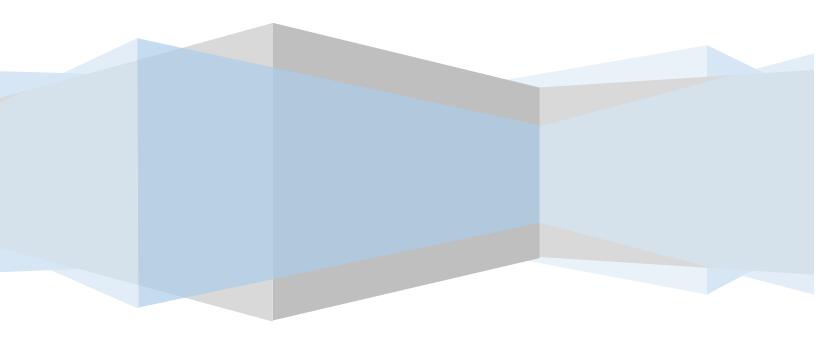
POST OPERATIONS ANALYSIS REPORT

August, 2020

CENTRAL COMMAND CENTER, C-ATFM, DELHI





Contents

| Α. | Introduction3 | |
|----|--|---|
| | Analysis Period | 3 |
| I | Back Ground | 3 |
| | Annexure A: Traffic at Indian Airports amidst COVID-19 Scare | 4 |



Monthly Post Operations Analysis

A. Introduction

Analysis Period 1st – 31st August'20

Back Ground Due to Government of India's restriction to prevent the spread of Covid-19 virus, a total ban was applied to all domestic & international commercial flight operations to and from India from 0001 UTC of 22nd March'20. Only Flights engaged in Cargo, humanitarian aids, medical supplies and relief purposes were allowed to operate with prior approval of DGCA.

Domestic flight operations resumed from 1830 UTC of 24th May'20. Government of India has now allowed airlines to operate up to 45 percent of their summer schedule whereas the scheduled international flight movements remain suspended till 1829 UTC of 30th September'20.

India has so far created air bubbles with the US, UK, France, Germany, UAE, Qatar and Maldives. Seeking to expand its travel orbit as the world gradually reopens, the government is in talks with Australia, Italy, Japan, New Zealand, Nigeria, Bahrain, Israel, Kenya, the Philippines, Russia, Singapore, South Korea, Thailand, Sri Lanka, Bangladesh, Afghanistan, Nepal and Bhutan. The idea of air bubbles is to ensure continuity of travel between India and these countries by eligible categories of people till normal flight operations resume.

During the above mentioned period, **no ATFM Measures** were applied as no Demand Capacity imbalance was observed at any Airport in India.

Central Command Centre, the ATFM nodal office, resumed 24/7 operations from 24th May'20.



Annexure A: Traffic at Indian Airports amidst COVID-19 Scare

Introduction

COVID-19 has created an unprecedented global challenge, particularly to the aviation industry. The quick spread of the virus has caused governments to rapidly restrict travel and close borders to contain the spread. This had a drastic and detrimental effect on aviation worldwide.

Domestic Flight operations resumed in caliberated manner from 1830 UTC of 24th May'20(NOTAM G0274/20 replacing NOTAM G0271/20) whereas international flight operations to/from India remains suspended till 1829 UTC of 30th September'20 (NOTAM G0666/20 replacing NOTAM G0403/20)

Demand is lower than expected largely due to the confusion and uncertainty at the state level regarding resumption, quarantine rules and continuing escalation in the infections. The COVID-19 pandemic has led to a massive disruption to flight operations, with numerous airport restrictions.

Current NOTAMs: G0666/20

(G0666/20 NOTAMR G0403/20

Q) VIXX/QXXXX/IV/NBO/W/000/999/

A) VIDF VABF VECF VOMF B) 2008310704 C) 2009301829

E) COVID-19: IN ORDER TO RESTRICT THE SPREAD OF COVID-19 (NOVEL CORONA VIRUS 2019) DISEASE IN INDIA, FOLLOWING RESTRICTIONS ARE IMPOSED ON ALL SCHEDULED INDIAN AND FOREIGN AIRLINES ENGAGED IN INTERNATIONAL AIR TRANSPORTATION TO/FROM INDIA:

1. NO SCHEDULED INTERNATIONAL COMMERCIAL PASSENGER AIRCRAFT SHALL TAKE OFF FROM ANY FOREIGN AIRPORT FOR ANY AIRPORT IN INDIA AFTER 0001 UTC OF 22 MAR 2020 TILL 1829 UTC OF 30 SEP 2020.

