

GHANA CIVIL AVIATION AUTHORITY

ADVISORY CIRCULAR AC 28-009

REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS) NO FLY ZONES

SECTION 1 GENERAL

1.1 PURPOSE

This Advisory Circular (AC) provides guidance to individuals and certified organizations regarding the geophysical areas and specific locations where it has been determined by the Ghana Civil Aviation Authority (GCAA) and the Ministry of National Security to be high risk or restricted operation zones hereby referred to as "RPAS No Fly Zones".

1.2 STATUS OF THIS ADVISORY CIRCULAR

This AC is an original issuance.

1.3 BACKGROUND

- 1. Article 9 of the Convention on International Civil Aviation stipulates the following:
 - a. Each contracting State may, for reasons of military necessity or public safety, restrict or prohibit uniformly the aircraft of other States from flying over certain areas of its territory, provided that no distinction in this respect is made between the aircraft of the State whose territory is involved, engaged in international scheduled airline services, and the aircraft of the other contracting States likewise engaged. Such prohibited areas shall be of reasonable extent and location so as not to interfere unnecessarily with air navigation. Descriptions of such prohibited areas in the territory of a contracting State, as well as any subsequent alterations therein, shall be communicated as soon as possible to the other contracting States and to the International Civil Aviation Organization.
 - b. Each contracting State reserves also the right, in exceptional circumstances or during a period of emergency, or in the interest of public safety, and with immediate effect, temporarily to restrict or prohibit flying over the whole or any part of its territory, on condition that such restriction or prohibition shall be applicable without distinction of nationality to aircraft of all other States.
- 2. The Ghana Civil Aviation Authority (GCAA), in addressing the use of RPAS in and into the State of Ghana has provided the Ghana Civil Aviation Directives Part 28 wherein the Authority and the Ghana Civil Aviation (Security) Directives which address the security risks and threats arising from the relationships between the State and its Aviation Industry.

1.4 APPLICABILITY

The guidance in this AC is applicable to the following:

- A. Drone/RPAS operators who intend to utilize a drone for Recreational, Private or Commercial Use.
- B. Applicants of Special Authorization according to GCADs Part 28 Subsection 28.
- C. Foreign Nationals who intend to use their RPAS temporarily in Ghana.
- D. Any other person who intends to use RPAS in the State of Ghana.

1.5 RELATED DIRECTIVES

The following directives are directly applicable to this guidance—

- Ghana Civil Aviation Directives Part 28
- Ghana Civil Aviation (Security) Directives

1.6 Related Reading Material

For further information on this topic, persons are advised to review the following publications and regulatory requirements –

- 1. Ghana Civil Aviation Authority
 - GCAA Aeronautical Informational Publication (AIP)
- 2. International Civil Aviation Organization (ICAO)
 - ICAO Manual on Remotely Piloted Aircraft Systems (RPAS) (Doc 10019)
 - Annex 17, Security
 - Doc 8973, Aviation Security Manual

1.7 ACRONYMS

The following acronyms and abbreviations are used in this advisory circular—

- 1) AC Advisory Circular
- 2) BVLOS Beyond Visual Line of Sight
- 3) **CONOPS –** Concept of Operations
- 4) GCAA Ghana Civil Aviation Authority
- 5) GCADs Ghana Civil Aviation Directives
- 6) ICAO International Civil Aviation Organization
- 7) MTOW Maximum Take-off Weight
- 8) **OEM** Original Equipment Manufacturer
- 9) **OPSPECS –** Operations Specifications
- 10) **POPS –** Prospective Operator Pre-Assessment Statement
- 11) ROC RPAS Operator Certificate
- 12) ROM RPAS Operator Manual
- 13) RPAS Remotely Piloted Aircraft Systems

1.8 Understanding The Process

This AC provides aid in identifying and ensuring safe operation of RPAS in the State of Ghana without undue encroachment into locations herein termed as "RPAS No Fly Zones".

- It is essential to understand that these areas are hereby specified to prevent illegal use of RPAS which could contribute to criminal offences.
- These places are also specified as an indication that, the use of RPAS in such cases as may require operation into these zones would require security clearances and special approvals from State Entities.
- The specification of these areas prevents the unauthorized usage of RPAS in a way which would pose significant risk to people or property.
- The Ghana Civil Aviation Authority reserves the right to amend the list of zones as advised by State and Security Agencies.

SECTION 2 CLASSIFICATION OF RPAS NO FLY ZONES

2.1 DANGER ZONES

Danger Areas are areas of military airspace often used for activities such as fighter pilot training, live ammunition training or weapons and systems testing (including GPS jamming exercises). The official definition is "An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified time.

2.2 PROHIBITED ZONES

Prohibited Areas are areas of airspace which for one reason or another have been prohibited from having aircraft enter them. The official definition is "An airspace of defined dimensions above the land areas or territorial waters of a State within which the flight of aircraft is prohibited".

