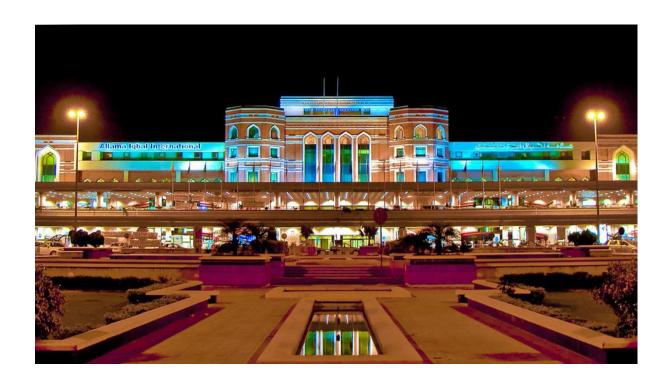


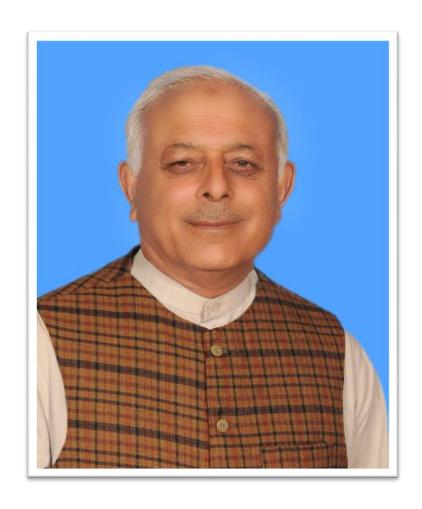
# **Year Book 2020-2021**



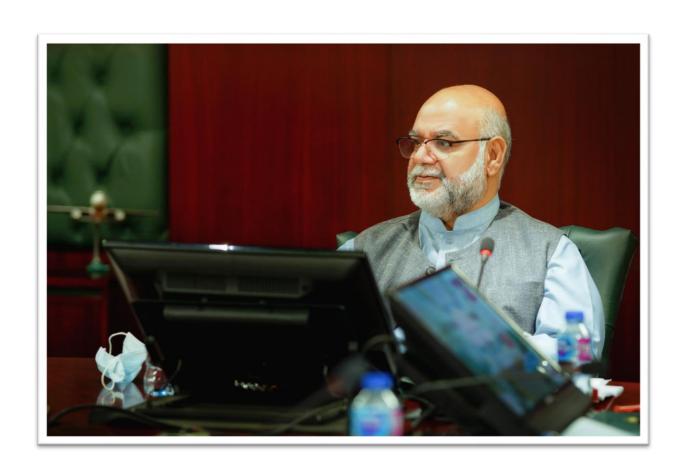
# GOVERNMENT OF PAKISTAN CABINET SECRETARIAT AVIATION DIVISION ISLAMABAD



**Imran Khan**Prime Minister of Pakistan



**Ghulam Sarwar Khan**Federal Minister for Aviation



**Shoukat Ali**Federal Secretary, Aviation Division

#### **Foreword**

The Year-Book of the Aviation Division has been prepared in pursuance of Rule 25(2) of the Rules of Business, 1973. This book contains vision and detail of functions, organization, activities and achievements of the Aviation Division and its attached departments/organizations for the financial year 2020-21. It contains information which may be of interest to the academia, researchers and relevant stakeholders.

The Aviation Division was established in June 2013 as a part of the Cabinet Secretariat. It had earlier been a wing under the Ministry of Defence. In a short span of time, Division has focused on safety, security and quality standards of aviation industry. Besides bilateral and multilateral liberalization; lowering taxes; stimulating economy through tourism, trade, etc.; public private partnership and infrastructural development are the areas under emphasis.

I hope that this book will prove beneficial for all concerned.

#### **Shoukat Ali**

Secretary
Aviation Division
Cabinet Secretariat
Government of Pakistan

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#### Introduction

The Aviation Division spearheads strategy, policy and oversight of all matters related to aviation sector. It has the primary focus on matters concerning aviation business by virtue of its structural and human-resource oriented acumen. A developed civil air transport system is vital to economic development. Important economic centers like trade, tourism and agriculture rely on functioning of air transport system. This Division's activities hence are geared directly towards aviation and indirectly corroborating existing national economic growth plans. Aviation sector must thrive to some reasonable degree on its own terms. An entrepreneurial spirit and 'can-do' attitude among many other business values is encouraged.

#### Vision

Safe, secure & efficient air transport and highest standards of weather forecasting.

#### Mission

To maintain the highest standards of safety, security and service by promoting air connectivity in the aviation industry. To ensure precision and accuracy in meteorological services

#### **Functions**

Aviation Division has been allocated following functions: -

- Aircraft and air navigation; administration of the Civil Aviation Ordinance 1960 (XXXII 1960).
- ii. Development of civil aviation in Pakistan.
- iii. Provision of aerodromes.
- iv. Regulation, organization and safety of air traffic and of aerodromes and administration of Airports Security Force.
- v. Pakistan International Airlines Corporation Limited (PIACL).
- vi. Air Service Agreements with other countries; liaison with International Civil Aviation Organization and other international agencies concerned with aviation business.
- vii. Federal Meteorological Organizations and Meteorological observatories; World Meteorological Organizations.

#### **Departments/Organizations**

The following departments/organizations are working within the purview of Aviation Division:

- 1. Civil Aviation Authority (CAA)
- 2. Pakistan International Airlines Corporation Limited (PIACL)
- 3. Airports Security Force (ASF)
- 4. Pakistan Meteorological Department (PMD)

#### **Budget 2020-21**

Sr.	Grant (Demand No.)	Budget	Supplementary	Final
No.		Allocation	Grant	Allocation
i)	15 -Aviation Division (Main))	103.762	10.000	113.762
ii)	16 -Misc. Expenditure of Aviation Division	13.090	10,115.000	10,128.090
iii)	17 -ASF	7,693.000	700.000	8,393.000
iv)	18 -PMD	1,347.611	56.648	1,404.259
v)	149-Development	1097.779	-	1097.779

#### **Public Sector Development Program (PSDP) 2020-21**

There are total 15 projects of PSDP which are under process. Total estimated cost of these projects during the FY-2020-21 is Rs. **31747.679 Million** and total allocation is **Rs. 1320.879**. Detail of these projects can be perused at **Annex-I.** 

#### **Achievements of Attached Departments/Organizations**

#### **Pakistan Civil Aviation Authority**

#### **Achievements**

- Review of National Aviation Policy 2019
- Removal of hindrances, requirement of NOCs, formulation of policy and SOPs for construction of high-rise building through amendment in Civil Aviation Rules, 1994 (Rule 68) to regulate height restriction around airfields
- Up-gradation of Airfield lighting system at Gwadar Airport for night operation
- Installation of Category II airfield lighting system at Quetta International Airport for night operation
- Operationalization of multistory new car park at Allama Iqbal International Airport.
- Expansion of International Departure Briefing Area to minimize congestion issues at AIIAP Lahore.
- Clean & Green Movement: Plantation of non-bird attractant trees at Airports and development of tree orchards on unutilized land pieces.
- Development of Miyawaki plantation orchard at Islamabad International Airport (5500 Plants of different species planted)

#### **Future Initiatives**

- Development of Aviation Tower at Blue Area, Islamabad
- Pilot project for provision of Solar Energy facility at Jinnah International Airport, Karachi through Public-Private-Partnership.
- Pilot project for establishment of E-Gates at Jinnah International Airport, Karachi
- Revision of National Aviation Policy-2019 and promotion of Aviation sector as Aviation Industry.

- Establishment of New Walton General Aviation, Education and Training City in Muridke.
- Utilization of CAA land assets for commercial projects in Public-Public-Partnership like at Walton Lahore.
- Modernization of air traffic management system to meet international requirement of ICAO for reduction in enroute separation.

#### **Pakistan International Airlines Corporation Ltd.**

#### **Achievements**

- Restructuring and digitization of HR processes through induction of e-PIA employee's portal
- Corporate Utilization of PIA foreign properties.
- Restoring back long grounded fleet (Two B777s, One A320 & One ATR) using own resources
- Revamping of Safety Management System with consultation of Boeing and accepted by EASA, Transport Canada & ICAO
- Successfully completed detailed security & safety assessment by TSA, Transport Canada & UK DFT.
- Conducted first ever TSA cleared direct flights to USA Mainland

FINANCIAL RECOVERY			
	2018 (Base)	2019	2020
Revenue (in Millions)	103,490	147,500	94,989*
Operational Losses (in Millions)	32,081	6,130	680
Total Losses (in Millions) (Including burden of legacy debt)	67,418	53,361	35,354
Seat Factor	77.3%	81.3%	74.5%
Yield	6.70	8.85	12.15

#### **Future Initiatives**

- Developed a comprehensive Business Plan 2019-2023 with following two aspects;
  - Operational Turnaround Plan towards Profitability
  - Balance Sheet Restructuring for addressing legacy debt

#### **Airports Security Force**

#### **Achievements**

- Formulation & implementation of ASF Firing Regime to improve existing training mechanism of weapon firing and staff weapon handling skills
- Establishment of Joint Search Counters at International Airports
- Provision of X-ray machines display linkage to ANF & Customs at Joint Counters for quick screening of passengers
- Establishment of Joint CCTV Control Rooms at International Airports to counter money laundering issues.

#### **Future Initiatives**

- Review of policy governing issuance of Airport Entry Passes to include digitization of Airport Entry Passes through use of modern technology.
- Establishment of ASF Training Academy in Islamabad.

#### **Pakistan Meteorological Department**

#### **Achievements**

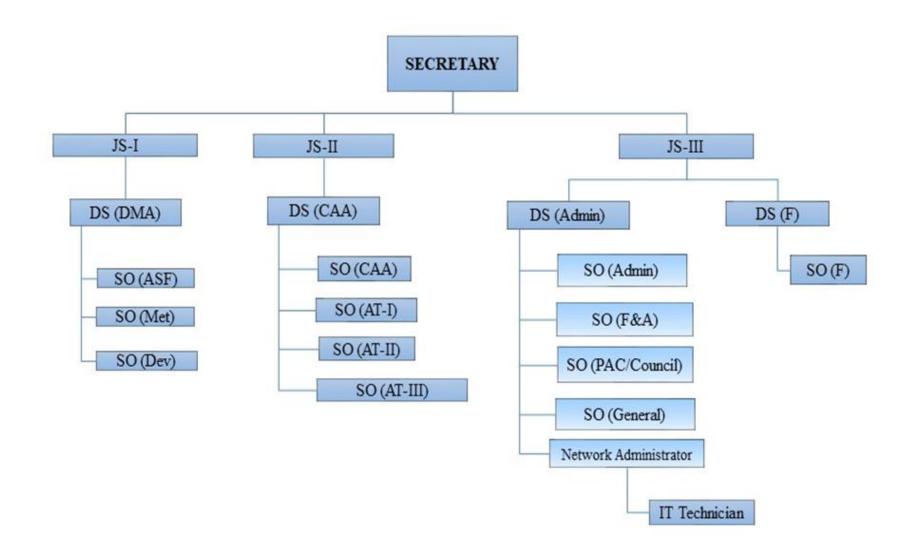
- Establishment of Specialized Medium Range Forecasting Centre (SMRFC) at Islamabad
- Installation of S Band Weather Surveillance Radar at Karachi for an aerial weather coverage of 450km radius
- "Establishment of Flood Forecasting and Warning System for Kalpani Nullah Basin, Mardan, Khyber Pakhtunkhwa"
- Installation of S Band Weather Surveillance Radar at Sukkur to improve weather and flood forecast
- Installation of S Band Weather Surveillance Radar at Multan
- Installation of S Band Weather Surveillance Radar at Sukkur
- To improve the weather information dissemination system, three Video Studios were installed at Islamabad, Karachi & Lahore under Chinese Technical Grant in Assistance program.
- Launch of Mobile Weather Apps, YouTube Weather Channel and PMD Twitter with more than 16,000 followers

#### **Future Initiatives**

- Up-gradation and Modernization of the Flood Forecasting & Warning System for Lai Nullah Basin in Islamabad-Rawalpindi would be made and its Concept Clearance Proposal has been approved in CDWP meeting.
- Strengthening of Flood Early Warning System of Pakistan Meteorological Department (PMD, WAPDA & FFC) under Turkish grant in Assistance Program.

