

TRINIDAD AND TOBAGO'S ATFM UPDATE

Curtis Fraser

Air Traffic Management Officer, TTCAA

cfraser@caa.gov.tt



Trinidad and Tobago's ATFM Overview

- Attended Regional ATFM/CDM Training; (Dominican Republic, from June 05 – 08, 2018)
- Provided in-house training to fifteen (15) Air Traffic Controllers in between January to December 2018.
- Updated ATFM/CDM Manuals
- Upgraded to second version of ATFM software: October 2019 – February 2020
- Expected to upgrade ATFM hardware by second quarter of the year 2022.



TTCAA
Safer Skies

ATFM Functions – Responsible Departments

- ATFM Team comprises of members from the Planning and Technical Evaluation (PTEU) Department and ATS operations.
- Strategic ATFM functions are carried out by the PTEU.
- Air Traffic Services are mostly responsible daily tactical functions.

ATFM Tasks done by PTEU

- Traffic Analysis and Projections
 - Collaborate with AUs for schedules
 - Collect Traffic Statistics
- Quality assurance of ATFM Software, Accuracy of data and information,
- Development/Update Procedures, Manuals
- Work with Region to develop Performance Measurement
- Participate on CADENA planning web-conferences
- Coordination with internal and external stakeholders during ANS Contingencies

ATFM Tasks done by ATS

- Daily update of CADENA OIS (Shared between PTEU and ATS),
- Attend as observers on weekly CADENA planning conference
- Monitor demand with capacity and discuss proposed TMMs with PTEU ATFM team, when required
- Coordinate with PTEU ATFM team to disseminate critical information during contingencies

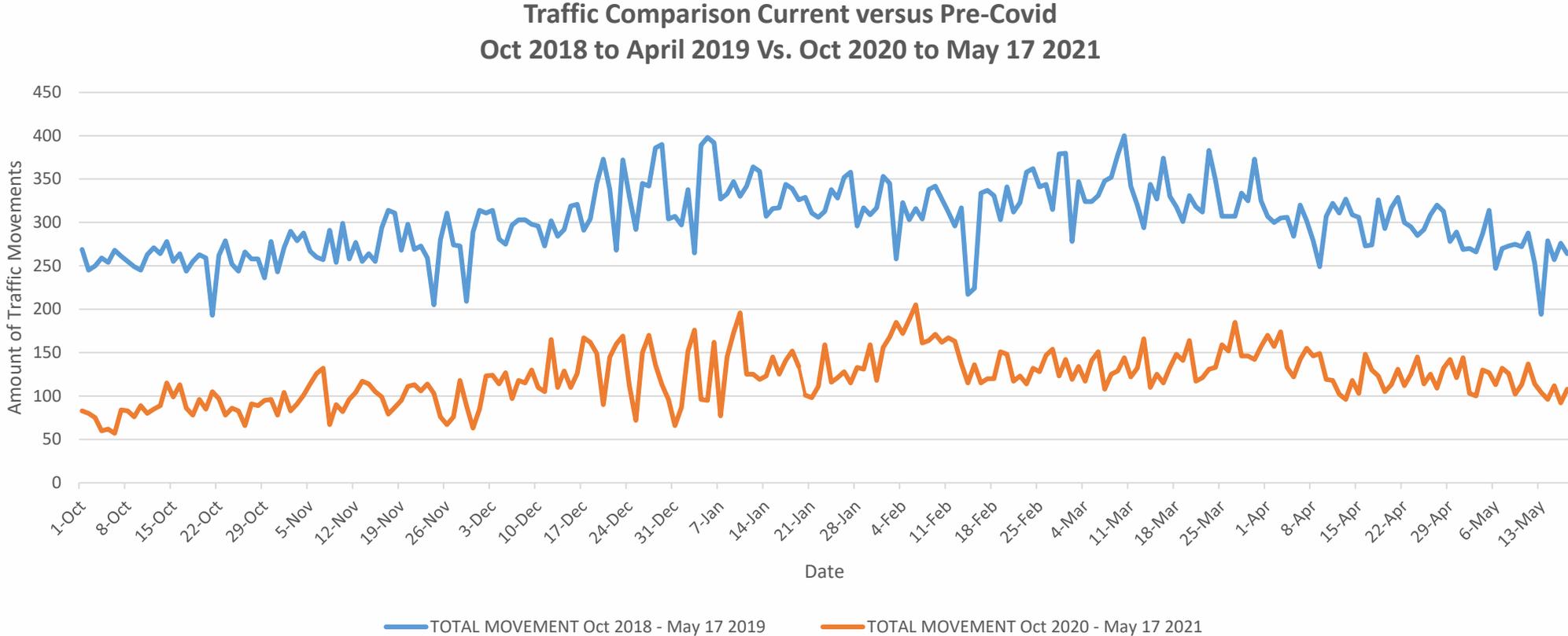
ATFM Functions – Monitoring Traffic Trends

PTEU ATFM Team keeps a close eye on Demand during COVID 19 period

- Collect and collate statistical data on all types of demand; passenger, cargo, general aviation, training, domestic, etc..
- Demand Projection - Continuously collaborate with the airlines and other airspace users to receive updates on intended operations.