2. THESE INSTRUCTIONS ARE IN ADDITION TO THE TRAVEL RESTRICTIONS/ADVISORIES ALREADY ISSUED AND UNDER IMPLEMENTATION.

3. THE RESTRICTIONS DO NOT APPLY TO ACFT OPERATED IN THE FOLLOWING CIRCUMSTANCES:

- AIRCRAFT IN A STATE OF EMERGENCY
- AT ALTERNATE AERODROMES IDENTIFIED IN A FLT PLAN (INCLUDING THOSE FOR EDTO)
- CARGO FLIGHTS
- TECHNICAL LANDINGS WHERE PASSENGERS DO NOT DISEMBARK

CCC-CATFM/2020/09/04



4. OPERATIONS RELATED TO HUMANITARIAN AID, MEDICAL SUPPLIES OR RELIEF FLIGHTS WILL NEED APPROVAL FROM DIRECTOR GENERAL OF CIVIL AVIATION, INDIA. THIS WILL REQUIRE COORDINATION BETWEEN THE DIPLOMATIC REPRESENTATIVES FROM CONCERNED COUNTRY IN INDIA AND THE MINISTRY OF CIVIL AVIATION.

5. THE ABOVE ARE TEMPORARY MEASURES TO RESTRICT THE SPREAD OF COVID-19, AND ARE SUBJECT TO REVIEW BY GOVERNMENT.

6. OVERFLYING FLIGHTS TO OPERATE WITH DUE PERMISSION AS PER PROCEDURES ALREADY IN PLACE.)

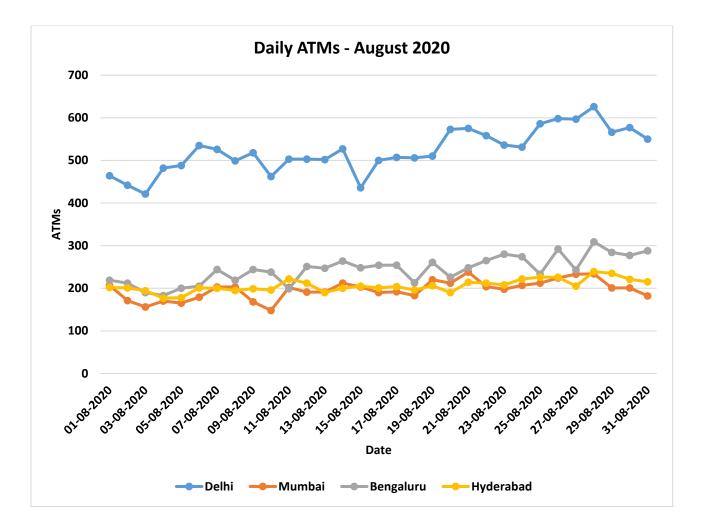
TRAFFIC ANALYSIS

Domestic flight services have resumed in India on May 25, after about two months of suspension due to the coronavirus disease (COVID-19)-necessitated nationwide lockdown. Experts believe the unpredictability of lockdowns imposed by state governments and differing quarantine rules are also making consumers averse to travel. The flow of travel is primarily unidirectional and limited to largely essential travel.

The total number of ATMs at Indian Airports in Aug'20 (during Covid pandemic)w.r.t. Dec'19(Pre -Covid) is 32.7%.

The total Air traffic movements including Passenger and Combination other flights i.e. All-Cargo flights, International scheduled, International non-scheduled, Domestic scheduled, Domestic non-scheduled, Air taxi & commercial business flights and all other aircraft movements at four major Indian Airports namely Delhi, Mumbai, Bengaluru and Hyderabad is plotted for each day of the month of Aug'20. The data is collected from SKYFLOW system and movement data received from Delhi, Bengaluru and Hyderabad Airport. Airline movement is also plotted for the month for major Scheduled Operators.