- Installation of 65 Hybrid Weather Stations in Khyber Pakhtunkhwa, Balochistan, AJK and GB & AWS manufacturing at PMD Karachi under JICS Economic & Social Development program.
- Upgradation of Seismic Monitoring Network of Pakistan (Phase- II) funded by CEA China.

#### **Existing Organogram of Aviation Division**





### **Pakistan Civil Aviation Authority (CAA)**

#### **Introduction:**

Pakistan Civil Aviation Authority (CAA) was established on 7<sup>th</sup> December 1982 through Pakistan Civil Aviation Authority Ordinance 1982. The purpose of establishing CAA is to promote and regulate Civil Aviation activities and to develop an infrastructure for safe, efficient, adequate, economical and properly coordinated Civil Air Transport Services in Pakistan. CAA is controlled by the Government of Pakistan through Aviation Division.

**Vision:** "Be a world-class service provider in the Aviation Industry."

**Mission:** "Provide safe, secure and efficient best-in-class aviation services to the

stakeholders."

Core Values: Commitment, Professional Excellence, Customer Focus, Safety and Security, and

Integrity.

#### Achievements 2020-2021

#### **Directorates**

#### **Human Resource Directorate**

#### Career Planning & Reward and Recognition

#### **Officer(s) Promotion:**

Considering the merit, suitability and availability of vacancy, following 291 nos. of officers were promoted during the year 2020:

Executive Group	Promotions
EG-01 to EG-02	165
EG-02 to EG-03	64
EG-03 to EG-04	8
EG-04 to EG-05	45
EG-05 to EG-06	9
EG-06 to EG-07	21
EG-07 to EG-08	30
Total	342

#### **Staff Promotion:**

Staff Group	Promotions
SG-10 to SG-11	4
SG-09 to SG-10	22
SG-08 to SG-09	329
SG-07 to SG-08	33
SG-06 to SG-07	199
SG-05 to SG-06	582
Total	1169

#### **Re-Mustering:**

By following the criteria of qualification, experience, vacant positions and analyzing service records, the 11 number of re-mustered interested staff are as follows:

Staff Group	No. of Staff
SG-06	03
SG-04	08
SG-02	02
Total	13

#### Award of DGCAA Commendation Certificate/ Letter of Appreciation

On account of performing duties efficiently with dedication, 09 officers were awarded DG, CAA Commendation Certificate, and 09 officers/officials were awarded letter of Appreciation by the Competent Authority viz., DG, CAA during the year 2020-2021

#### **Award of Honesty and Integrity Certificate**

On account of performing duties diligently, honestly with responsibility to maintain the repute of the organization, 12 officials were awarded certificate of Honesty and Integrity during the year 2020-2021.

CSR activities for the year of 2020-21 are summarized as under:

No of employees sent for Hajj	Nil
No of cases processed under Federal Government Family Assistance Package	43 cases
No of cases finalized for Pension	309 cases
No of cases processed for Scholarship	195
No of employees given Welfare Loan	60
No of employees given Monetary Grant	44

#### • Up-gradation of CAA graveyard

- o The boundary wall of CAA graveyard has been raised.
- o New signologies have been fixed in the CAA graveyard.
- o Some plants and flowerpots have been placed in CAA graveyard.
- o Trimming of trees and removal of wild bushes have been completed.
- o Some other additional civil work is underway for the improvement of CAA graveyard.
- Revenue generated through permitting marriages and ceremonies on CAA land: An amount of RS. 2,53,000/- have been collected during the financial year of July, 2020 to June 2021 and deposited in the CAA Welfare Fund, HBL Branch Airport on account of using CAA land for the conduct of marriages and ceremonies by the residents of the CAA Colony.
- Revenue generated through permitting cricket matches on CAA land: An amount of RS. 15,000/- have been collected during the financial year of July, 2020 to June, 2021 and deposited in the CAA Welfare Fund, HBL Branch Airport on account of playing cricket matches on CAA land.

- Construction of new boundary wall at CAA graveyard: A new boundary wall has been constructed around CAA graveyard for securing additional land of CAA and protecting graves from the overflow of rainwater through the adjacent Nullah.
- Cleanliness of rainwater Nullahs in CAA colony through outsource contractor.

Details of training/courses conducted between 1st July 2020 to 30th June 2021 are follows:

Sr. #	Training Courses	No. of Trainees
a)	Foreign Training (virtual)	53
b)	In-Land Training	657
c)	CATI	408
	Total	1118

Moreover, internship opportunities provided to 252 students from various recognized Universities / Institutes in multiple disciplines between 1st July 2020 to 30th June, 2021.

275 Inductions were made at HQs and various locations by Pakistan Civil Aviation Authority between January 2020 and July 2021.

#### **Air Transport & Economic Regulations Directorate**

- Upon the directive of the Prime Minister of Pakistan to "Critically and comprehensively review National Aviation Policy (NAP) in order to support Aviation and Airline Industry in Pakistan", the national aviation policy draft was finalized, after extensive consultation with all relevant stakeholders incorporating suggestions from stakeholders and obtaining their agreement on the draft.
- The draft of NAP-2019 was presented to Prime Minister on 14th March, 2019 and was finally approved by the Federal Cabinet on 26th March, 2019.
- Following incentives have been provided in National Aviation Policy 2019:
  - Reduced Cost of doing Business: Rationalization of Paid-up Capital, Security Deposit and PCAA Charges
  - Ease of doing Business: Rationalization of Aircraft Age, Paid-up Capital Regulations and License/ AOC Regulations
  - Improved/Modern Facilities: Provision of state-of-the-art infrastructure for Airports, Air Navigation Service and cargo villages
  - o **Future Growth**: To develop MROs, Aircraft Manufacturing & Simulators, and Flight Kitchen Set-up by providing conducive/business friendly conditions
  - o **Outcome of NAP 2019**: Contribution to economic growth would be ensured through new airlines, job creation, competitive market, better facilities, and Foreign Direct Investment
  - o **TPRI License**: Tourism Promotion & Regional Integration (TPRI) License has been introduced for the 1st time through NAP-2019 and the Application Form & its prerequisite/Conditions of License have also been approved.
- British Airways commenced operations to Islamabad airport.
- Azerbaijan Airline has shown interest in operating flights to Pakistan which are likely to materialize in the near future.
- Jazeera Airways of Kuwait is likely to commence operating flights to Karachi and approvals in this regard have been granted.

- PIA showed its interest in resuming operations to US for which coordination is being made with FAA and TSA.
- Enhanced traffic rights have been obtained from Japan Civil Aviation on China-Japan route for PIA. PIA recommenced Japan operations through China.
- Pakistan CAA has endeavored to encourage foreign carriers to conclude mutually beneficial code share agreements with PIA.
- PCAA efforts materialized in the form of conclusion of mutually beneficial code-share agreements between PIA and foreign carriers
- Any new as well as additional traffic rights to foreign designated airlines are being awarded after due consultation with PIA in order to support our national carrier.
- To promote domestic aviation, aeronautical charges for domestic operators have been waived off w.e.f. May 15, 2019, however, passenger base charges were waived off by June 01, 2019.
- Air Navigation Order regarding Airlines' Flight Regularity & Punctuality issued.
- First TPRI license has been awarded to Aircraft Sales and Service Limited in line with the vision of Government of Pakistan to promote tourism and socio-economic connectivity.
- Publication of PCAA Statistical Digest from 2010 to 2016 is completed and process of distribution has also been completed. Now Statistical Digest is available for purchase for industrial users.
- New Air Navigation Order number ANO-001-ATNR-3.0 "Licensing / Certification of Flying Training and Commercial & Private Air Operations" has been approved and implemented.
- Civil Aviation Authority Order number CAAO-002-ATNR-2.0 "Air Transport License by Federal Government and DG CAA" has been approved and implemented.
- New TPRI License format along with its pre-requisites, Conditions and Application Form have been approved and implemented.
- New NAP-2019 document has been designed and published.
- Regular Public Transport (RPT) License of M/s Air Sial was renewed.
- Federal Government approval has been received for renewal of RPT License of M/s Afeef Zara Airways.
- British Airways increased operation from Islamabad and commenced operations to Lahore airport.
- Virgin Atlantic has started operating flights to Lahore and Islamabad.
- Pegasus Airline has started operating flights to Pakistan
- Fly Baghdad Airline has started operating flights to Pakistan
- Air Sial started its domestic operation from December 25, 2020.
- Ariana Afghan Airline has been allowed to operate from Kabul to Islamabad.
- Air Arabia Abu Dhabi has been issued permission to operate to Multan and Faisalabad.

- Many interested potential licensee of TPRI have been given guidance and facilitation to apply and sail through the process. North Air and Alvir Airways have been given licenses.
- Serene Air has been permitted to commence operation on international routes. Designation of Saudi Arabia, China, and United Arab Emirates. Designation of Afghanistan and Qatar is in the process.
- The Aeronautical Authorities of UAE and Saudi Arabia have accepted the designation of Serene Air.
- Security Deposit of Askari Air has been forfeited due to non-compliance of NAP-2019.
- Following Regular Public Transport (RPT) licenses have been processed for Federal Government approval:

I. Q Airways (Security clearance)
II. Fly Jinnah Services (License granted)

• Following Applications have been forwarded to Aviation Division for acquiring security clearance:

I. Flying School Potohar Aviation
II. Aerial Work Sky Wings

 Number of consumer complaints handled against various Airlines during the period January to December 2020.

 PIA
 : 12

 Airblue
 : 16

 Serene Air
 : 09

 Foreign Airlines
 : 39

 TOTAL
 : 76

#### **CNS Engineering Directorate**

Sr. #	Name of Work	Remarks
		Telecom & Electronics Branch
		Procurement of Equipment
1	Up-gradation of AMHS equipment	Up-gradation of existing AMHS System at JIAP Karachi and CATI Hyderabad. (TOTAL: Rs.92.80 million)
2	Procurement of Computer and Printers p/o AMHS	Procurement of Qty2 Laptop, Qty11 Desktop Computer and Qty20 Printer. (TOTAL: Rs.2.304 million)
3	Procurement of CCTV System at CAA airports	Procurement of CCTV Cameras for the coverage of Vehicle Gate, IIAP Islamabad (TOTAL: Rs.1.842 million)
4	Procurement of LED TV for CAA Airports / Locations	Procured of LED TVs (TOTAL: Rs.1.321 million)
5	Procurement of High- Power HF RT System	Procurement of VOLMET Transmitter for JIAP Karachi (TOTAL: Rs.34.503 million)

