the implementation of ICAO SARPs, and to foster self-reliance and growth. The client States will benefit from the wealth of experience of the volunteer at a minimal cost or at no cost. The volunteer on the other hand will have the opportunity to maintain and possibly update

his/her skills and make valuable contributions to the development of civil aviation.

In the immediate terms, the ICAO Program for Aviation Volunteers, will be part of a larger ICAO strategy for assisting States in addressing shortcomings identified during audits. However, the Aviation Volunteers could also be provided in non-audit areas in response to requests from States, subject to availability of experts with the required skills.

Skilled and experienced volunteers will be engaged through ICAO to provide short term assistance to States in the performance of specified tasks related to their field of expertise, for a specific period of time.

Ref: <http://www.icao.int/about-icao/partnerships>

News & Snippets

- Appreciation from ICAO on Pakistan CAA Working Papers:

“We must congratulate Pakistan for these papers and the effort undertaken to optimize your system and capacity. I have made these both WPs part of the agenda as they are very significant and we should recognize the progress made, and ensure that your neighbours do the same.”
- The number of members in ICAO Council, carrying out the directions assigned by the Assembly, is being increased from 36 to 40.
- The number of members of Air Navigation Commission (ANC) which recommends SARPs & PANS, is being increased from 19 to 21.
- Beside USOAP an MOU with ICAO on Universal Security Audit Programme (USAP) is also being finalised by CAA Pakistan.

Training from COSCAP-SA Platform

- In Jan 2017, Capt Marie Zubryckij, Chief Technical Advisor of COSCAP-South Asia conducted an SMS Workshop for PCAA & industry
- Following courses for PCAA and Industry will be held in May 2017, under COSCAP SA:
 - SMS Executive Course
 - Auditing Techniques Course



Participants of SMS Workshop held in Karachi

Editorial Team

- Nawaz Ahmed Sipra - Additional Director ICAO Cell
- Tabassum Qureshi - Additional Director SSP
- Nayyar H Faruqui - Consultant ICAO Cell