

TYPES OF ATC UNITS

Air traffic controllers manage aircraft through all stages of flight.



1. What types of controllers do you know?
2. What are Ground (Tower, Radar, Approach, Area) controller duties?
3. How different are the units?

There are several types of ATC units. In Russia the most common units are Ground, Tower, Radar, Approach, Area (or En Route) and Flight Information Service (Local Area Control).

Ground unit

- controls traffic on the aerodrome movement area
- **handles aircraft** from the moment of engine start-up up to the holding point (before departure)
- manages aircraft from the moment of vacating the runway up to the parking stand (after landing).

The **adjacent (neighbor) unit** of Ground is Tower. Controllers work from Towers and visually observe aircraft. Tower controllers

- **provide service to aircraft** on final and on the active runway starting from the holding point
- provide separation between departing and arriving aircraft
- give clearance for take-off and landing.

Radar controllers **manage lower airspace**. Area of responsibility of a Radar controller is take-off and landing zone (which extends from 200 m up to FL 50 within the radius of 50 km from the aerodrome). Radar controllers

- issue approach clearance for arriving aircraft
- instruct departing aircraft about initial climb.

Approach unit **guides climbing and descending traffic** in the airspace (which stretches for 50 km-200 km from the aerodrome and from FL 1800 m up to 5700m above the ground). Approach controllers

- **arrange (organize) traffic sequencing**
- provide necessary separation between aircraft.

ACC (Area Control Center) **covers a large area**. This facility is **responsible for upper airspace** (e.g. from FL_____ up to FL_____) and en-route stage of flight. En route controllers **accept traffic from** Approach or another Center (and **hand it over to** adjacent units). The airspace is split into sectors. Each sector is managed by two controllers. ACC controllers

- handle traffic cruising on airways
- give heading and level instructions for separation and collision avoidance
- help pilots avoid bad weather conditions and restrictions.