6	Procurement of UPSs / AVRs	Procurement of Qty.,-47 UPS 3 KVA and Qty11 AVR 5 KVA (TOTAL: Rs.4.700 million)	
7	Procurement of PA System	Procurement of PA System for Conference Room at ACC JIAP Karachi and BNBAP Sukkur (TOTAL: Rs.4.700 million)	
8	Procurement of Test Equipment	Procurement of Qty01 Board Spectrum Radio Frequency Cable & Antenna Analyzer / Tester for HF VHF and UHF (TOTAL: Rs.1.200 million)	
9	Provision / Replacement of Office Equipment.	Procurement of office equipment (Photocopier machines, Paper Shredder, Voice Recorder, Binocular, Fax Machines (TOTAL: Rs.4.000 million)	
		Procurement of Spares	
10	Procurement of Spares	Procurement of Spares part of VHF (AM) Transceiver make Jotron (TOTAL: Rs.27.1300 million)	
11		Procurement of Critical Spares part of CNS Equipment installed at IIAP Islamabad (TOTAL: Rs.3.263 million)	
12		Procurement of spares part of FIDS JIAP, Karachi (TOTAL: Rs.1.920 million)	
		Service Level Agreement (SLA)	
13	SLA	SLA BHS In-Line Scanner & Security Check Equipment installed at IIAP Islamabad (TOTAL: Rs.168.56 million)	
14	Maintenance Contract	One Year Service / Maintenance contract with Parts for Qty87 UPSs (2KVA, 3KVA, 6KVA, 7KVA, 20KVA) (TOTAL: Rs.1.341 million)	
15	Maintenance Contract	Two Years Maintenance / Service Contract (with parts) for Qty108 UPSs (2KVA, 3KVA, 5KVA, 6KVA, 10KVA, 30KVA) (TOTAL: Rs.4.557 million)	
		Radar Branch	
05 ADS-B	Procurement Of Qty- 05 ADS-B Complete systems	Installation of QTY-5 ADS-B system at Dalbandin, Laram Top, Zhob, Karachi & Lahore to strengthen the surveillance capability over Pakistan airspace.	
	along with Its Installation, Testing & Commissioning At Karachi, Lahore, Dalbandin, Laram Top and Zhob On Turnkey "FOR" Basis.	The data of ADS-B would provide redundancy to the existing surveillance Radar system and would also serve as gap filler in the identified grey areas. (Rs. 165.2 Million)	
2	Procurement of Qty 21 VHF Transceivers along with Qty 12 Antennas & Accessories for replacement of obsolete VHF Transceivers.	Qty. 21 VHF AM Transceivers were procured and installed at nation-wide EVHF remote stations to enhance the reliability and availability of Air-to-Ground communication. (Rs. 38.421 Million)	

3	Establishment/ Operationalization of new Area Control Centre at Islamabad Airport.	CNS directorate completed successfully the technical provisions and infrastructure as per the requirements of Ops directorate for the establishment of new ACC at Islamabad including but not limited to ATM systems, Air-to-Ground and Ground-to-Ground communication with neighboring FIRs i.e., China, Tajikistan and Afghanistan.
4	Reconfiguration /Remodeling of Lahore ACC and Karachi ACCs.	The airspace of Pakistan was restructured according to Air Navigation Plan (2019-24). In this regard CNS Dte. made technical provisions in coordination with Ops Dte. as appended below:
		Re-structuring of Karachi FIR
		Change of FIR bifurcation / division line between Karachi & Lahore FIRs.
		Shifting of Karachi ACC Sector North to Lahore ACC.
		Creation of new Sector Centre at ACC Karachi.
5	Procurement of critical spares for comounted primary & Secondary surveillance Radars (PSRs/MSSRs)	The CAA board approved procurement of critical spares to meet requirement of two years for the Co-mounted Primary & Secondary Surveillance Radars (PSRs/MSSRs) installed at Karachi and Lahore Airport directly from OEM i.e. Indra Sistemas – Spain on FOB basis.
	installed at JIAP Karachi and AIIAP Lahore	Contract signed between PCAA and Indra Sistemas for procurement of critical spares for Indra PSR & MSSR installed at JIAP Karachi and AIIAP Lahore. (US\$ 1.034Million)
6	Establishment of Contingency Operation Set-up in case of non- availability of ACCs	A Contingency setup of Radar ACCs was established at Karachi, Lahore and Islamabad each to enable ATC to provide safe and seamless air traffic control services in case of any emergent situation.
		Networks Branch
1	Procurement of telecom office equipment for PCAA airports/locations	Procurement of Qty:28 plain paper laser fax machines with built-in copier, scanner and printer for PCAA airports/locations (Date: Aug 2020) (Cost: Rs.881,224)
2	Procurement of Optical Telephone Multiplexer for AIIAP Lahore	Procurement of Qty-01 Optical Telephone Multiplexer (supporting 64 channels) for AIIAP Lahore (Date: Nov 2020) (Cost: Rs.250,000)
3	Procurement of Optical Multiplexer for JAIP Karachi to replace existing UMUX system Keymile 1500	Procurement of Qty:08 Telephone over Fiber Extender (64 Channels) & Qty:02 Audio over Fiber Extender (32 Channels) for JAIP Karachi (Under installation) (Date: Feb 2021) (Cost: Rs.2,300,000)

		Nav-Aids Branch
1	Procurement of Qty 06 ILS/TDME  Provision, Installation, Commissioning, and Testing of Instrument Landing System (ILS) and Terminal Distance Measuring Equipment (TDME) at PCAA Airports/Location on FOB Turnkey Basis	Against Contract signed in between PCAA and M/S Selex E.S USA (OEM) first batch of equipment comprising of three (03) ILS/TDME systems and accessories have been installed at EED Karachi, CATI-Hyderabad and AIIAP Lahore R/W end 36L. Second batch of equipment has arrived and under clearance at Karachi port for installation at JIAP Karachi-25R, Multan and Faisalabad Airport.
2	Procurement of Qty 11 DVOR/DME Provision, Installation, commissioning and Testing of Doppler VHF Omni Range (DVOR) and Distance Measuring Equipment (DME) at PCAA Airports/Location on FOB Turnkey Basis	Against Contract signed in between PCAA and M/S Selex E.S USA (OEM) f Against Contract signed in between PCAA and M/S Selex E.S USA (OEM) first batch of equipment comprising of four (04) DVOR/DME systems and accessories has been installed at Panjgur, CATI-Hyderabad, EED Karachi and AIIAP Lahore.  Second batch of DVOR/DME equipment has arrived and under clearance at Karachi port for installation at Multan, Faisalabad, Zhob and Nawabshah Airports.

#### **Engineering Services Directorate**

#### **Civil Works**

Sr. #	Location	Name & Scheme Description	Completion Cost (M)
1	IIAP	Construction of additional tiolets block (Prefabricated) at level-III concourse hall PTB IIAP Islamabad	21.153
2	AIIAP	Relocation of DVOR / DME to New Localizer inside perimeter fencing AIIAP, lahore	16.031
3	AIIAP	Provision of Shed, UVIS, Barrier, Double ASF Gates at Cargo Complex, AIIAP Lahore. (Balance Work)	3.492
4	MUL	Provision of Emergency Access Road From Runway 18 END at Multan Int'l. Airport.	6.828
5	IIAP	Supply of MS Mobile Working Platform at IIAP	0.970
6	IIAP	Provisioning of standby arrangements of water supply for Radio Radar Building at IIAP Islamabad	1.097
7	RYK	Provision of parking shed in CAA mess at SZIAP, Rahim Yar khan	0.688
8	ВАН	Construction of E&M In-House workshop along with toilet at Bahawalpur airport 1.063	
9	AIIAP	Provision of RCC Shed at Main Entrance of ACC Building AIIAP Lahore	2.103
10	DGK	Construction of PTCL & NTCL exchange room at FAKL Airport D.G.Khan	
11	MUL	Provision of Fiber Glass Parking Sheds at CAA Officers / staff Mess and near fire station at MIAP, Multan	2.107
12	SUK	Improvement of sewerage system (Provision of RCC septic tank) at BNBAP Sukkur	1.720
13	SUK	Rehabilitation of sewerage system of staff colony, officers and staff mess at BNBAP Sukkur	2.286
14	MUL	Extension of CAA Masjid at MIAP (Geo- Technical Investigations) 0.099	
15	DGK	Provision of Star Barriers and Strengthening of ICAO Standard Fence at Dera Ghazi Khan Airport 0.790	
16	JIAP	Provision of Double Gate System with Fence at Labour Gate JIAP Karachi 1.267	

17	JIAP	Raising of Boundary Wall from K. Electric Grid Station to Runway 25L along Model Colony Road at JIAP, Karachi	6.554
18	JIAP	Raising of Boundary Wall around Tank No. 3 towards bungalow No. B-1 and Provision of Hard Standing in Tank No. 3 Parking Area at JIAP, Karachi	2.174
19	JIAP	Provision of Road Blockers at different Locations of JIAP, Karachi	0.897
20	JIAP	Raising of Boundary Wall with Barbed Wire Fencing at TX. Station Cape Monze Karachi	1.544
21	JIAP	Raising of Boundary Wall with Barbed Wire Fencing at TX Station Cape Monze Karachi	1.544
22	TBT	Instalation of double gate system at vehicle entry points to Apron at Turbat Airport	2.372
23	DBD	Provision of shed for parking QRF vehicles at Dalbandin Airport	0.639
24	MNJ	Construction of QRF Shed at Moen Jo Daro Airport	0.754
25	SUK	Construction of QRF Shed at BNB Airport, Sukkur	0.761
26	SUK	Provision of Double Gate System (Old Apron Side) and Bathrooms for ASF Check Posts at BNB Airport, Sukkur	1.964
27	CATI	Construction of Boundary wall Around Nursery at CATI Hyderbad 2.343	
28	ZHB	Provision of shed for parking QRF vehicles at Zhob Airport 0.963	
29	IIAP	Provision of Potable Accommodation for Special Protection Unit near RA#07 at IIAP Islamabad	
30	AIIAP	Provision of Alternate AFL Circuit for Secondary Runway at AIIAP, Lahore 13.646	
31	MUL	Construction of security wall along entry cargo road (Graveyard side) and increase in height of existing airport perimeter boundary wall to increase security perimeter at MIAP Multan	
32	ВАН	Construction of 3 Nos Guard Rooms near Entry gates at Bahawalpur Airport.	
33	MUL	Provision of Razor / Concertina wire on CAA Colony Wall (Jamailabad) at MIAP.  1.634	
34	JIAP	Provision of Sheds for ASF Vehicles / Post Different location in Airport at JIAP Karachi.	
35	UTA	Construction of boundary wall around CAA land allied works at Kalat, QIAP Quetta.  7.628	

		TOTAL	160.876
48	JIAP	Construction of Scanning Room at Entry Points of U.904 'E' Gate at JIAP Karachi	
47	JIAP	Raising of Boundary Wall of Maintenance Shed No.07 & 08 Near E-Gate at JIAP Karachi	
46	SKD	Construction of Sheds 02 Nos at Skardu Airport 0.319	
45	SKD	Provision of M.S gate at CAA Skardu Airport 0.197	
44	SKD	Construction of Bomb Disposal Ditch on land side 0.082 at Skardu Airport	
43	SKD	Re-installation of CCTV Camera and construction of small room at CAA Skardu Airport 0.120	
42	SKD	Installation of Dragon teeth / dividers on main gate at Skardu Airport 0.522	
41	GLT	Provision of Deployment Sheds for ASF at Gilgit Airport	0.384
40	GLT	Provision of Allied Facilities at existing 02 Watch Towers at Gilgit Airport	0.358
39	IIAP	Provision / Construction of ICAO Standard Fencing including gates, Stars Barriers, Ladies Search Room, /hard Standing, Roadside Retaining Wall with allied works for strengthening of security infrastructure at Thalian Gate IIAP Islamabad.  32.369	
38	IIAP	Provision of M.S Containerized Room with Washroom at Cargo Complex at IIAP, Islamabad  1.102	
37	ZHB	Construction of accommodation / living to army guard airport security deployed at DVOR DME Zhob	
36	ZHB	Construction of security post at EVHF station at Zhob Airport 1.072	

#### **Electrical & Mechanical Works**

Sr.	Location	Name & Scheme Description	Completion Cost (M)
1	IIAP	P/I of Air Distribution Network with Allied Works in Offices / Rooms at PTB Level - I & II and Split AC Units in Newly Established Landside Offices at IIAP Islamabad	2.319
2	AIIAP	Provision and Installation of New MRL Elevator in Place of Old Elevator in Concourse Hall at AIIAP, Lahore	19.50
3	JIAP	Replacement of Existing Conventional 4x800W Lights Fixtures with New 4x400W LED Lights at Apron Area of JTC JIAP	2.498
4	JIAP	Providing / Installation of Inverter Technology	7.0

