



| ICAO

# INTERNATIONAL CIVIL AVIATION ORGANIZATION

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# Handbook on Radio Frequency Spectrum Requirements for Civil Aviation

Volume II - Frequency assignment planning criteria for  
aeronautical radio communication and navigation systems (ICAO Doc 9718, Volume II)

## (4) ILS, VOR, DME and GBAS



**Workshop/Training on  
“Frequency Finder 2024” application**  
Nairobi, Kenya | 12 – 16 August 2024

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# Doc 9718 Volume II

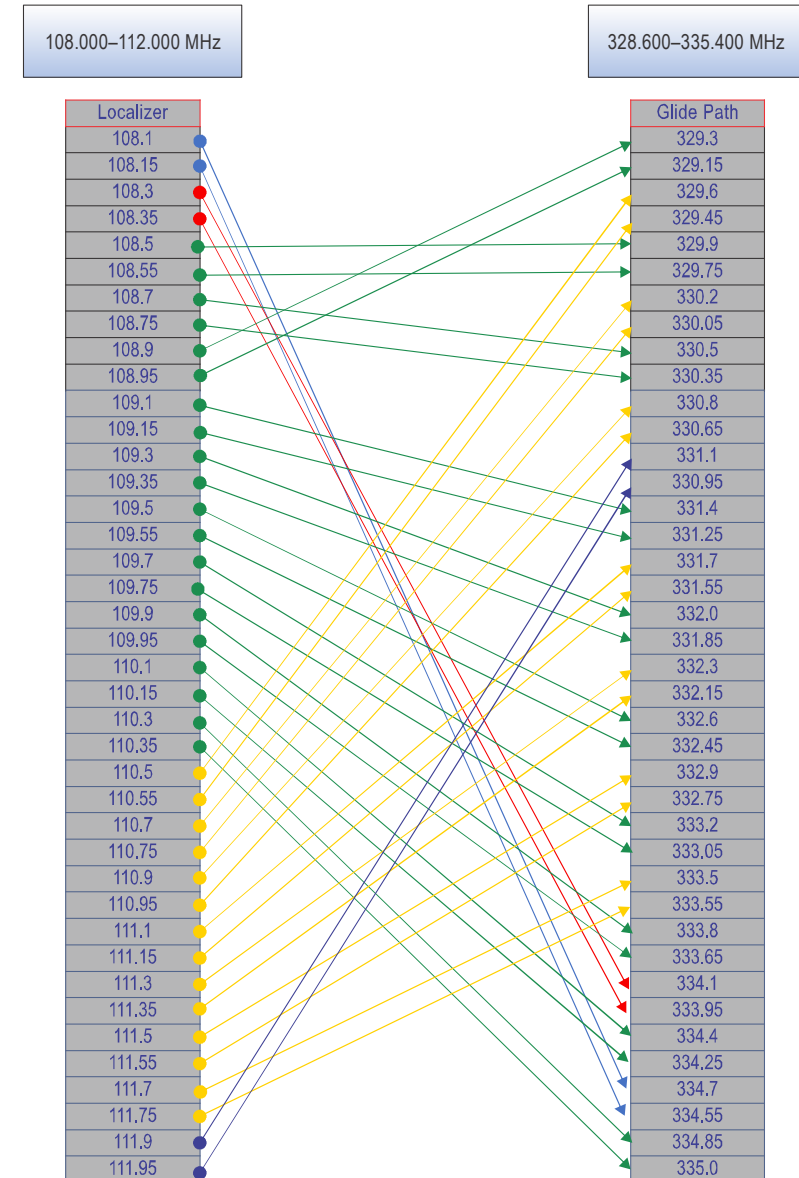
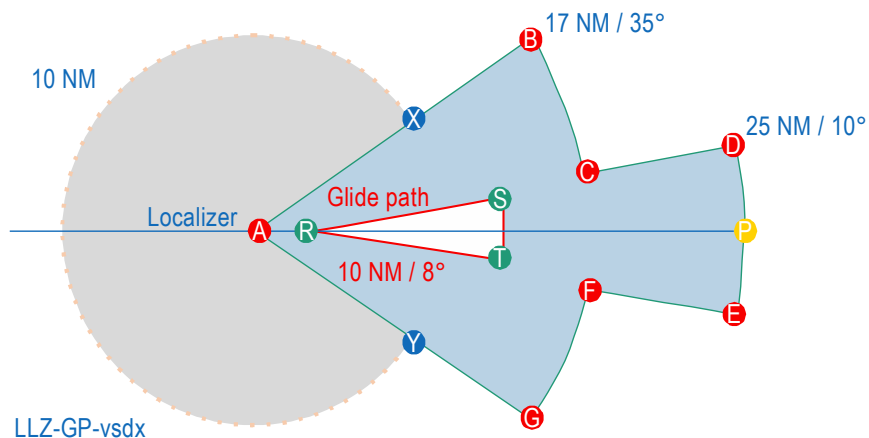
## Frequency assignment planning