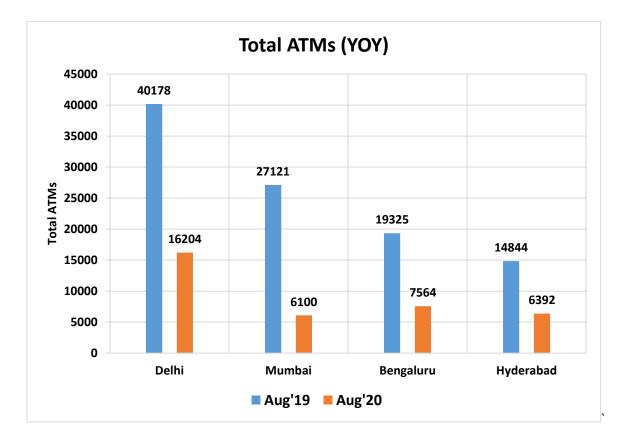


I. Daily ATMs at four major airports in the month of August 2020

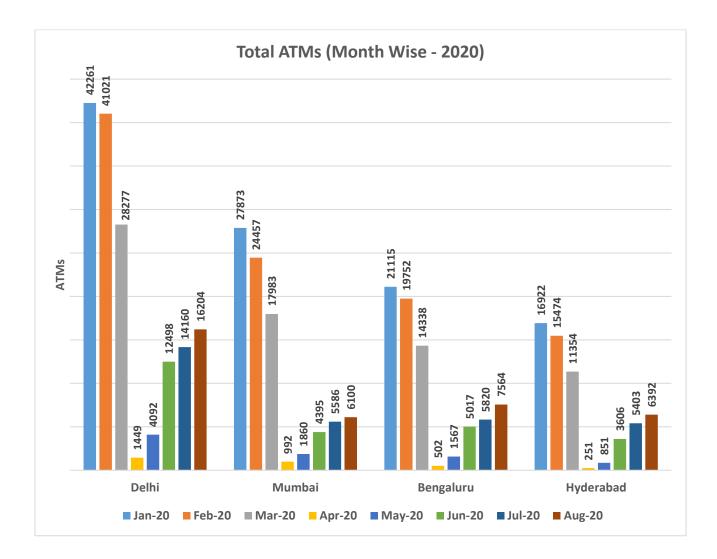


II. Comparison of total ATMs (YoY) and Month Wise at four major airports:

The graph below depicts the comparison of total ATMs in the month of Aug'20 in comparison to the total ATMs in Aug'19 for four major Airports in India. The traffic handled in Aug'20 at Delhi is about 40% of the traffic handled in Aug'19 whereas the traffic handled in Mumbai, Bengaluru and Hyderabad are 22%, 39% 43% respectively of the traffic handled in Aug'19.

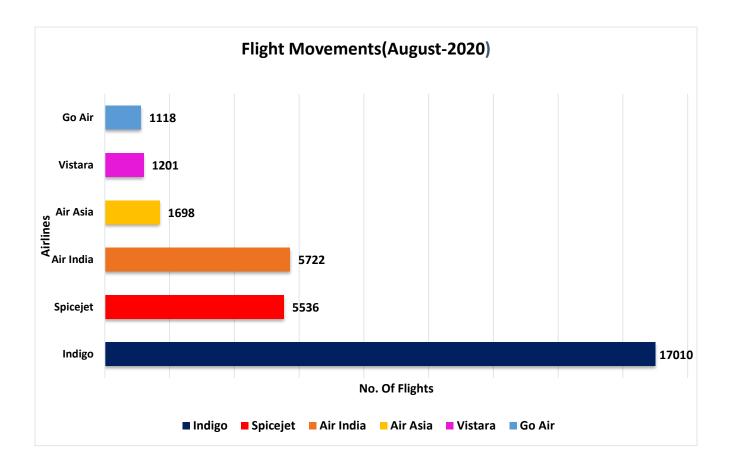






The graph below presents the month-wise air traffic movement in the year 2020, at four major Airports.





III. Flight Operations – Airline wise: