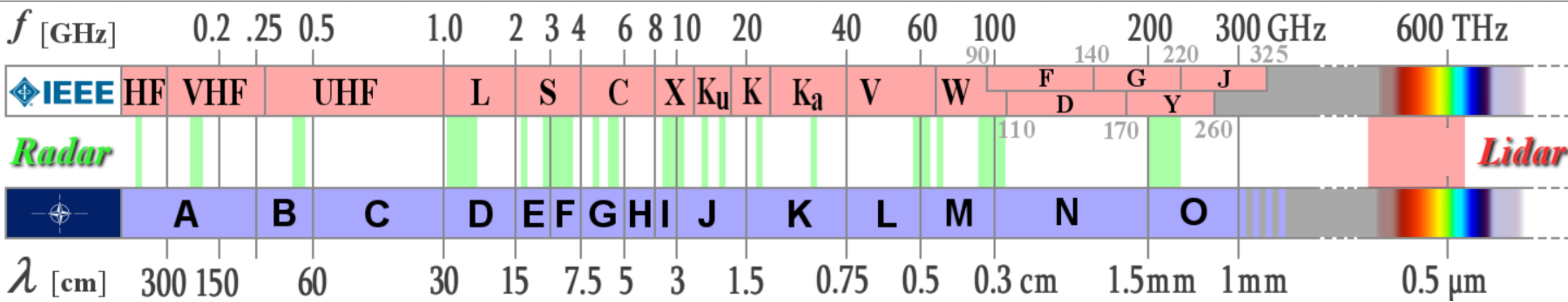


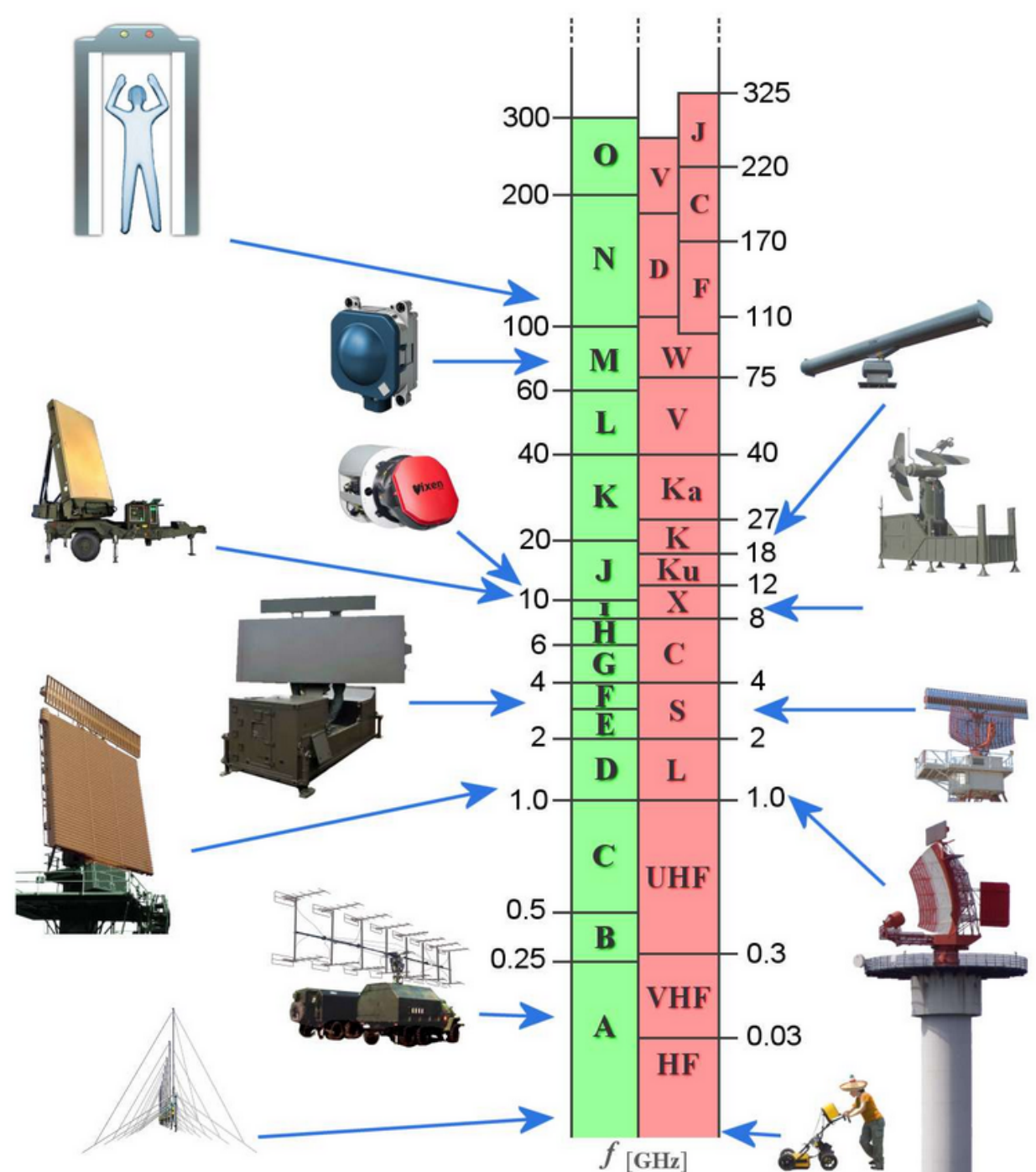
Radio Frequencies (electromagnetic waves)