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### Chapter 3 - Instrument Landing System (ILS)

Methodology and examples for calculation of separation distances for:

- Localisers (108-112 MHz)
- Glidepath (328.6-335.4 MHz)
- Localisers versus VOR and GBAS VDB

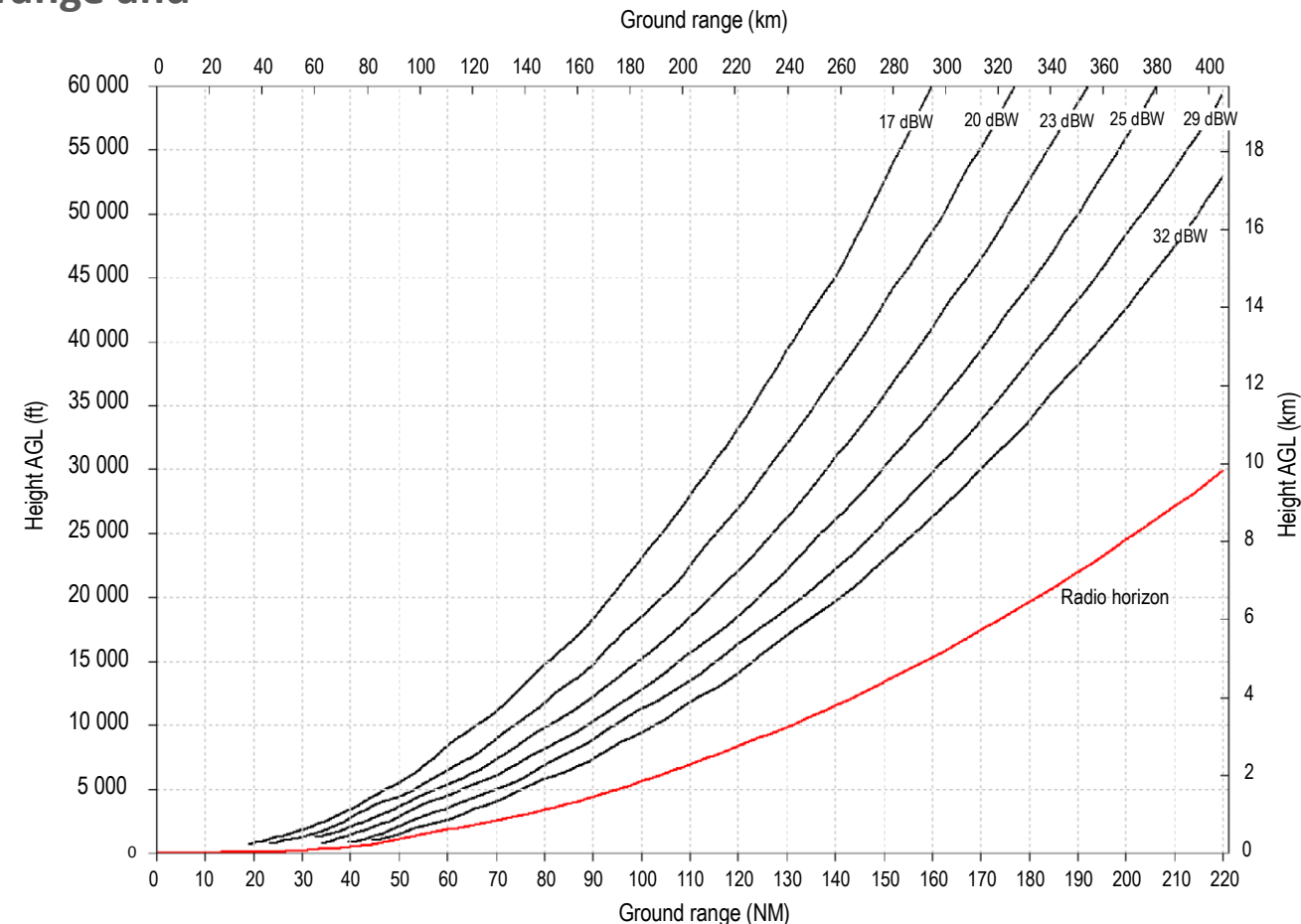