		Split AC Units at CAA Officer Mess Karachi	
5	AIIAP	Providing / Installation of DC Inverter Type Air Conditioner and Electric Water Coolers at various	6.834
6	JIAP	locations of AIIAP Lahore Provisioning and Installation of Surface Road Blockers at Entrance Gate of Utility Building and	9.910
7	AIIAP	China Gate Jinnah Avenue Road JIAP Provision and Installation of Security Equipment at AIIAP, Lahore	4.499
8	SUK	Provisioning & Installation of Surface Road Blockers & Allied Works at the Entrance of BNB Airport Sukkur.	2.090
9	IIAP	Provision of Utility (Electrical Power Supply) to M/s PIACL at Allotted Site of IIAP Islamabad	11.127
10	FSB	Installation of 400 KVA Step Down Transformer in Residential Colony at Faisalabad Airport	1.786
11	BKIAP	Improvement / Rehabilitation of Old / Faded Existing Single / Double Faced Guidance / Mandatory Signboards at Airside at BKIAP Peshawar	1.972
12	ВАН	Revamping / Up-Gradation of CAA Mess at Bahawalpur Airport	0.530
13	GWD	Providing & Installation of New Air-Conditioning Units for Departure Lounge of Gawadar Airport	2.176
14	PNJ	Improvement of Illumination in Landside of Panjgur Airport 2.195	
15	BKIAP	Installation of Passenger Elevators in already constructed hoist ways for newly constructed office block & ramp area at CAA BKIAP Peshawar.	20.701
16	NWB	Rehabilitation of Airfield Lighting System at Nawabshah 2.278	
17	GWD	Provision of Simple Approach Runway Lighting System at Gawadar International Airport  25.023	
18	PNJ	Providing & Installation of 20 KVA Standby Industrial Diesel Generator at DVOR Station Panjgur Airport  2.195	
19	SUK	Provisioning / Installation of Solar Powered LED Flood Lights Systems for ASF Watch Towers at Sukkur (Qty-07), Moenjodaro (Qty-06) and Nawabshah (Qty-06) Airports.  4.950	
20	DIK	Installation of Solar Powered Search Lights on Security Watch Tower at D.I. Khan Airport	1.483
21	DBD	Provisioning of Solar Powered Submersible Pump for Tubewell at Dalbandin Airport	2.178
22	GWD	Providing & Installation of Solar LED Flood Lights on ASF Watch Towers at Gawadar Airport	2.044
23	PNJ	Providing & Installation of Solar LED Flood Lights on ASF Watch Towers at Panjgur Airport	2.047
24	ТВТ	Providing & Installation of Solar LED Flood Lights on ASF Watch Towers at Turbat Airport  2.047	

25	PSN	Providing & Installation of Solar LED Flood Lights on ASF Watch Towers of Old Radar Building Pasni Airport  2.030	
26	DBD	Providing & Installation of Solar LED Flood Lights on ASF Watch Towers Dalbandin Airport	
27	ZHB	Providing & Installation of Solar LED Flood Lights on ASF Watch Towers at Zhob Airport  1.82	
28	JIAP  Provision and Installation of Locally Fabricated Electromechanically Operated Motorized Cabin for Shifting the Luggage Trolleys behind M.I. Room of JIAP		6.960
29	JIAP	Rehabilitation of Elevator No.02 Installed in Concourse Area of JIAP	2.459
		TOTAL	154.551

#### **Commercial & Estates Directorate**

- During the period under review, Covid-19 outbreak adversely affected the business potential of
  commercial concessions due to restriction on flight operations domestically as well as
  internationally, resulting into decreased passenger flow. Moreover, lackluster response was
  witnessed from business community at all CAA airports in disposing of concessions, despite
  multiple tendering attempts.
- However, special relief in monthly license fee was given to the concessionaires for three (03) months during which airport operations were ceased.
- It would be pertinent to highlight that a number of concessions were sustained at CAA Airports facilitating the passengers in essential areas notwithstanding the pandemic spanning over more than 1 ½ years due to supportive treatment / policies of Commercial & Estates Dte., including special relief drive.

#### **Information Technology Branch**

- Designing, Development, Testing, Implementation and Training of Airworthiness ERP interface is completed.
- Functional Requirements gathered and solution implemented after testing and training of EED ERP interface.
- Documentation, Development of SOP's & User guides has been completed with respect to SCM Durable and Repairable Items Solution in ERP.
- Started working to capture Ground Operations Billing Data in an automated manner.
- Work in progress for creation of FIRMS interface to integrate billing data with AODB at IIAP Islamabad.
- Designed and developed e-Embarkation System to capture data of Embarked Passengers for FIRMS, which is in testing phase.

- Designed and developed e-Cargo System to capture Cargo data being exported for FIRMS, which is in testing phase.
- Designed and developed SDCPS software to collect and process safety data.
- Designed and developed software for Engineering Services Dte., which is under testing phase.

#### **Finance Directorate**

Summarized income and expenditure position for the financial year 2020-21 (Provisional / Unaudited) and financial year 2019-20 (Actual) is presented below:

Description	Actual 2019- 20	Provisional 2020- 21
Income / Revenue	97,366	52,127
Expenditure	63,564	50,906
Surplus before Taxation	33,802	1,222
Taxation	7,332	3,696
Surplus / (loss) After Taxation	26,470	(2,474)

#### **Airworthiness Directorate**

Apart from routine targets, Airworthiness Directorate has made some astounding endeavors in year 2020- 2021 to take the aviation sector to new horizons of the international standards. Summary of which is as follow:

- Around 100 regulatory documents have been revised to improve compliance with Standards & Recommended Practices (SARPs) prescribed in International Civil Aviation Organization (ICAO) Annexes.
- Establishment of a separate Airworthiness Engineering Division to comply with ICAO requirements
- Airworthiness Directorate's audit has been carried out by ICAO COSCAP experts and showed satisfaction to around 88 percent in compliance with International Standards.
- Standard Operating Procedures (SOPs) have been amended time to time to make department procedures in such a way to enhance performances and achieve services in a timely manner.
- Oversight of Aircraft Inspections have been increased to ensure greater safety of aircraft and passengers.

#### **CAA ADP**

CAA Annual Development Programme (ADP) for the year 2020-21 envisaged an overall allocation of Rs.20,112 million, of which major provision of Rs. 5,817 million was allocated for Islamabad International Airport Project (IIAP), Rs.900 million was allocated for expansion of Allama Iqbal Int'l Airport Lahore (SH: Car Park & Access Road), Rs. 6,596 million for re-construction / upgradation of airport projects / runways / radar / nav-aids, security / technical equipment and Rs.6,799

million for other misc. development requirements of CAA. Total 81% of funds committed / utilized against ADP 2020-21 for Rs.20,112 million till 30<sup>th</sup> June, 2021.

#### **Development Projects**

#### **Gwadar International Airport Project**

- Construction activities started by Chinese Side in November, 2019 with revised completion date of Sept, 2023 due to Covid-19 pandemic. Construction activities by Chinese Side at NGIA site is at full swing and 14% physical progress achieved so far.
- Exemption of Balochistan Infrastructure Development Cess (BIDC) from Baluchistan Govt taken & 30 Chinese consignments cleared so far through Gwadar Port for smooth execution of the Project.
- 11KV Temporary power supply lines constructed and energized with 02, 630KVA Transformers in July, 2020.
- Water Pipeline to NGIA Project site completed and water is available at NGIA Site.
- Construction of Telecommunication Tower (BTS) along with equipment installation completed and services are available at NGIA Site.
- Main Dual access road and secondary dual carriage road constructed by GDA for NGIA Project.
- PC-1 Revision II including all the directions of CDWP submitted to Ministry of Planning Development and Special Initiatives through Aviation Division for approval of ECNEC.

## Re-Construction & Up-Gradation Of Main Runway (18l/36r) At Allama Iqbal International Airport, Lahore

For detailed planning, designing, documentation and supervision of construction works, services of a consultancy Firm M/s. Umar Munshi Associates - Yooshin Engineering Corporation - Mascon Association (Pvt.) Ltd (JV) have been hired by PCAA.

Project Particulars:

• Contractor: CCECC-MATRACON- HABIB JOINT VENTURE

Contract Cost: PKR 6450 Million
Project Start: 3<sup>rd</sup> September 2020

• Expected completion date: 15<sup>th</sup> December 2021

#### Scope of Work:

The project scope includes Reconstruction of Main Runway (18L/36R) including Overruns and extending the existing (7.5 m) shoulders to (15m) width, including:

- Construction of New Link Taxiway (Linking Secondary Runway with Sierra Taxiway)
- Curve improvement of the existing link taxiways including:
  - o Sierra
  - o Uniform
  - o Delta

- o Bravo
- o Tango
- o Quebee
- o Alpha
- Rapid Exit Taxi-1 (ZULU)
- Rapid Exit Taxi-2 (VICTOR)
- Ancillary Works
- Construction of Storm Water Drainage & Siphons
- Relocation of Utilities
- Removal/Fixation of Existing and New Airfield Lights (CAT-Ill) as per requirement.

43.55% physical progress achieved during the year 2020 - 21 (September 2020 - June 2021).

#### Reconstruction of Rigid Runway at Faisalabad International Airport (FIAP)

FIAP main runway site was handed over to the project on 17th February 2021, after issuance of NOC from PAF.

Progress of FIAP Main Runway Reconstruction Project for FY-2020-21 is as follows:

- Overall Progress = 6.61%
- Pavement Removal = 93.23%
- Excavation = 99.74%
- Sand Cushion = 22%

## Upgradation of Main Runway (31r/13l) At Quetta International Airport, Quetta for Operation of Aircraft Operations Up to ICAO Code 4E

Main runway at QIAP (13L/31R) was re-habilitated in 1988 which had completed its useful life and only small aircrafts such as B-737 and A-320 are being operated on the runway surface. For accommodating the Hajj operations from QIAP i.e., operation of aircrafts for ICAO Code 4-E such as B-777, the work of upgradation of main runway was undertaken by P&D, Directorate HQ, CAA which includes complete reconstruction of the Main Runway 13L/31R, construction of two new taxiways, extension of the existing rigid apron and installation of new energy efficient/ICAO compliant CAT-II lighting system.

To design and plan the upgradation, CAA hired the services of M/S Osmani & Company (Pvt.) Ltd in association of with RMJM-BRASIL, RMJM-OSMANI and Directorate of Design & Consultancy (DD&C). The consultant is providing detailed design, planning & supervision of the project. M/s Umer Jan & Company Engineers & Contractor was qualified and awarded the work being lowest and successful bidder.

Project commenced on 05th May 2020. Due to Parallel operations, Project is planned in Phase wise execution and divided in 03 Phases. Works are going on with full swing with Phase-I on the verge of completion subsequent to which works on Phase-II and III will be started. Current progress on Phase-I is 93%. The awarded Project completion Date is 4<sup>th</sup> May 2022.

#### Salient Features:

Complete re-construction of main runway 13L/31R including overrun and shoulders for wide body (Code-E) aircraft operations with following:

- Additional / New taxiway linking the main runway with Apron.
- Complete re-construction of existing link taxiway K.
- Extension of Apron to accommodate parking and maneuvering of code E aircraft.
- Complete replacement of airfield lighting system with state-of-the-art Category II system with centralized airfield lighting control & monitoring system at control tower.



## Pakistan International Airlines Corporation Limited (PIACL)

#### Introduction

PIACL was formed in 1955 under the PIAC Act of 1956. It has a long meritorious legacy of being among the best airlines in the world; setting new trends and world records in the commercial aviation arena. However, since 2004, it is in persistent losses which has caused serious cash flow and liquidity concerns for the airline, hampering its growth and profitability.

