## Controlled Airspace And Restricted Areas In Uganda

PRESENTATION BY AIR TRAFFIC MANAGEMENT (ATM)

TO

DRONE STAKEHOLDERS AWARENESS WORKSHOP JULY 2019



## Content

- Definitions
- Controlled Airspace delineation
- Restricted Airspaces in Uganda



## Definitions

- **Airspace**: Portion of the atmosphere controlled by a country above its territory;
- Controlled airspace.

An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.

- Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in Annex 11, of the Chicago Convention
- Controlled airspace established to protect flight paths of aircraft





## Controlled area includes;

- Control areas are delineated so as to encompass sufficient airspace to contain the flight paths of aircraft under Air traffic Control
- All Airspace Extending upwards from 1500ft is controlled and uncontrolled Else where
- Includes all ATS Flight routes
- -Differing ATC service given depending on location in relation to Airport or Airway
- More Stringent Requirements around Airports and along Flight routes
- Additional Airspaces established around Airports to protect Arriving and departing ac



## Controlled Airspaces In Uganda

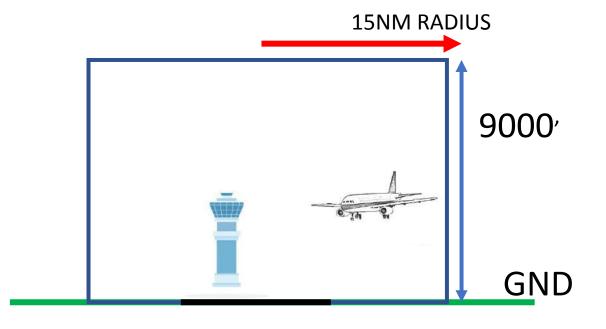
#### • Control Zones(CTR)

A controlled airspace extending upwards from the surface of the earth to a specified upper limit.

-Encompasses airspaces not within Control areas ( below 1500)

-CTRs established at Entebbe and Soroti

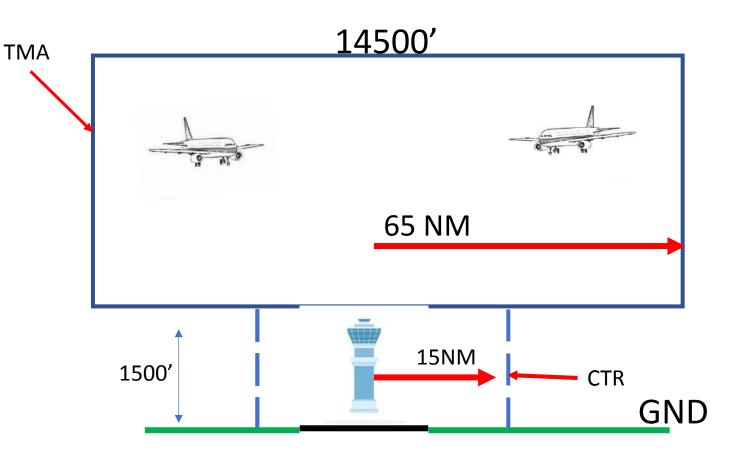
- Radius 15NM, GND- 9000'





# TMA – terminal manoeuvring area

- In Uganda, Designed around and centred on Entebbe Airport with a lateral limit of 65NM
- -Approach service (Climb to cruise and descent for landing facilitated here
- It usually is situated on top of a control zone and provides protection to aircraft climbing out from the airport.