- www.radartutorial.eu



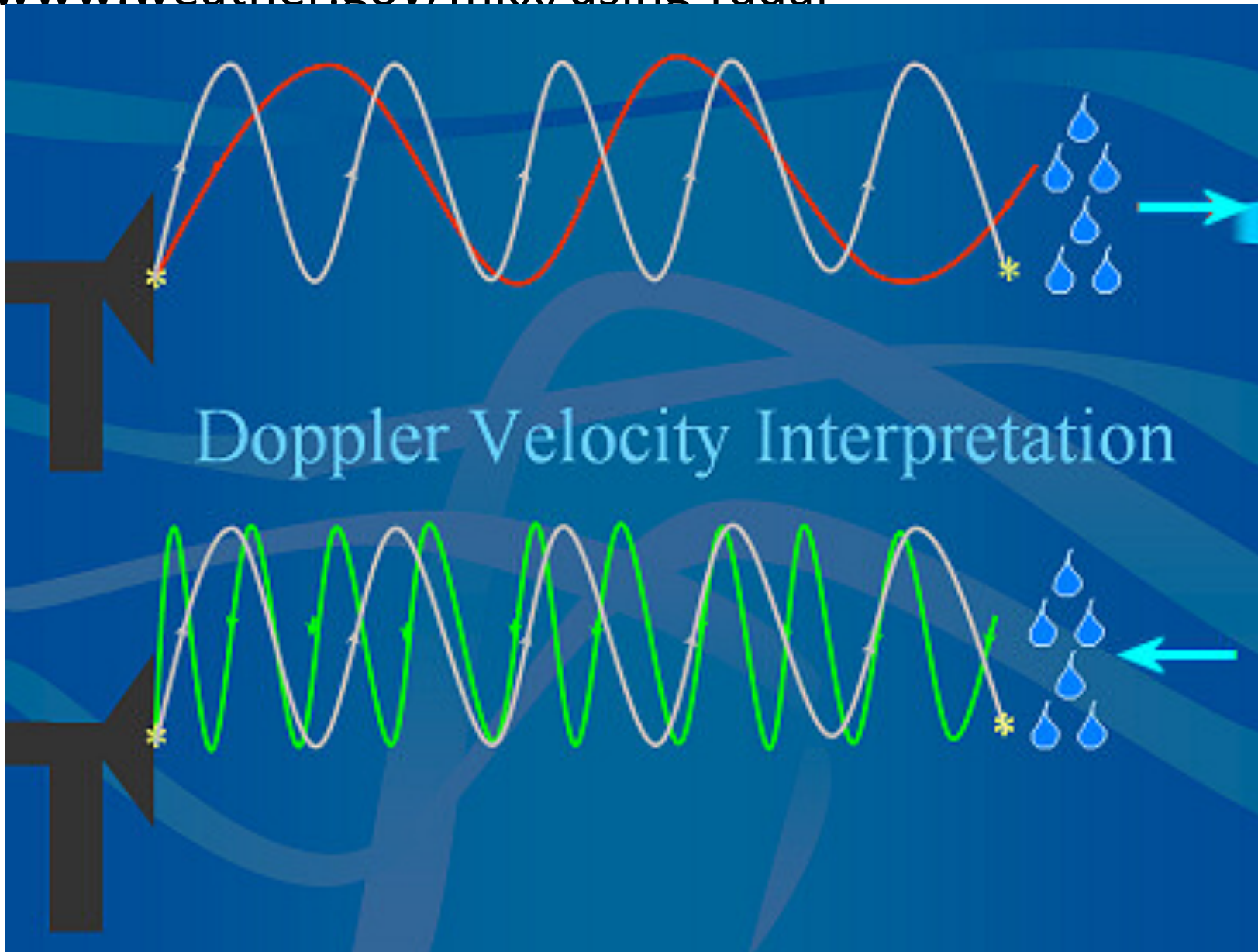
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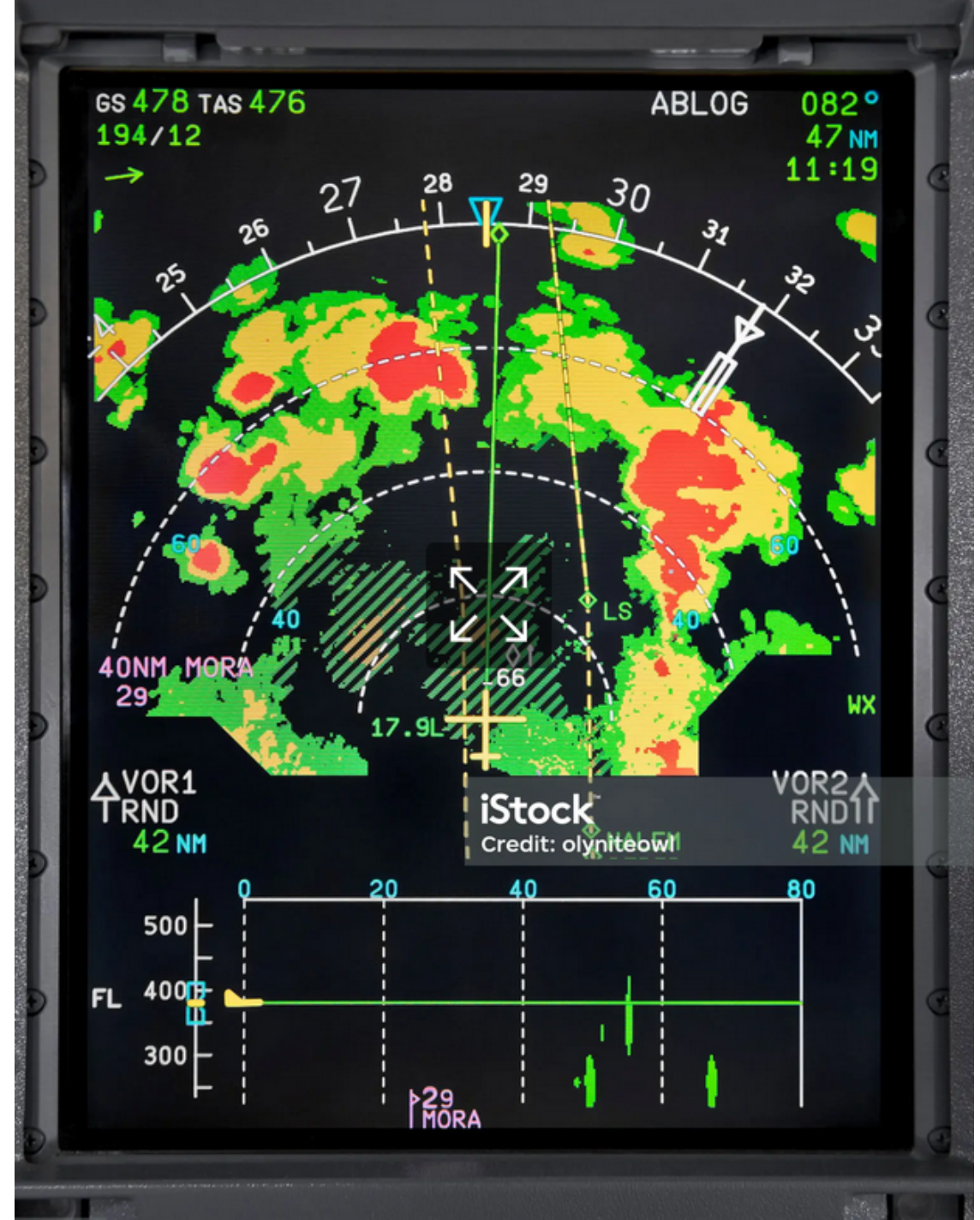
Doppler Radar

- <https://www.weather.gov/mkx/using-radar>



Airborne Weather Radar

- <https://aea.net/AvionicsNews/ANArchives/AirborneWeatherRadarFeb06.pdf>
- Rainfall intensity
- Turbulence
- Below 2000' AGL → Predictive Wind-Shear



Windshear training for UK ATC Controllers

2. Background

2.1 Windshear is a sustained change in the wind velocity along the aircraft flight path, which occurs significantly faster than the aircraft's momentum can counter. Windshear can occur at any level, but it is low-level windshear which can cause problems of sufficient magnitude to affect the control of aircraft in departure or final approach phases of flight.

2.2 Most modern airliners carry onboard windshear detection systems, which will audibly warn the crew of the presence of windshear. Such audible alerts can be either predictive, occurring before the aircraft encounters the windshear, or reactive after penetration of the windshear.