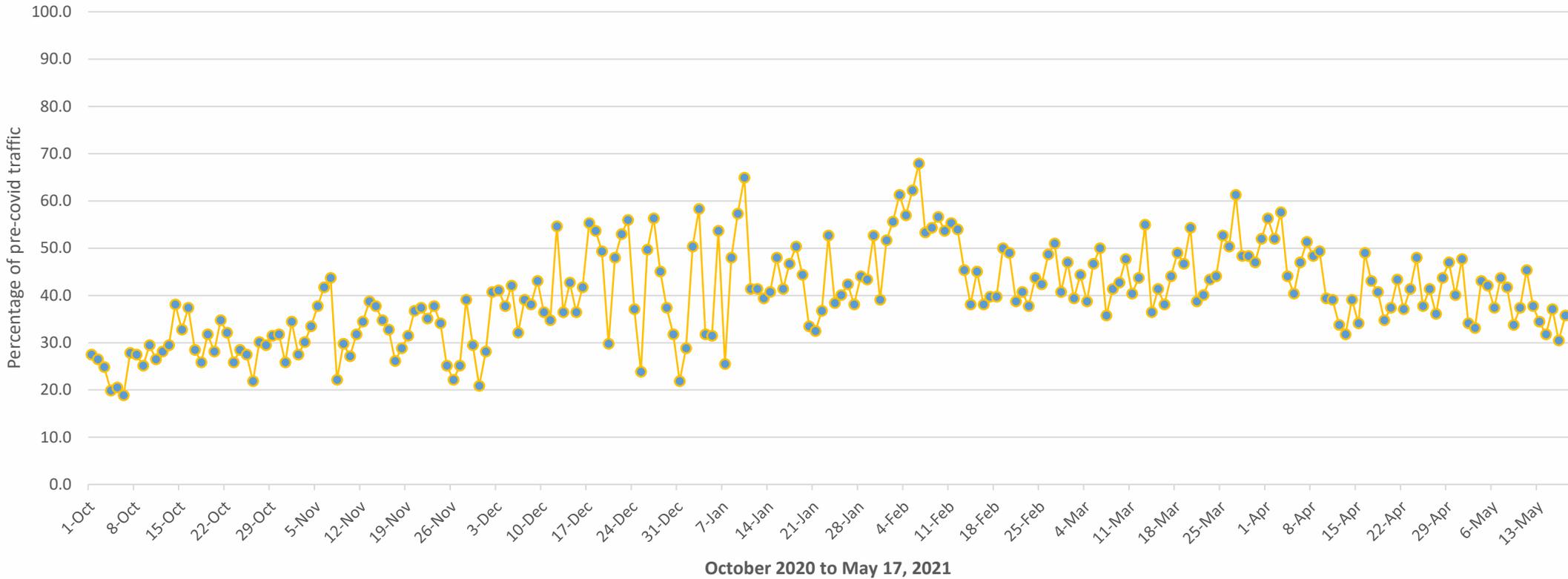
Traffic Comparisons to Pre-COVID Period



TTCAA
Safer Skies

Traffic Comparisons to Pre-COVID Period

Percentage of Average Pre-Covid Traffic Movements



ATFM Tools

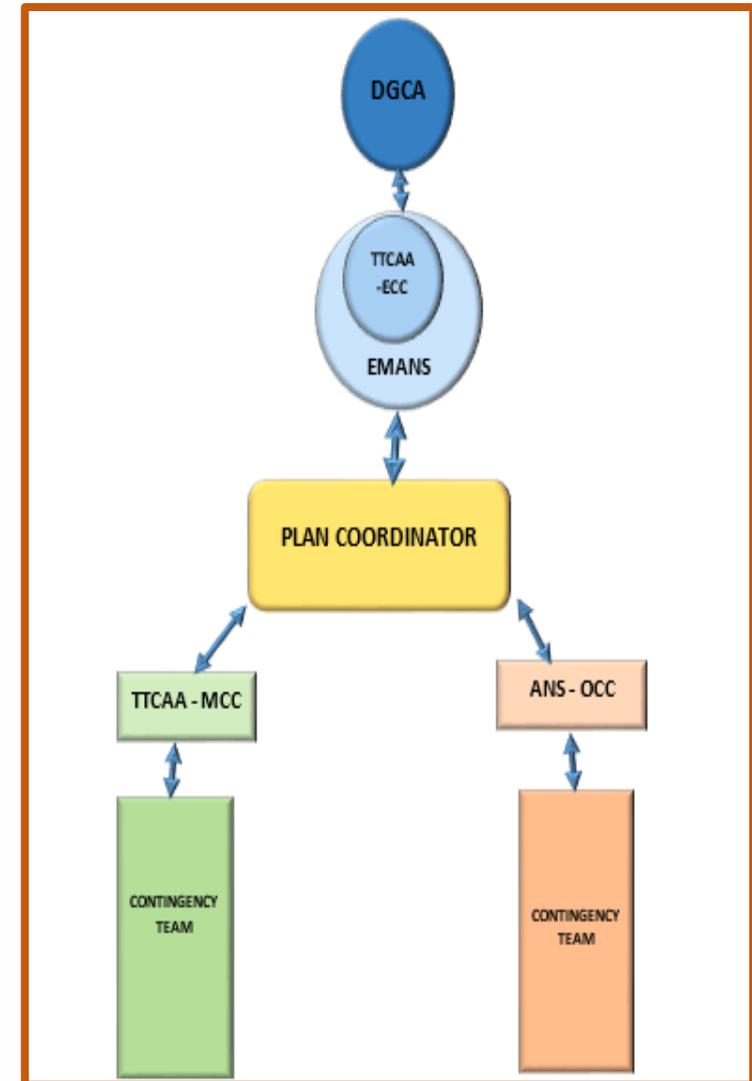
- ATFM tools were upgraded to the second software version between October 2019 – February 2020;
- The TTCAA Began Sharing ATFM tools with Trinidad and Tobago Meteorological Service (TTMS) on test basis;
- The TTCAA will begin sharing tools, on a test basis, with local stakeholders and an Eastern Caribbean (E/CAR) State during the third quarter 2021.
- The intention is to develop a common platform to share critical operational information, especially during contingencies



ANS Contingencies

PTEU ATFM team provides support to ensure continuity of services during ANS contingencies:

- Responsible for developing the ANS Contingency Plan;
- Serves as the ANS Contingency Coordinator during an event. Serves as liaison between Executive Contingency Committees, Management and Operational Committees; and stakeholders;
- Execute TTCAA-ANSD Contingency Plan as efficiently as possible;
- Ensure that the ANSD is at a level of preparedness for the execution of the ANSD Contingency Plan, *e.g. training, table-top exercises etc.*
- Ensure the maintenance and review of the TTCAA-ANSD Contingency Plan.



AIR NAVIGATION SERVICES CONTINGENCY STAGES

STAGE	EFFECT	MITIGATION
5 ATC-0	Air Navigation Service Suspended Staff unavailable Equipment unserviceable	<ul style="list-style-type: none"> Implement FLAS Advise ICAO, Ministry of Works, CADENA, Operators, IATA, TMMs, Neighboring FIRs; Airport Authority Trinidad and Tobago, Promulgate NOTAM
4 Affected Operations	<ul style="list-style-type: none"> ANS Operations fully affected High impact on ANS Operations Staff High Potential of impact to CNS assets equipment 	<ul style="list-style-type: none"> ATS Route Closures <u>ATFM Measures</u> Contingency Staff Provision of Transportation Provision of Meals Provision of Accommodations Relevant CNS equipment powered down
