GAMBIA CIVIL AVIATION AUTHORITY



SUMMARY OF THE ADVISORY CIRCULAR ON CONTROL OF OBSTACLES

(AC-COO-001)

What is an Obstacle?

An obstacle is any fixed (temporary or permanent) or mobile object that:

- Is located on an aircraft movement area, or
- Extends above a surface established to protect aircraft in flight, or
- Lies outside those surfaces but has been assessed as a hazard to air navigation

Examples of obstacles

- Tall buildings and structures, communication towers or masts, cranes, chimney, power transmission line, antennas, wind turbines, large signboards, construction stockpiles, vehicles and machinery
- Tall trees and vegetation growth

What is an Obstacle Limitation Surface:

An Obstacle Limitation Surface (OLS) is a defined three-dimensional surface that establishes the limits to which objects may project into the airspace around an aerodrome (airport).

It ensures the safety of aircraft, and thereby the passengers and crews aboard them, while taking off or landing, or while flying in the vicinity of an airport.

What does the Aerodrome Regulation say:

The Civil Aviation Aerodrome Regulation 2024 states that **new objects or extensions of existing objects** shall not be permitted above the obstacle limitation surfaces except when, in the opinion of the Authority, an object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.

• When Do You Need Clearance?

You must apply for Aviation Height Clearance (AHC) if:

- Structure is over 10m high within 5 km of the airport
- Structure is 46m or more within 10 NM (18.5 km) of the airport
- Any object penetrates an **Obstacle Limitation Surface (OLS)**

Consult the Clearance Decision Guide below (page 3) for more information

You must seek clearance or notify if:

- Laser below 3000m above ground level and within 18,500m from the airport (Seek clearance)
- Weapons above 45m within 15,000m from the airport (Notify)
- Pyrotechnics at or above 45m within 10km,
- at or above 120m beyond 15km from the airport. (Seek clearance)

Consult the Clearance Decision Guide (flowchart) below (page 3) for more information.

How to Apply

- 1. **Get the Form** Obstacle Evaluation Application Form (FSS-AGA-FORM-OE)
 - o Available at GCAA offices or at www.gcaa.aero
- 2. **Provide Details** location (coordinates), height, type of structure, contacts.
- 3. **Submit to GCAA** Department of Flight Safety Standards, at Banjul International Airport, Yundum
- 4. **Payment** Make the necessary payment (if applicable)
- 5. **For using lasers, pyrotechnics, or weapons-** Formally writes to Director General of GCAA and specify the intended location (nearby prominent feature or coordinates), proposed time, proposed trajectory (height), your contact details and submit to Department of Flight Safety Standards, at Banjul International Airport.

★ GCAA will conduct an aeronautical study or factor certain considerations before issuing clearance.

Contact Us

Gambia Civil Aviation Authority Department of Flight Safety Standards

Tel: 2958187] | Email: aceesay@gcaa.aero / adamacsay76@gmail.com

www.gcaa.aero

Applicability

The Aviation Height Clearance (AHC) applies to any new object or extension of an existing object that meets the criteria outlined in the flowchart below.

Clearance Decision Guide (Flowchart) Steps:

Start

- 1. Are you planning to build, install, or erect a structure near an airport?
 - No → ✓ No clearance needed → End
 - Yes → Continue
- 2. Is the structure within 5 km of the airport and taller than 10 m?
 - Yes → Apply for Aviation Height Clearance (AHC) → End
 - No → Continue
- 3. Is the structure 46 m or higher within 10 NM (18.5 km) of the airport?
 - Yes → Apply for AHC → End
 - No → Continue
- 4. Is it a highway, railroad, or other transverse way for mobile objects, and could the adjusted height of mobile objects (roads: +4.8 m, railways: +5.4 m, or highest object) exceed the limits in steps 2 or 3?
 - Yes → Apply for AHC → End
 - No → Continue
- 5. Does the structure penetrate an Obstacle Limitation Surface (OLS)?
 - Yes → Apply for AHC → End
 - No → Continue
- 6. Is it a structure that may discharge efflux at >4.3 m/s within an OLS or higher than 60 m above ground (e.g., industrial chimneys, stacks, ventilation exhaust)?

- Yes → Apply for AHC → End
- No → Continue
- 7. Are you planning to use a Laser near the airport?
 - Yes → Apply for Clearance to Use Laser → End
 - No → Continue
- 8. Are you planning to use Pyrotechnics (fireworks) near the airport?
 - Yes → Apply for Clearance to Use Pyrotechnics → End
 - No → Continue
- 9. Are you planning to use Weapons that fire/launch projectiles near an airport?
 - Yes → Motify GCAA → End
 - No → ✓ No Notification needed → End

Legend / End Result:

- a) Structures → AHC
- b) Highways/railways with tall objects → AHC
- c) Efflux structures (chimneys, stacks, vents) → AHC
- d) Lasers → Clearance for Laser Operation
- e) Pyrotechnics → Clearance for Pyrotechnic Operation
- f) Weapons → Notification to GCAA
- g) Otherwise → No clearance required

Example Scenario:

- **Structure:** 45 m tall tower
- **Distance from Airport Reference Point (ARP):** 7 km

Check against the steps/requirements:

- 1. Within 5 km and taller than 10 m?
 - \circ No (7 km away) → Continue
- 2. 46 m or higher within 10 NM (~18.5 km)?
 - \circ No (45 m) \rightarrow Continue
- 3. Does it penetrate an OLS?
 - o Only GCAA can confirm. If the 45 m tower does **not** penetrate any defined OLS → Continue

Result: According to this decision flow, no Aviation Height Clearance (AHC) is required, but the penetration of OLS can only be determined by GCAA.

Important Note:

Even if AHC isn't triggered by height or distance alone, you must consult GCAA to ensure the structure:

- Does not penetrate any OLS.
- Does not interfere with instrument procedures or navigable airspace.

Bottom line: A 45 m tower at 7 km from the airport could be acceptable and might not require AHC but GCAA confirmation is required to ensure it does not penetrate OLS nor does it poses hazard to air navigation.