## Frequency assignment planning

### Chapter 4 – VHF Omnidirectional Range (VOR)

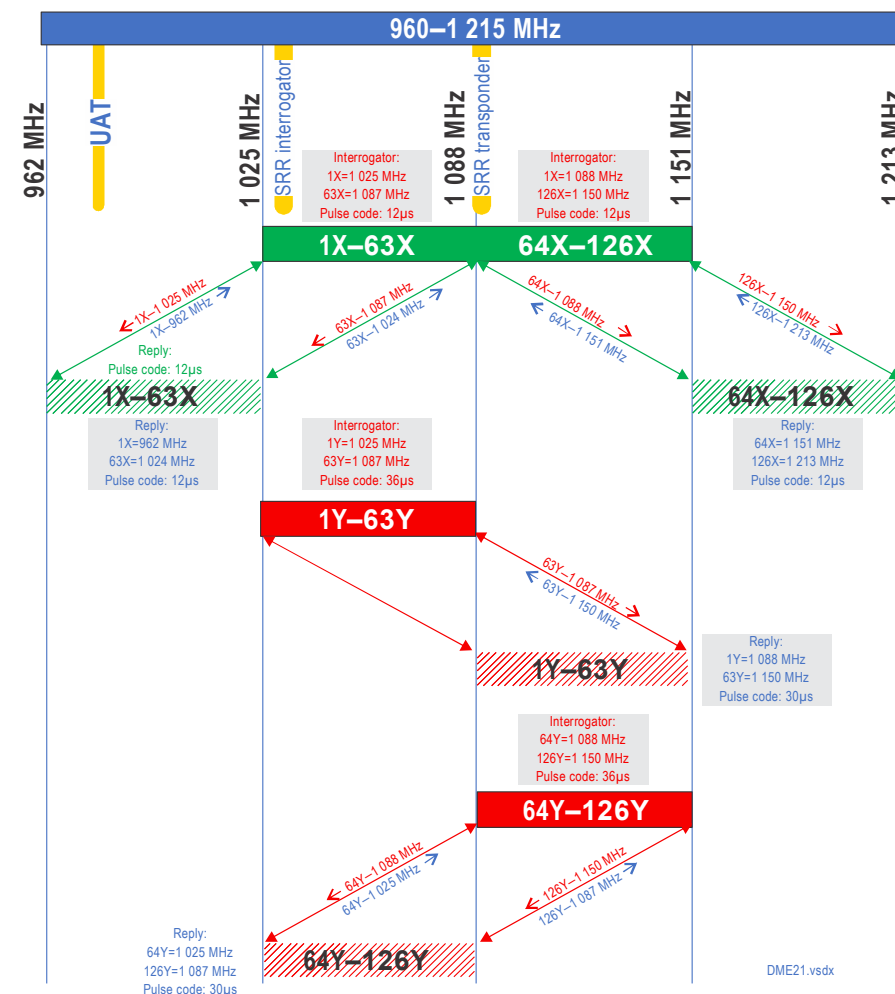
Methodology and examples for calculation of range and separation distances for:

- VOR (108-117.975 MHz)
  - ✓ Associated with DME
  - ✓ Operating in the band 108 – 112 MHz
- VOR versus Localizers
- VOR versus GBAS





