

1. RECENT DEVELOPMENTS IN KAPITALI TMA (KAPITALI AIRPORT, NORDLAND) 06-09-2010

Kapitali Airport has been experiencing a dramatic increase off traffic. The current Runway configuration is 04/22. Increasing pressure from environmental groups has led to constraints for rwy utilisation after 2200. The conventional SID and STARs are hardly used due to radar vectoring. Traffic has been growing around 7% annually and the forecast indicates a continuation of this trend. Airlines want shorter and more predictable routes, which should better support their planning and CDM activity. CDAs have not been implemented.

The Airspace design does not support present demand. Holds are placed in the ACC but managed by APP. The work of the APP controllers is not systemised leading to high workloads. The new optimised TMA should be in place before **23-02-2012**, this criteria has been requested by the ministry of Transport.

1.1. MAIN ISSUES

- Environmental pressure (noise sensitive) especially over city area.
- Environmental lobby: Southern Coldland is an area of considerable economic growth
- Danger and other Military Areas: along southern portion of the FIR constrain airspace use.
- Present rwy use and handling of traffic in the TMA have reached its capacity limit thereby increasing delays and complexity.
- Operators want to reduce costs and fly more efficient and user preferred routes, including CDA's
- Local operator wants to expand it's flight schedule by 20 flights for cargo during night

2. OVERVIEW OF KAPITALI TMA OPERATION

2.1. CONTROL POSITIONS

The Kapitali TMA is worked by three control positions:

- Co-ordinator [ARR} controller who is responsible for receiving arrivals into the TMA.
- Final Approach Controller [FA] responsible for receiving traffic from the Arrival Controller and then affecting the final sequencing for landing.
- Departure Controller who [DEP] handles all departures outbound from Kapitali within the TMA and releases them onward to the relevant ACC sector.

2.2. HANDLING ARRIVING IFR

Inbound flights are released before the TMA on Radar headings to the ARR. These levels are \pm FL160+ for inbounds from KAPTA and VIHTI and FL100+ for inbounds from PORVO. Holds are not used consistently and the activation is often reactive and not planned

Little use is made of the existing SID & STARs.

2.3. HANDLING DEPARTING IFR

Departures (most commonly off RWY22) are released from Aerodrome Control to the DEP Controller who is able to climb traffic to pre-set levels agreed between ARR and DEP as per local standing instructions for different areas within the TMA. Outbound aircraft are released from DEP directly to the relevant ACC sector once clear of conflicting inbound traffic.

Little use is made of the existing SIDs after 4000 ft AMSL at which point aircraft are short-cut towards the TMA exit point.

2.4. PERFORMANCE MIX

Aircraft operating within the Kapitali TMA have a high performance mix of jets and turbo-props which complicates the controller tasks and necessitates different SIDs to cater for this mix.

2.5 VFR OPERATIONS

VFR operations are limited to SAR flights from Kapitali.

2.6 TMA INFO

The vertical dimensions are 1500 ft up to FL 145.
Airspace classification "C"

DETAILED ITEMS

TRAFFIC

- 75 % GPS/DME EQUIPPED
- 95 % DME

- ALL B-RNAV approved
- 65% RNAV-1 approved
- 25% Retro fittable
- 10 % to old

AIRSPACE

- Airspace classification C (inside and out side TMA as from 1500ft below uncontrolled)
- Airspace restrictions – TSA gnd FL 200
- Holding Areas on map
- MSA is 2500 ft
- TL 50
- MRVA is published 3000 ft

Air Traffic Management

- Arrival and Departures vectored
- No transit traffic
- Military VFR to TSA outside CTR
- VFR has no impact on TMA ops
- HOLDS managed by APP but located in ACC

Technical and Infra

- Two radar (APP and feed from ACC) full coverage as from 2000ft update rate 10 per min

- Full RADAR and Flight plan data processing
- ILS both rwy ends Cat 3
- DME coverage as from 2000 ft Whole TMA
- NDB for NPA

Weather and Terrain

- Terrain is not an issue see Map

Meteo

- No serious impact on ATM and Low pressure has no impact as well
- Main use is RWY 22 80% of the time
- Normal thunderstorm activity during summer, with normal disruption of traffic accommodated through flow control

Environmental constraints

Noise curfew after 2200

Avoid city as much as possible

Holding levels not below FL100

CDAs are not implemented

Military

TSA is used for air-combat. The TSA is activated from 0800-2200. There has been no agreement for the use of the TSA airspace outside actual use. Occasional use is obtained through telephone coordination.