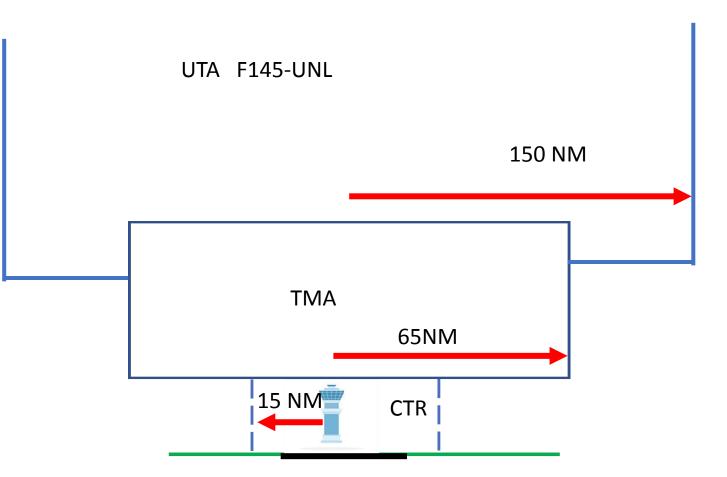




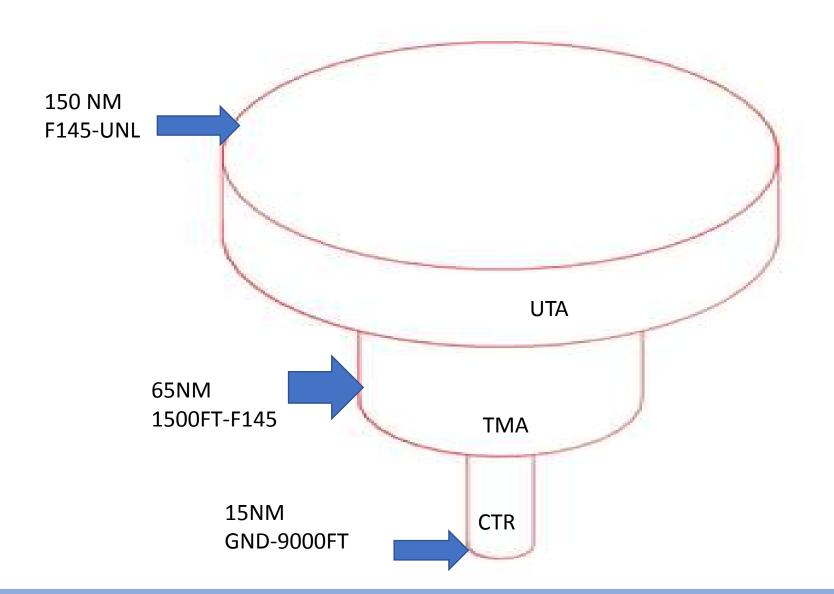
Upper Terminal Area (UTA)-Uganda FIR

Radius of 150NM centred on Entebbe

- From FL145 UNL
- Realistically, beyond
  150NM and Below FL145,
  less restrictions due to
  communication Challenges

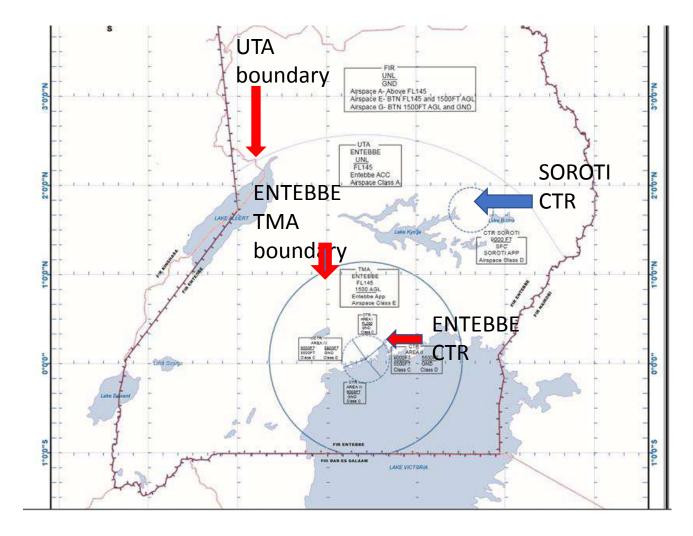






UGANDA

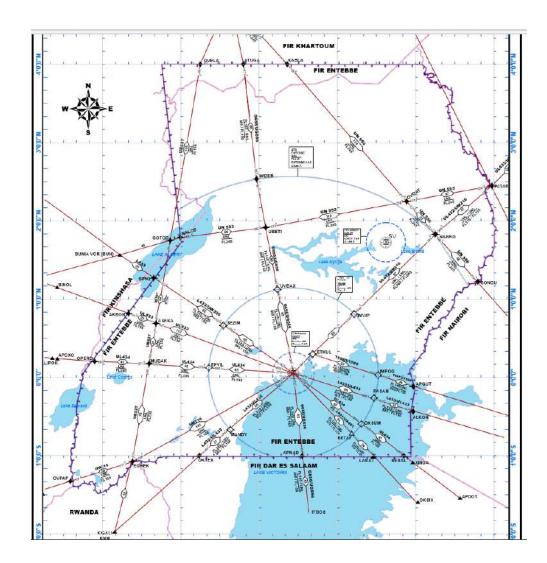
#### Entebbe Control Areas MAP depiction of CTR, TMA and UTA in Ugandan Airspace





ATS Routes In Ugandan Airspace

All ATS routes and their Protected Airspaces are controlled Areas





## Flight Restrictions -

- **Restricted area**. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions. (level or time..)
- **Danger area-** airspace of defined dimensions where activities dangerous to flight of aircraft may exist at Specified times.
- Prohibited Area-Portion of Airspace where Flight is prohibited



Depiction of restrictions On Charts

HUD- Danger Areas HUP- Prohibited Areas HUR- Restricted

NATIONALITY LETTER IDENTIFICATION OF AREA P= PROHIBITED R=RESTRICTED D=DANGER UPPER LIMIT LOWER LIMIT

Areas

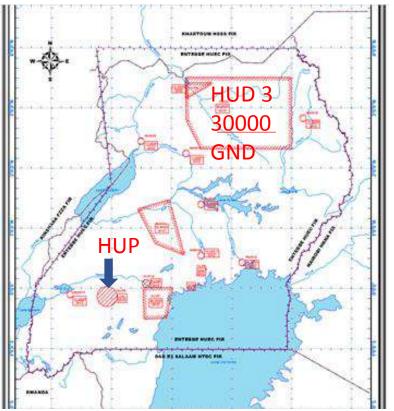


## Other Flight Restrictions

 Temporary Prohibited Areas/ Restricted areas Established at the request of Security Agencies Occasionally Notified through NOTAM Enforced by ATM through Pilot Controller **Communication** Usually >= 5NM, GND – UNL; lasts days at a time



### HUP, HUD& HUR In the Ugandan Airspace





## Notification Of Flight Restrictions

- Published in the Uganda Aeronautical Information Publication (AIP)- Permanent
- Notices to Airmen Temporary restrictions
- Flying over known restricted Airspace is an offence



## Conclusions

- The Ugandan Airspace is complex . For Drone operations to be effectively managed, a number of issues have to be addressed:
- Regulation and it's enforcement.
- Investment in Surveillance to monitor compliance
- Streamlined coordination procedures amongst the various stakeholders.
- Creation of awareness among the public about the danger posed by drones to aviation
- Protection of aviation at all times



# Thank you