3 Normal to Affected operations	<ul style="list-style-type: none"> ANS operations are beginning to be affected Operational staff levels may be reduced Possible impact to CNS equipment 	<ul style="list-style-type: none"> <u>ATFM Measures</u> Use of Contingency Staff (Non shift rated staff) Possible provision of transport Assessment of impact to CNS assets
2 Normal operations with monitoring of potential threats	<ul style="list-style-type: none"> Identification and monitoring of potential threats (ITCZ, Tropical disturbances, Tropical depressions, Tropical Storms, Hurricanes, Pandemic) 	<ul style="list-style-type: none"> Monitoring of Activity Constant collaboration with Met Services Assessment and advanced preparation of all TTCAA-ANSD assets
1 Normal operations with general monitoring	<ul style="list-style-type: none"> ANS Operations are normal with adequate staffing. CNS equipment are operating normally. General monitoring of weather during the wet season 	<ul style="list-style-type: none"> Periodic review and testing of ANS Contingency Plans

Short to Medium Term Objectives

1. Provide refresher and recurrent ATFM training to personnel involved in ATFM.
2. Improve Situational Awareness:
 - ❖ Improve collaboration/coordination with ECAR ANSPs – Scheduled or Adhoc Telecons,
 - ❖ Improve on ATFM tools and connect with ECAR ANSPs
3. Establish Standard/Harmonized procedures:
 - ❖ Include ATFM/CDM agreements as addendums to existing operational LoAs
4. Improve Planning at the Strategic Phase
 - ❖ Improve demand and predictions at strategic phase
 - ❖ Improve collaboration with the MWO to provide Airport and FIR forecast days in advance
5. Update Sector Capacities



Thank You

Curtis Fraser

Air Traffic Management Officer, TTCAA

cfraser@caa.gov.tt