As per the vision of the Honorable Prime Minister of Pakistan Mr. Imran Khan, the present government is very keen to make state owned entities self-reliant and financially sound with minimal government intervention. PIAC is no exception and is moving fast towards administrative and financial autonomy.

PIACL is passing through dire financial state, mostly due to recurrent losses and loss financing on both organization's own assets and sale proceeds, or through sovereign guarantees. This has resulted in amassing of huge liabilities on PIA's balance sheets adversely affecting its liquidity, financial viability and product improvement initiatives. Efforts are underway by the present government to improve the financial health of the Corporation by reducing its losses through various means and modes, including but not limited to the formation of special committee headed by Special Assistant to the Prime Minister on Public Sector Reforms Dr. Ishrat Hussain to advise the future course of action for PIA and hiring international consultants to prepare a world class business plan for PIA's revival. The government has also put in place a professional management with mandate to bring in discipline in the organization, curtail revenue leakages and create new revenue streams for the airline as a prerequisite for any serious reforms to be undertaken in the airline. Despite the fact that the revival initiative was seriously hampered by the COVID-19 outbreak and resultant travel restrictions that has affected the global aviation industry, PIA's results for the year show marked signs of improvement and reduction in losses. The financial results for the year 2020/21 are as under:-

Particulars	(Rs. In Millions) *Jan-Dec 2020
Revenue	94,989
Fuel & Oil	(21,154)
Others	(71,375)
Gross Profit	2,461
Other Operating Expense	(14,377)
Other Income	11,235
Loss from Operations	(680)
Exchange Loss	(4,949)
Loss before Interest & tax	(5,629)
Interest	(29,725)
Loss before tax	(35,354)

<sup>\*</sup>PIA financial year is based on calendar year i.e. January to December

It is worth mentioning that despite facing difficulties, PIACL has been able to improve upon its performance with reduction in losses. Furthermore, PIA's Seat Factor and Yields have also improved in comparison to previous years showing that it has taken serious steps towards improving its utilization and revenue streams despite the fact that Covid-19 pandemic badly hampered the aviation industry.

#### Vision

To be a world class profitable Airline meeting customer expectation through excellent services.

#### **Mission**

Offering quality customer services and innovative products, using state of the art technology, ensuring cost effective measures in procurement & operations and developing safety culture.

#### **Achievements**

Following key steps are being taken by PIACL to improve its air service:

#### **Fleet Expansion**

PIA fleet comprises of 29 aircraft which includes B-777 300ER, B-777 200LR, B-777 240 LR, A320, ATR-72 and ATR-42.

PIA has started its fleet replenishment and is adding on new aircraft in its fleet. PIA plans are to add 06 more Airbus A320s by next year. The decision of induction of fuel-efficient narrow body aircraft overall fits perfectly in PIA's new direction to capitalize and consolidate itself on the productive domestic and regional routes, paving the way for expansion back on the medium and long-haul routes of Europe, UK and North America.

To improve upon the training standards of PIA pilots, to tremendously reduce the training costs and to serve the national aviation industry, PIA plans to acquire state of the art A-320 full reality simulator, the latest of its kind in the Asia Pacific & Middle East Region, with full digital controls and motion by wire features. This will help PIA and the industry itself to save millions of dollars as there are over 600 A320 pilots in Pakistan, who had to go abroad to get their conversion or recurrent mandatory trainings.

#### Engineering (2020)

- **i.** PIA E&M capability was enhanced to handle state of art modern fleet including Boeing 787 Dreamliner and Airbus A350/A330/A320NEO fleet.
- **ii.** PIA commissioned an ATR shed in North Wing of Pakistan i.e., Islamabad providing maintenance service level up to check 'A' level on Airbus A320 / Boeing B777 and up to maintenance check 'C' level on ATR fleet.
- **iii.** PIA has also successfully established Structure Repair services (SRS) and Cabin Maintenance setup at PIA Engineering facility, Islamabad. Moreover, PIA is also performing Engine washing services of entire fleet at the same facility as well.
- **iv.** MRO IT, an ERP solution for maintenance activities is being implemented in PIA Engineering.

- **v.** PIA (E&M) was able to generate revenue of around *PKR 750 Million* alone for year 2020 as a contribution towards national flag carrier's strive for recovery from the effects of COVID-19 pandemic.
- **vi.** PIA Engineering & Maintenance (E&M) regulatory approval base has considerably increased. In addition to approval from PCAA, we hold regulatory approvals from foreign civil aviation authorities like QCAA (Qatar), PACA (Oman), GACA (Saudi Arabia), BCAA (Bahrain) and CAASL (Sri Lanka)



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The years 2020's start (1<sup>st</sup> quarter) was very encouraging in terms of revenue and achieving the targets but Covid-19 pandemic severely impacted the aviation industry as a whole and PIA has no exception. Despite various Covid restrictions, PIA achieved a seat factor of 74.46% as compared to 81.31% in 2019.

Despite Covid-19, PIA's market share remained 24% on international routes whereas PIA achieved market share of 50% in domestic market.

PIA operated to 44 destinations including 26 international and 18 domestic in 2020.

Focusing on future performance, PIA is pursuing aggressively to induct fuel efficient narrow body aircraft i.e A320 in order to overcome fleet constraints. As a part of route rationalization process, loss making routes were closed and frequencies were increased on profit making routes. Upon acquisition of more aircraft PIA will certainly avail opportunities to expand its network.



The airline has also been involved in taking various steps in cost reduction and productivity improvement. This includes contracts re-negotiations.

To reduce cost and develop markets, PIA has entered into Special Prorate and Code Share Agreements with other airlines.

Co-Branding initiative like Frequent Flyer Programme, Credit card etc. with Banks, Market Leaders in Travel and sales, FMCG companies, Hotels, Marketing Companies, Media Chambers of Commerce and Industry.







## **Passenger Handling Services (PHS)**

- In order to ensure on-time departures and to avoid delays due security measures, information has been widely circulated through domestic dailies for awareness of passengers. Special public awareness campaigns were created using mainstream and social media especially consequent to the prevailing COVID-19 related SOPs / PCR testing and delays due to adverse weather conditions / fog etc.
- PIA sent over 15 million flight information SMS to its valued customers to save them from any
  hassle especially when flight is delayed due some reason. The SOP to send SMS for flight details
  / schedule confirmation and / or for any delay in disruption has resulted in tremendously
  reducing customer complaints and annoyance.

- A very effective baggage identification system WTR (World Tracer Management) has been introduced through which the misplaced baggage is delivered to the passengers in a very short time. The baggage complaints reduced remarkably with only 0.001% baggage loss complaints recorded in 2020.
- Technical Ground Support has been revamped to provide improved service to passengers. PIA has embarked upon the program for upgration of its old vehicles and ramp equipment by allocating funds and through open market for competitive bidding.
- PIA has also worked on an initiative to bring back the old and neglected, yet servicable equipment back to life and all such equipment is now up and running servicing the flights and contributing in smoother operations.



## **Flight Services**

- Manpower rationalization has been achieved. Cabin crew strength has been brought down from 1500 plus (2019) to 1025 (2021).
- Cabin crew duty roster has been automated and centralized under IT supervision at Islamabad for equal and fair distribution.
- Training facility (mock up) is being established at Lahore which will reduce travel to Karachi for training purpose.
- Maximum flight assignments are being done from base to base in order to reduce domestic travel and hotel accommodation.
- Flight operation (cabin crew) of Multan, Sialkot and Faisalabad is being supported by LHE and ISB bases.
- In order to achieve maximum utilization of cabin crew, flight duty time limitation (FDTL) has been increased from 10 + 2 (12) to 12 + 2 (14) hours.
- Due to the enhanced duty hours, hotel accommodation (slip) has been discontinued at Jeddah and Kuala Lumpur saving millions of rupees.

## **Information & Communication Technology**

- Instructions issued to make use of technological assistance like video calls, conference calls etc.
- Passengers Services System (HITIT) was operationalized and implemented which resulted in significant savings.
- Increase in global distribution and sales network by brining Sabre, Travel port and Amadeus on board without exclusivity.

## **Uplifting of PIA Image**

• Special emphasis is being given to uplift PIA image in media. Services of qualified professional will be obtained to revamp PIA's media strategy and plan.



PIA will embark upon an awareness program in media regarding any initiative taken or announcement concerning public interest etc. will be the main features.

PIA which went through severe image crisis after the events of 2020, has started steadily rebuilding its image through extensive use of social media and PR initiatives.

The negative stories pertaining to PIA compared with last year

got reduced by over 75% with media running mostly positive stories on the improvements and initiatives of PIA.

- PIA has also started to professional run its social media / digital handles working in completely synergy for creating of a positive perception of the airline by focusing on alternative narrative, highlighting PIA's role in national crisis. The efforts of PIA in the largest repatriation operations consequent to COVID -19 outbreak and the uplifting of more than 100 million vaccines from China to Pakistan to strengthen the efforts of NCOC and NDMA were also highlighted to the nation.
- PIA received global accolades for its role in the aftermath of change in regime in Afghanistan, receiving appreciation from the World Bank & IMF, International News Agencies and Foreign Governments.
- PIA also created a number of stories to create a softer image of PIA such as baby onboard which got UN recognition and was termed as the most beautiful human in aviation picture of the year.



#### **Rationalization of HR**

- Ghost employees and employees with fake degrees were terminated in accordance with decision and direction of the Supreme Court of Pakistan.
- A detailed study was carried out which revealed that HR ratio is higher the available aircraft in the fleet. In light of the recommendations, HR was rationalized at all stations. Further to that Voluntary Separation Scheme was launched and as a result 1816 employees benefitted from this scheme.

## **Evacuation Flights / Special Flights**

In all difficult times, it has always been PIA's priority to facilitate expatriates by bringing them back to their homeland from any part of the world. During this Covid-19 (1<sup>st</sup> March to 31<sup>st</sup> July, 2020), PIA operated approximately 1769 special flights to different destinations that include; Frankfurt, Amsterdam, Paris, Oslo, Copenhagen, Tashkent, Almaty, Baku, Bishkek, Sydney, Chicago, New Jersey, Kuala Lumpur, Singapore, Bangkok, Baghdad, Dhaka, Colombo, Toronto, London, Manchester, Birmingham, Hong Kong, South Korea, Kenya, Sudan etc. to facilitate about 320,928 stranded Pakistanis.



## **Other Initiatives**

- Participation in formulation of new National Aviation Policy 2019, thus restricting unabated authorization to foreign carriers for business in Pakistan.
- IOSA audit and Safety audit successfully achieved.
- Resumption of night operations from Peshawar.
- Increasing Maximum Take Off weight limitation on A-320 aircraft thereby increasing payload carrying capacity.
- Improvement in aircraft cleanliness.
- Negotiations with MROS for rationalization/reconciliation of payments.
- Successful completion of pending audits and holding of AGMs for years 2017 and 2018 in compliance with Companies Act and compliance requirements of SECP. Removal of PIA from SECP's defaulters list.
- Focus on ancillary revenues like sale bulkhead seats, advance seat sales etc.
- Removal of positioning flights and dead-legs from aircraft and network operations.



## **Improvement in Product**

• Customer friendly Web-Site

## **Revenue Enhancement**

- Rationalization Network
- Expansion Code Share
- Ancillary Revenues through sale of bulk head and aisle seats
- Charter operation

## **Cost Reduction**

- Contracts for Food, Motor Transport, Medical, Utilities and crew hotels have been revised leading to marked savings.
- Curtailment of expenses on international stations



## **Airports Security Force (ASF)**

## General

ASF was established in 1976 under the ASF Act LXXVII of 1975 initially as the tenth Directorate of the Department of Civil Aviation. After the hijacking of PIA airplane in March 1981, sensing the contradictory requirements of security and facilitation, ASF was separated and in December 1983, was placed under the folds of Ministry of Defence. In 1984, ASF was subjected to Pakistan Army Act. Now, ASF is functioning under Cabinet Secretariat Aviation Division, since June 2013.

ASF started its journey by managing security of 7 major airports with a limited manpower of 2870 (all ranks). Now, ASF is assigned security of 42 airports (9 major & 33 smaller airports) with a total strength of 13684 all ranks. The summary of airports spread over various parts of Pakistan is given below: -

a. Operational = 25
 b. Non-Operational = 17
 Total = 42

Since 9/11 incident and particularly terrorists attack at Old Terminal, Karachi Airport on 08 June 2014, Aviation Security has shot into prominence as airports and commercial aircrafts are considered iconic targets by terrorists. As Aviation Security is the state responsibility, and Government is investing heavily in this field to mitigate threats to Aviation Industry as it has serious political and economic implications.

## **Aviation Security Challenges**

Some of the major challenges to Aviation Security are: -

- a. Asymmetric Warfare.
- b. Variable Terrorist Threats.
- c. Increasing Criminal Activities.
- d. Structural Security Weaknesses.
- e. Technological Shortcomings.
- f. System Vulnerabilities.
- g. Shortage of Manpower
- h. Shortage of Latest Weapon / Equipment.

## Vision

Keeping abreast with latest trends in Global Aviation Security and adopting new technologies, developing a highly trained, well equipped and motivated Airports Security Force in order to meet international standards of Aviation Security and to counter growing terrorism and crime against Aviation Industry in Pakistan, reliability is key to Aviation Security and must be developed in following priority: -

- a. Human Reliability
- b. Technical Reliability
- c. Systems Reliability

## **Core Values**

Core values to be inculcated in ASF are: -

- a. Operational Readiness (Proactive Approach)
- b. Zero Tolerance (*High Standard of Discipline*)
- c. Integrity (*No Corruption*)
- d. Firmness and Courtesy (Good Public Image)
- e. Continuos Improvement (Quest for Excellence)

#### Mission

Safeguard Civil Aviation Industry against unlawful interference and ensure security and protection of life and material within the premises of airports.

## **Main Functions**

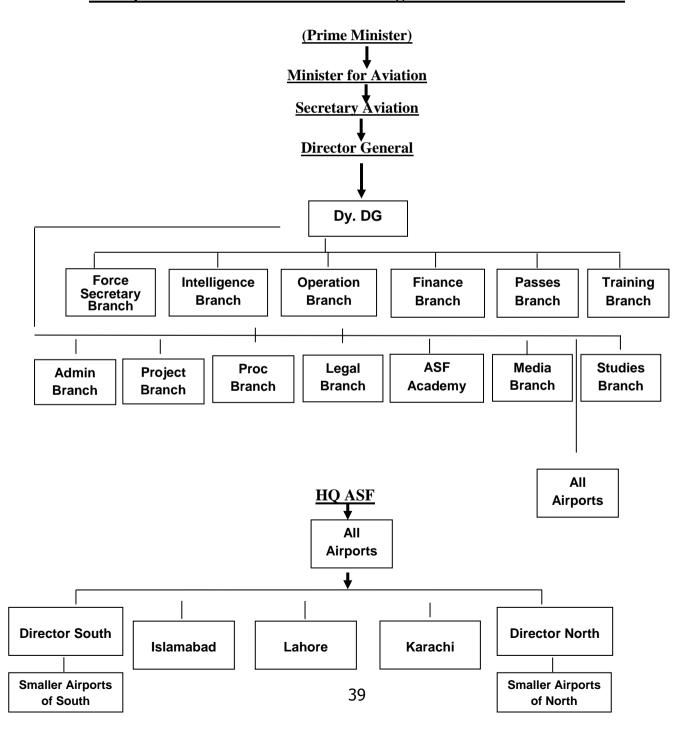
In accordance with the provisions of the ASF Act 1975, the Force is responsible for:-

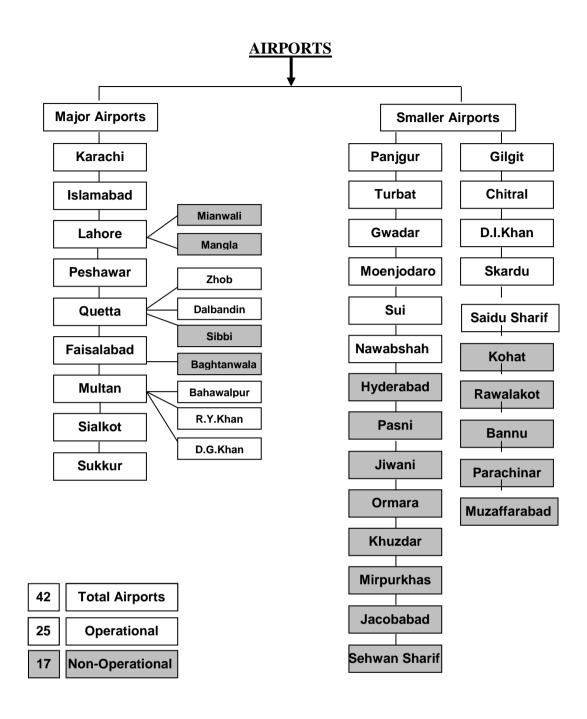
- a. Ensuring security of all airports, aerodromes and civil aviation installations within the limits of airports & aerodromes and for safeguarding Civil Aviation against acts of unlawful interference or threats of interference.
- b. Ensuring security of all structures, equipment, material and installations belonging to operators and other Government or non-Government organizations within the limits of airports and aerodromes.

- c. Ensuring security of aircrafts, passengers, baggage cargo and mail within the limits of airports and aerodromes.
- d. General maintenance of law & order within the limits of airports in conjunction with the Police and taking cognizance of all offences committed at the airports and aerodromes under any law for the time being in force.

## **Organization**

ASF is headed by Director General who articulates his command from ASF Headquarters located at Karachi. The organization of ASF is as under:-





## Manpower

## **State of Manpower**

Detail	Authorized	Held	Deficient
Uniformed staff	13782	12950	832
Ministerial staff	778	734	44
Total	14560	13684	876

## **Detail of Activities, Achievements and Progress – 2020-21.**

## **Detail of Promotion of officers / officials is as under:**

Rank	Year-2020	Year-2021	Total
Director	-	5	5
Addl Director	8	10	18
Deputy Director	21	23	44
Assistant Director	33	14	47
Inspector	45	85	130
Sub Inspector	140	212	352
Assistant Sub Inspector	183	188	371
Sergeant	253	213	466
Superintendent	-	3	3
Assistant	1	2	3
UDC	-	4	4
LDC	1	2	3
Total	685	761	1446

## **Detail of recruitment is as under:**

Rank	Year-2020	Year-2021	Total
Assistant Director	41	10	51
Inspector	12	2	14
Assistant Sub Inspector	369	111	480
Corporal	1945	444	2389
Corporal Driver	17	13	30
Steno Typist	3	3	6
Draftsman	1	1	2
UDC	2	5	7
Technical Assistant	-	1	1
Religious Teacher	-	1	1
Medical Attendant	1	1	2
MT Driver	1	2	3
Assistant	2	3	5
LDC	6	5	6
Lab Assistant	2	-	2
Cook	7	-	7
Medical Officer	-	2	2
Sweeper	4	-	4

rog ra m

<b>p</b> Cobbler	1	-	1
Compounder	1	-	1
Naib Qasid	-	6	6
Total	2415	605	3020

## of Activities and Targets – 2020-21

Imparting of Basic & specialized Aviation Security Training (Short Courses) for Manpower Quality Enhancement of Human Resources in Aviation Security has been scheduled/targeted during 2021 for strengthening and reinforcement of security at all airports to counter the prevalent threats to Aviation Industry.

	Basic Courses	<b>Schedule</b>
(1)	Basic Aviation Security Course	24-05-21 to 30-11-21
(2)	Officer Basic Aviation Security Course	23-06-21 to 07-11-21
	<b>Specialized Courses</b>	<b>Schedule</b>
(1)	Sniper Course	13-12-21 to 31-12-22
(2)	Company Commander Course	20-12-21 to 25-02-22
(3)	Platoon Commander Course	20-12-21 to 11-02-22
(4)	Advance Screener Course	20-12-21 to 04-02-22

## **Performance Statistics**

In spite of numerous constraints and limitations under which ASF is working, its performance is a matter of pride and satisfaction for everyone. Following states of recoveries made by ASF during the financial year 2020-21 reflect the state of alertness and vigilance of ASF at airports: -

## **Recovery of Arms/Ammunition**

ASF staff has recovered following arms/ ammunition during course of their duties at various airports: -

S. No	ITEMS	LICENSED / UNLICENSED	QTY
1	Gun / Rifle	Licensed	-
Gun / Riffe		Unlicensed	13
2	Revolver / Pistol	Licensed	21
2	Revolver / Pistol	Unlicensed	61
3 Ammunition (Rounds)		Licensed	1199
3	Ammunition (Rounds)	Unlicensed	1421
4	Magazine	Licensed	103
4	Wiagazine	Unlicensed	144

## **Recovery of Narcotics**

ASF staff during performance of their duties at various airports recovered **82.01** KGs Heroin, **2.169** KGs Hashish/Charas, **35.005** KGs Ice Heroin, **6.95** Liter Liquid Ice Heroin during the financial year 2020-21. The accused passengers alongwith recovered narcotics were handed over to Anti-Narcotics Force for legal action.

## **Recovery of Currency**

ASF staff during performance of their duties at various airports recovered **13969890** Pak Rupees, **87700** US \$, **200690** UAE Dirham, **470000** Saudi Riyal, **17500** British Pound, **10700** Euros, **62660** Chinese Yuan, **3000** Canadian Dollar, **10000** Qatri Riyal recover during the financial year 2020-21. The accused passengers alongwith recovered Currency were handed over to Pakistan Customs for legal action.

#### **Recovery of Gold**

ASF staff during performance of their duties at various airports recovered **26.76775** KGs Gold during the financial year 2020-21. The accused passengers along with recovered Gold were handed over to Pakistan Customs for legal action.

#### **Passenger Valuables**

A large number of valuable belongings of passengers like cash, credit cards, Jewelry etc. were found by ASF at various airports and were handed over to their owners who appreciated honesty of ASF staff.

## **Airguards Operations**

ASF has an Elite Force comprising specially trained and robust men & women for ensuring in-flight security besides augmenting the on-ground security measures to foil any attempt of hijackers / terrorists to ensure smooth functioning of aviation industry.

## **Role of Women in ASF**

Besides general security duties, the ASF female staff has been imparted training in the various fields i.e. Unarmed Combat, Martial Arts, Close Quarter Battle (CQB), Intelligence, Screeners, CCTV Operators and Administrative duties etc to provide them equal opportunity of employment in every

department of ASF like male staff. The services of female ASF personnel have also been utilized as:-

- a. Airguards, to provide in-flight security.
- b. Instructors, to train other female staff besides the mandatory security duties.
- c. Screeners, to operate the baggage screening machine.
- d. Intelligence duties, to provide pre-hand threat information.
- e. Computer operators.

## **Training**

## **Training at ASF Academy & Airports**

ASF Academy Karachi & airports cater for all types of training of ASF personnel. 3711 all ranks were imparted training during financial year 2020-21 as under:-

Course Detail	Year-2020-21
MCMC Course (Domain Specific Training)	14
Advance Screener Course	55
Basic Aviation Security Course	2113
Master Trainer Course (Training Cycle)	30
Master Trainer Course (New Firing Regime)	31
QRF Training Course	188
Promotion Cadre Courses	1069
Explosive Trace Detection Course	100
Security Equipment Training Course	111
Total	3711

## **Training Provided by ASF to Other Organizations / Departments**

Training for Advance Screener/Refresher Screener Courses were organized for the officers/staff of other departments at ASF Academy Karachi. Summary of the staff of other departments attended Advance / Refresher Screener courses is appended below:-

	<u>Departments</u>	<u>I</u> 1	<u>ntakes</u>
(1)	Shaheen Airport Services	-	18
(2)	Royal Airport Services	-	15
(3)	Emirates Airline	-	09
(4)	Gerry's Dnata	-	35
(5)	Pakistan Coast Guard	-	10

(6) UBL - 01 Total = 88

<u>Local Courses.</u> 150 x ASF staff attended different courses in various training institutions in Pakistan.

#### **Procurement**

<u>Uniform & Protective Clothing</u>. Budget for Uniform and Protective Clothing for Financial Year 2020-21 of <u>Rs.160,077,590</u>/- has been consumed for the procurement of uniform items.

**Transport.** ASF needs to maintain operational mobility at all times to cater for its security needs at airports. A large number of vehicles are old vintage and need replacement. In order to enhance the operational / administrative mobility, budget of **Rs.74,626,000**/- has been consumed during FY 2020-21 for the procurement of vehicles.

Plant and Mach. ASF endeavors to remain in step with the technological developments in the field of Aviation Security and has acquired some of latest security equipment, communication systems, CCTV System accessories and firefighting equipment etc. All major airports have been provided with technical coverage. However, still some of the equipment at all airports need replacement as it is becoming old, obsolete and outdated. Budget of Rs.40,820,000/- has been consumed during FY 2020-21 for the procurement of Plant and Mach to enhance the security standards.

<u>Arms / Ammunition.</u> Budget of <u>Rs.77,884,885/-</u> has been consumed during FY 2020-21 for the procurement of under mentioned quantity of ammunition:

S. No.	Type of Arms / Ammo	Qty Nos.
1.	Pistol 9mm POF X	92
2.	Ammo 9 x 19mm (Pistol)	65281
3.	Ammo 7.62 x 39mm (SMG)	586500
4.	Ammo 7.62 x 51 mm (Sniper)	11500
5.	Ammo 7.62 x 51 mm (MG1A3)	23500

## **Equipment**

**Procurement by HQ ASF During FY-2020-21**. Details of activities, achievements and progress:

S No	Items	Otv
5 110	Tuellis	Qty

1.	Smart LED TV 50"	20
2.	Smart LED TV 40"	30
2	Batteries for W/T set Motorola as per sample	300
3.	Chargers for W/T set Motorola as per sample	200
4.	Batteries for W/T set I Com	400
	Chargers for W/T set I Com	200
5.	Antenna for walkie Talkie Set Vertex	200
6.	Hand Scanner	40
7.	Batteries 12 V150Ah	25
8.	Battery 12V - 7AH	200
9.	Photocopier	5
10.	Torch Heavy Duty	100
11.	UPS 7.5 KVA (with 4 x Batteries set 150Ah)	10
12.	UPS 2 KVA 12/24 VDC	6
13.	Inter Com Sets	50
14.	Cat-6 Cable	6000
15.	PTZ controller	6
16.	PoE Switch 8 Ports	50
17.	PoE Switch 4 Ports	30
18.	Hub Switches	50
19.	Camera Housing As per Sample	100

## Finance

## **Budget Allocation**

Grant/Demand No	Original	Supplementary	<b>Economic Cut</b>	Final Budget
	Budget	Grant		Allocation
06 (FY 2019-20)	7332.000 M	0.014 M	-	7332.014 M
17 (FY 2020-21)	7693.000 M	700.000 M	-	8393.000 M

## **Project**

## **PSDP ASF Projects**

(Rs in Million)

S#	Name, Location & Status of	Approval/ Status Forum	Date of AA with	Capital	PSDP Rs	Physical	Remarks
	scheme (Approval status with	& Date	<b>Execution Period as</b>	Cost Rs.	Allocation	Progress of	
	forum/date)		Per Approved PC-I		2021-22	the Project	
1	Construction of Double Storey						
	ladies Hostel/Barrack with						
	provision of third Storey	DDWP	17-02-20	86.923	11.077	90%	Work is in
	alongwith Mess, Recreation Hall	21-01-20	(24 M)	80.923	11.077	90%	progress
	and Allied Facilities at AIIAP						
	Lahore (53x Ladies Staff)						
2	Construction of 2 x Double						
	Storey Barrack with provision of						
	third storey for Corporal to	DDWP	17.02.20				
	Inspectors and Assistant Director	21-01-20	(36 M)	17-02-20	37.581	80%	-do-
	along with separate Mess, and	21-01-20	(30 1/1)				
	allied facilities Recreation Hall at						
	Quetta Airport						

Rs in Million)

3	Construction of barrack accommodation for 64 x ASF personnel along with Mess and allied facilities, Ladies rest room, MT, Store, Kote Magazine, Quarter guard, and OC Accommodation / Room at Skardu Airport	DDWP 21-01-20	17-02-20 (24 M)	134.871	50.000	60%	-do-
4	Construction of barrack accommodation for 64 x ASF personnel alongwith Mess and allied facilities, MT, Store, Visitor's Room, Ladies Rest Room, Kote Magazine, Quarter guard, and OC Accommodation / Room at Chitral Airport	DDWP 03-06-20	08-06-20 (24 M)	61.534	39.534	60%	-do-
5	Construction of Double Storey Barracks for ASF at Faisalabad Airport	DDWP 21-01-20	17-02-20 (24 M)	93.285	21.285	80%	-do-
6	Construction of Double Storey Director South Secretariat Offices ASF alongwith allied Facilities adjacent to HQs ASF Karachi	DDWP 21-01-20	17-02-20 (12 M)	37.493	6.213	100%	Project has completed

## Rs in Million)

S#	Name, Location & Status of scheme (Approval status with forum/date)	Approval/ Status Forum & Date	Date of AA with Execution Period as Per Approved PC-I	Capital Cost Rs.	PSDP Rs Allocation 2021-22	Physical Progress of the Project	Remarks
7	Construction of triple Storey Living Accommodation for ASF Personnel at Lahore Airport (192 Persons)	DDWP 21-01-20	17-02-20 (24 M)	146.272	57.719	75%	Work is in progress
8	Construction of triple Storey living Barrack for 192 x ASF Personnel alongwith Mess, Recreation Hall at Multan Airport	DDWP 21-01-20	17-02-20 (24 M)	127.34	3.952	100%	Project has completed
9	Upgradation of ASF Academy, Karachi	DDWP 05-10-20	18-1-21 (36 M)	1737.527	350.000	20%	Work is in progress
10	Upgradation of ASF Academy, Karachi (PC-II)	DDWP 10-10-19	21-10-19 (12 M)	64.680	30.000	25%	-do-
	Total	-	-	2657.506	607.361	-	-

## Conclusion.

Considering the sensitivity of Aviation Industry in Pakistan and threats of terrorism, there is a need to enhance security measures at the airports. The Aviation Security in Pakistan due to its unique Geo political situation and multiple / diversified threats perception has its own significance. The security at airports has been intensified and the capability of Aviation Security Personnel enhanced to pre-empt and counter any terrorist attack. In order to maintain International Aviation Security Standards according to International Civil Aviation Organization (ICAO) recommendations, budget for procurement of Security Equipment, Arms, Ammunition and Transport needs to be increased substantially. Similarly, long outstanding accommodation problem of ASF needs to be addressed through increase in PSDP allocation by the Planning Commission of Pakistan.



# Pakistan Meteorological Department (PMD)

#### Introduction

Pakistan Meteorological Department (PMD) is an attached department of the Cabinet Secretariat (Aviation Division). It is a scientific and technical organization engaged in the collection of real time diversified meteorological, climatologically, hydrological, agro-meteorological and seismological data for undertaking multifarious activities mainly in the field of Meteorology, Hydrology and Seismology in the fulfillment of its objectives and obligations. In addition to having various specialized units and centres (like Flood Forecasting Division, Drought Monitoring Centre, Research & Development Division etc.), PMD has a network of about 100 observing stations and about 50 Automatic Weather Observing Stations which function under the technical and administrative control of PMD's various Directorates including Regional Directorates established at Lahore, Karachi, Peshawar, Quetta and Gilgit. Further, for the provision of Agrometeorological Services, PMD has a specialized National Agrometeorological Centre (NAMC) at Met Complex, Islamabad, which is supported by 05 Regional Agrometeorological Centres (RAMs), located at Rawalpindi, Faisalabad, Tandojam, Quetta and Usta Muhammad. Furthermore, National Drought Monitoring Center (NDMC), Islamabad is another specialized unit of PMD responsible for monitoring drought situation in the country and issues drought bulletins / advisories to the concerned stakeholders. The centre is supported by four Regional Drought Monitoring Centers (RDMs) based at Lahore, Karachi, Peshawar and Quetta.

#### **Mission Statement**

"Provision of authentic Climatological, Hydro-meteorological and Geophysical Services for improved protection of life, property and environment, increased safety on land, at sea, and in air, and sustainable economic growth"

#### Task

To ensure timely issue of different types of weather / flood forecasts, warnings and advisories, earthquake monitoring / tsunami reports to concerned government functionaries/organizations and print and electronic media:-

- (i) the safety of civil aviation operations, marine navigation and other related activities;
- (ii) mitigation of disasters due to meteorological, hydrological and geophysical phenomena such as tropical cyclones, heavy rains, floods and earthquakes etc;
- (iii) Socio-economic development of the country based on climatic and agro-climatic information to augment potential of different areas.
- (iv) Boosting up agricultural productivity of the country by providing agrometeorological services to the farming community.

To investigate the behavior of the atmosphere and exploiting this knowledge for short, medium and long-term weather predictions.

To undertake research and development activities in various disciplines like Numerical Weather Prediction, Climate Change, Climate Modeling, Flood Modeling (hydrological Model, Flood Routing Model), Drought Monitoring, Weather Modifications, Wind Power Potential survey of various regions of Pakistan, Seismology and Earthquake Hazard Assessment etc.

PMD has a total strength of 2430 personnel comprising 347 officers (BS-16 & above) and 2083 staff members.

#### **Main Functions**

The services being rendered by PMD to different Ministries / Organizations as follows:

- (a) Aviation Meteorological Services (Aviation Division)
- (b) Strategic Weather Services to Armed Forces (Defence Division)
- (c) Flood & Rivers Stream Flow Forecasting (Ministry of Water and Power, National and Provincial Disaster Management Authority (NDMA / PDMAs), Federal Flood Commission (FFC), WAPDA and irrigation department)
- (d) Agrometeorological/Weather Service for Farmers (Ministry of National Food Security and Research)
- (e) Environment, Ozone, Climate Change &, Global Warming Monitoring (Climate Change Division, Planning & Development Division/ Planning Commission),
- (f) Seismic Monitoring & Severe Weather Early Warnings (Disaster Relief Cell of Cabinet Division, NDMA / PDMAs)
- (g) Scientific Studies in Atmospheric Sciences (Ministry of Science & Technology)
- (h) Astronomical Information, Moon sighting (Ministry of Religious Affairs and Inter-faith Harmony / Ruet-e-Hilal Committee)
- (i) Harnessing Wind Power Potential of different regions of Pakistan (Ministry of Science &. Technology)
- (j) Drought/Environment Monitoring & Early Warning (Planning & Development Division, Planning Commission / Agriculture and other concerned departments)
- (k) Climate Change, impact assessment and adaptation strategies (Climate Change Division, Planning Commission)
- (l) Glacial melting-monitoring and research (Ministry of Water & Power, Climate Change Division)
- (m) Marine Meteorological Services for METAREA-IX (Arabian Sea, Persian Gulf rim-countries) i.e. tracking of tropical cyclones, storm surges, tsunami, state of the sea etc. (Port Authorities, Fisheries, Pakistan Navy, neighbouring countries)
- (n) Training on Meteorology and Earth Sciences (PAF, Pakistan Navy / Army and other friendly countries)

## **Detail of PMD Projects during Year 2020-2021**

S. No.	Name of the Project	Capital Cost of the Project (Rs. in million)	Allocation 2020-21 (Rs. in million)	Activities fixed for 2020-21
1	Installation of Weather Surveillance Radar at Karachi in the Islamic Republic of Pakistan	1580.000	55.000	Construction of boundary wall, Payed to Govt. Deptt. for service rendered, Miscellaneous items
2	Installation of Weather Surveillance Radar at Multan in the Islamic Republic of Pakistan	1848.650	55.000	Purchase of IT equipment, Hard/Soft Wares, Purchase of Furniture, Shifting of HTL Electric Line
3	Reverse Linkage Project Between Pakistan Meteorological Department and Marmara Research Centre (MRC), Turkey (IDB)	168.308	41.900	Purchase of Seismological equipment and furniture, Transportation of goods
4	Installation of Weather Surveillance Radar at Sukkur in the Islamic Republic of Pakistan	2522.000	12.000	Bank fee for opening of Authorization to Pay(A/P), Payment to M/S SESCO for Installation of transformer

## **Major Activities Performed during 2020-2021**

## **Monsoon Outlook and Flood Forecasting**

PMD issued Monsoon Outlook 2020 during the month of June before start of the monsoon season and shared with all concerned stakeholders like NDMA, FFC, GHQ, Ministry of Water and Power. Further, PMD also issues district levels forecast to the stakeholders. PMD's Flood Forecasting Division (FFD), Lahore issued Flood Forecast Bulletin (A&B) / Advisories/Alerts on daily basis from 15 June to 15 October to all concerned stakeholders during monsoon season 2020. Further, PMD also issues tehsil level forecast to the stakeholders.

#### Fog Forecast for Major Airports/Cities

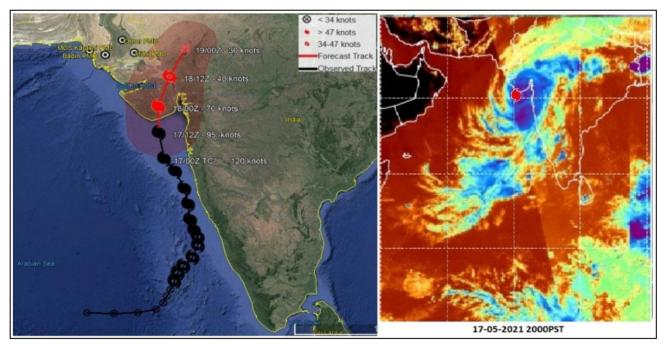
During every winter season, fog events hamper the routine activities of the various sectors. PMD extended services to the Aviation Division regarding fog forecast for Major Airports/cities, Motorway & Highway Police for the safety and awareness of travelling persons by road, and to the general public.

## **GLOF** event of Shishper glacier at Hunza

GLOF Early Warning System is working in three valleys in Chitral (Bindogal and Golain) and Bagrot in Gilgit. During May 2021, GLOF event of Shishper glacier at Karimabad, Hunza has amicably been handled with the assistance of GBDMA and others line agencies.

## Very Severe Cyclonic Storm "Tauktae" (12-18 May, 2021)

Tropical Cyclone "Tauktae" formed in the north Arabian Sea during the period from 12-18 May, 2021 has successfully been monitored by Tropical Cyclone Warning Centre, Karachi. The Centre vigilantly tracked the different cyclogenesis phases of the cyclone as well as its intensification into "Very Severe Cyclonic Storm "Tauktae". PMD predicted the cyclone in lead-time and issued subsequent advisories / alerts to disaster mitigation organizations.



<u>Project Completion Ceremony of the project "Specialized Medium Range Weather Forecasting Centre & Strengthening of Weather Forecasting System in Islamic Republic of Pakistan"</u>

A project completion and handing-over to PMD" ceremony has been organized at Met. Headquarters, Islamabad on 10<sup>th</sup> February, 2021. Honorable Minister for Aviation graced the occasion as the Chief Guest. Guests from stakeholders' organizations attended the ceremony.



<u>Weather Surveillance Radar (WSR) at Karachi:</u> New weather radar has been installed under the JICA Grant-in-Aid at Karachi and is operational since 24 April 2021. 45 Hybrid Weather Observation Systems (AWS with agro-meteorology facility) received through the Japan International Cooperation System (JICS) for its installation at various locations.

<u>Issuance of "Pakistan's Monthly Climate Summary" and "State of Pakistan's Climate 2020"</u> Pakistan Meteorological Department has started issuing Pakistan's Monthly Climate Summary since August, 2020 and "State of Pakistan's Climate 2019 and 2020" which are available at PMD weblink: http://www.pmd.gov.pk/cdpc/home.htm

#### Capacity Building through Foreign Trainings

One M.S. and one Ph.D. opportunity has been availed by PMD scientists in Japan through EAD. In various technical trainings, regarding radar operation, installation & calibration of AWS, operation of IFAS model etc. about 150 PMD personnel have been trained by foreign experts. Soon after the emergence of COVID-19, foreign trainings were halted globally. Later on, Online trainings, workshops and technical meetings started for the capacity building of those NMHSs which are lacking in technical capabilities. More than 90 PMD officials participated in various Online / virtual trainings organized by international organizations like WMO, RIMES, CMA, JICA, ICIMOD, Hong Kong Observatory, GEO, ICAO etc.

## PMD Budget for F.Y. 2020-21

a) Non-Development Budget Rs.1347.611 million

b). Development Budget Rs.163.000 million

(F.E.C. of Rs.123 million was surrendered due

to non-release.)

## **PSDP 2020-21**

DCDD	Name of the	Estimated (	Cost	Actual	Allocation 2020-21			
PSDP No	Project / Project details	<b>Total Cost</b>	Foreign Cost	Expenditure upto 30th June, 2021	Foreign Aid	Rupees	Total	
	2	3	4	5	6	7	8	
1	Construction of Double storey ladies Hostel/Barrack with provision of third storey along with Mess, Recreation Hall and Allied Facilities at AIIAP Lahore (53x Ladies Staff)	86.923	0	0.000	0.000	61.923	61.923	
2	Construction of 2x Double Storey Barrack with provision of third storey for Corporal to Inspectors and Assistant Director along with separate Mess, and allied facilities Recreation Hall at Quetta Airport	167.581	0	0.000	0.000	90.000	90.000	
3	Construction of Airport Security Force at IIAP	2,586.860	0	0.000	0.000	50.000	50.000	
4	Construction of barrack accommodation for 64x ASF personnel along with Mess and allied facilities, Ladies rest room, MT,	134.871	0	0.000	0.000	69.756	69.756	

	Store, Kote Magazine, Quarterguard, and OC Accommodation / Room at Skardu Airport						
5	Construction of barrack accommodation for 64x ASF personnel along with Mess and allied facilities, MT, Store, Visitor's Room, Ladies Rest Room, Kote Magazine, Quarterguard, and OC Accommodation / Room at Chitral Airport	61.534	0	0.000	0.000	20.000	20.000
6	Construction of Double Storey Barracks for ASF at Faisalabad Airport	93.285	0	0.000	0.000	65.000	65.000
7	Construction of Double Storey Director South Secretariat Offices ASF along with allied Facilities adjacent to HQs ASF Karachi	37.493	0	0.000	0.000	21.280	21.280
8	Construction of Rain Water Harvesting Kasana Dam	2,629.420	0	0.000	0.000	100.000	100.000
9	Construction of triple storey Living Accommodation for ASF Personnel at Lahore Airport (192 Persons)	146.272	0	0.000	0.000	63.553	63.553

15	Karachi (PC-II)  Total Rupee in Million	64.68 31747.679	3385.884	0.000	0.000 223.100	10.000 1097.779	10.000 1320.879
1.7	Upgradation of ASF Academy,	64.60	0	0.000	0.000	10.000	10.000
14	Developing Reverse Linkage Between Marmara Research Centre (MRC), Turkey and Pakistan Meteorological Department (IDB)	168.308	123.884	0.000	23.100	17.900	41.000
13	New Gwadar Int'l Airport	22,247.450	0	0.000	100.000	419.000	519.000
12	Installation of Weather Surveillance Radar at Multan in the Islamic Republic of Pakistan	1848.650	1720.000	0.000	50.000	5.000	55.000
11	Installation of Weather Surveillance Radar at Karachi in the Islamic Republic of Pakistan	1580.000	1542.000	0.000	50.000	5.000	55.000
10	Construction of triple storey living Barrack for 192x ASF Personnel alongwith Mess, Recreation Hall at Multan Airport	127.340	0	0.000	0.000	99.367	99.367

#### **List of Abbreviations/Acronyms**

#### <u>Abbreviation</u> <u>Expanded Form</u>

ADP Annual Development Programme

AGM Annual General Meeting

AIIAP Allama Iqbal International Airport

AJK Azad Jammu Kashmir
ANF Anti-Narcotics Force
AOC Air Operating Certificate
ASF Airports Security Force
ATC Air Traffic Controller
AWS Weather Observation Systems

BAH Bahawalpur

BCAA Bahrain Civil Aviation Affairs
BKIAP Bacha Khan International Airport

BNBAP Benazir Bhutto Airport
CAA Civil Aviation Authority

CAASL Civil Aviation Authority of Sri Lanka
CDWP Central Development Working Party

CEA China Eastern Air
CQB Close Quarter Battle

DBD Dalbandin

DD&C Directorate of Design & Consultancy

DFT Department for Transport

DG Director General
DGK Dera Ghazi Khan

DME Distance Measuring Equipment

DS Deputy Secretary

DVOR Doppler VHF Omni Range E&M Electrical & Mechanical

EASA European Union Aviation Safety Agency

ECNEC Executive Committee of National Economic Council

EG Executive Group

ERP Enterprise Resource PlanningF.E.C. Foreign Exchange ComponentFDTL Flight Duty Time Limitation

FFC Frontier Corps

FIAP Faisalabad International Airport

FOB Free On Board FSB Faisalabad FY Financial Year

GACA General Authority of Civil Aviation of Saudi Arabia

GLT Gilgit
GWD Gawadar

HF High Frequency

HITIT High Tech Information Technology

HR Human Resource

ICAO International Civil Aviation Organization

IDB Islamic Development Bank

IIAP Islamabad International AirportILS Instrument Landing SystemJIAP Jinnah International Airport

JICS Japan International Cooperation System

JICS Japan International Cooperation System

JS Joint Secretary

LED Light Emitting Diode

LHE IATA Airport Code for Allama Iqbal International

Airport, Lahore

MCMC Mid-Career Management Course

MRC Marmara Research Centre

MRO Maintenance, Repair and Operations

MUL Multan

NAMC National Agrometeorological Centre

NAP National Aviation Policy

NCOC National Command and Operation Center NDMA National Disaster Management Authority

NDMC National Drought Monitoring Center

NGIA New Gawadar International Airport

NOC No Objection Certificate

NWB Nawabshah

OEM Original Equipment Manufacturer
PACA Public Authority for Civil Aviation

PAF Pakistan Air Force

PCAA Pakistan Civil Aviation Authority
PHS Passenger Handling Services

PIACL Pakistan International Airlines Corporation Limited

PMD Pakistan Meteorological Department

PNJ Panjgur

PSDP Public Sector Development Program

PSN Pasni

QCAA Qatar Civil Aviation Authority
QIAP Quetta International Airport

QRF Quick Reaction Force

RAMC Regional Agrometeorological Centres

RDMs Regional Drought Monitoring Centers

RPT Regular Public Transport

SARPs Standards & Recommended Practices

SECP Securities and Exchange Commission of Pakistan

SG Staff Group

SKD Skardu

SLA Service Level Agreement

SMRFC Specialized Medium Range Forecasting Centre

SO Section Officer

SRS Structure Repair Services

SUK Sukkur TBT Turbat

TDME Terminal Distance Measuring Equipment
TPRI Tourism Promotion and Regional Integration
TSA Transportation Security Administration

UHF Ultra-High Frequency VHF Very High Frequency

WAPDA Water and Power Development Authority

WSR Weather Surveillance Radar
WTM World Tracer Management