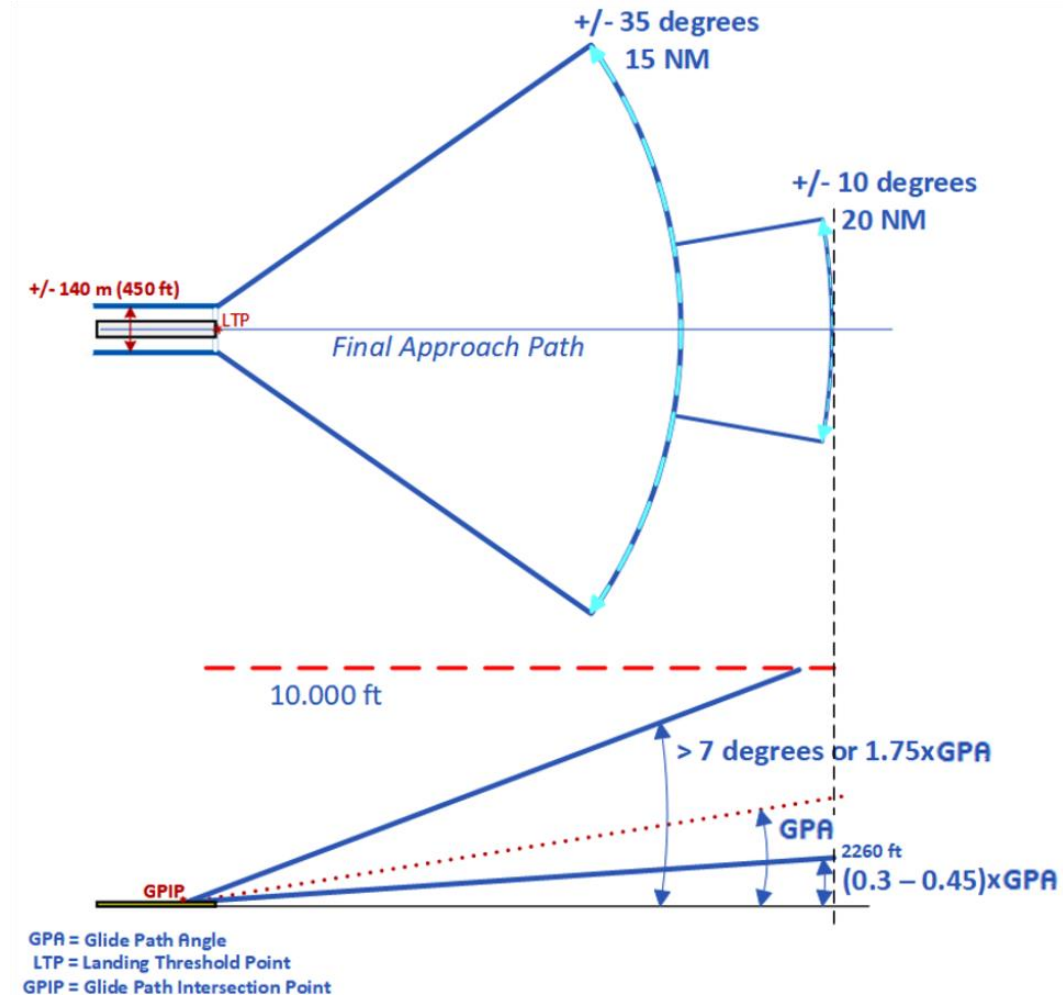
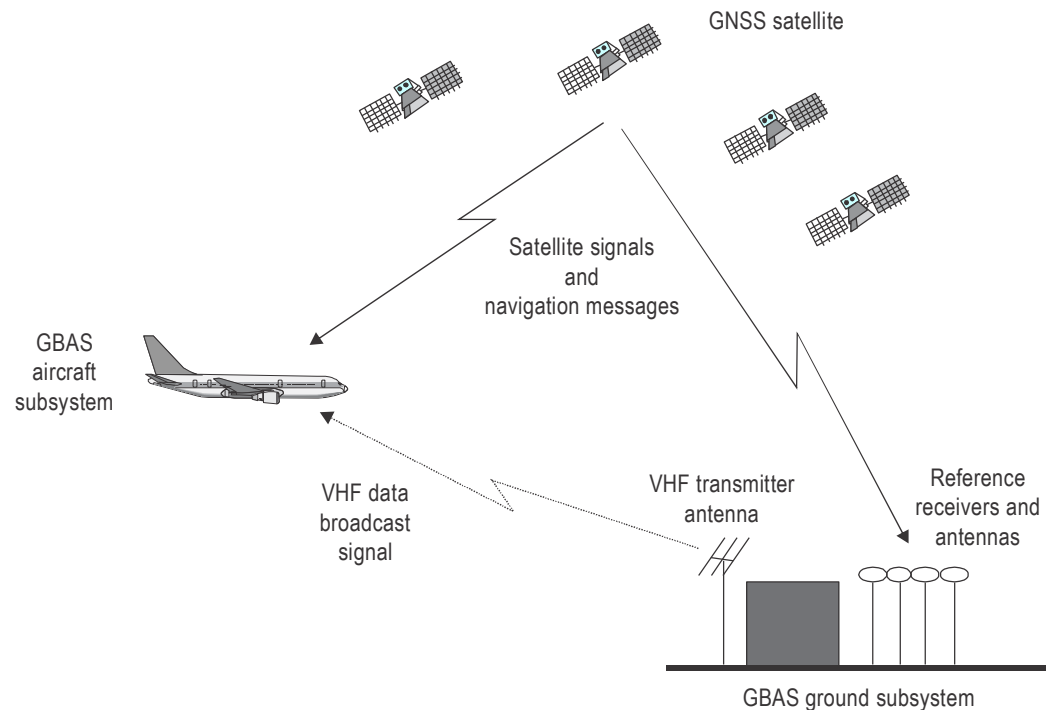
## Methodology and examples for calculation of operational coverage and separation distances



## Frequency assignment planning

# Chapter 6 – Ground Based Augmentation System (GBAS), 108 – 117.975 MHz

Methodology and examples for calculation of operational coverage and separation distances



### Future work

- The 2022 update added material on radionavigation systems (ILS, VOR, DME and GBAS), as developed with the help of NSP. Editorial update of this material is planned in the near future
- Future work will concentrate on refining the existing criteria and adding criteria for systems such as LDACS
- The Handbook and other relevant material can be downloaded from the FSMP website (Repository section) at <http://www.icao.int/safety/fsmp>



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Thank You!