2.3 CONTROLLED AIRSPACE, AERODROMES AND AIRPORTS

The Aerodrome Traffic Zones surrounding smaller airports and aerodromes that do not have additional controlled airspace. The official definition of controlled airspace is "An airspace of defined dimensions within which air traffic control services is provided in accordance with the airspace classification". You must not fly in these areas without prior permission from the air traffic service provider controlling that airspace.

2.4 RESTRICTED ZONES

Restricted Areas protect sensitive locations. The official definition is "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."

2.5 MILITARY AERODROME TRAFFIC ZONES

Military Aerodrome Traffic Zones, similar to civil Aerodrome Traffic Zones, typically protect military aerodromes in the same way.

SECTION 3 RPAS NO FLY ZONES

3.1 CONDITIONS

- a) No RPAS Operator shall operate within a 10 km distance from the boundaries of military, police, prison, or national security facilities without prior approval from the appropriate authorities.
- b) No RPAS Operator shall operate within a 10 km radius from an airport or helipad having operational control with published Instrument Flight Procedure, or a 5 km radius from an airport or helipad without a published Instrument Flight Procedure without prior approval from the appropriate authorities.
- c) No RPAS Operator shall operate within a 1 km distance from the boundaries of other indicated facilities or within line of sight of these facilities, whichever is greater, without prior approval from the appropriate authorities.
- d) Any facility that falls within the airport, military, police or national security restriction zones shall be handled and governed by the No-Fly Zone Rules of that restriction zone.

3.1 STATE FACILITIES / PROPERTIES

SRL	FACILITIES	LOCATION	REMARKS
1.	SEAT OF GOVENMENT	ACCRA	
2.			
3.			

3.2 AERODROMES, AIRPORTS AND AIRSTRIPS

SRL	FACILITIES	LOCATION	REMARKS
1.	KOTOKA INTERNATIONAL AIRPORT	ACCRA	
2.	KUMASI AIRPORT	KUMASI	
3.	TAKORADI AIRPORT	SEKONDI-TAKORADI	
4.	TAMALE AIRPORT	TAMALE	
5.	WA AIRPORT	WA	
6.	HO AIRPORT	НО	
7.	AFIENYA AIRFIELD	TEMA	
8.	SUNYANI AIRPORT	SUNYANI	
9.	NAVRONGO AIRPORT	PAGA	
10.	YENDI AIRPORT	YENDI	
11.	ADA AIRSTRIP	ADA	
12.	BOLE AIRSTRIP	BOLE	

13.	OBUASI AIRSTRIP	OBUASI	
14.	WENCHI AIRSTRIP	WENCHI	
15.	ADANSI AIRSTRIP	ADANSI	

3.3 Power Generation Stations

SRL	FACILITIES	LOCATION	REMARKS
16.	TAKORADI THERMAL POWER STATION	TAKORADI	
17.	KPONE THERMAL POWER STATION II AND I	KPONE	
18.	TEMA THERMAL POWER STATION	TEMA	
19.	NZEMA SOLAR POWER STATION	AIWIASO VILLAGE	
20.	BXC SOLAR POWER STATION	GOMOA	
21.	GOMOA ONYAADZE SOLAR POWER STATION	GOMOA	
22.	NAVRONGO SOLAR POWER STATION	NAVRONGO	
23.	SONON ASOGLI THERMAL POWER STATION	KPONE	

3.4 Hydroelectric Station

SRL	FACILITIES	LOCATION	REMARKS
1.	TAKORADI THERMAL POWER STATION	AJENA	
2.	KPONE THERMAL POWER STATION II AND I	BUI	
3.	TEMA THERMAL POWER STATION	AKUSE	

3.5 FORTS AND CASTLES

3.5.1 WESTERN REGION

SRL	FACILITIES	LOCATION	REMARKS
1.	FORT APOLLONIA	BEYIN	
2.	FORT ST ANTHONY	AXIM	
3.	FORT GROSS FRIEDRICKSBURG	PRINCETOWN	
4.	FORT DOROTHEA	AKWIDA	

5.	FORT METAL CROSS	DIXCOVE	
6.	FORT BATENSTEIN	BUTRE	
7.	FORT ORANGE	SEKONDI	
8.	FORT ST SEBASTIAN	SHAMA	

3.5.2 CENTRAL REGION

SRL	FACILITIES	LOCATION	REMARKS
1.	THE FORT AT BRITISH	KOMENDA	
2.	FORT VENDENBURG	KOMENDA	
3.	CASTLE OF ST GEORGE	ELMINA	
4.	FORT STJAGO	ELMINA	
5.	CAPE COAST CASTLE	CAPE COAST	
6.	FORT VICTORIA	CAPE COAST	
7.	FORT ROYAL	CAPE COAST	
8.	FORT WILLIAM	CAPE COAST	
9.	FORT MCCARTHY	CAPE COAST	
10.	FORT FREDERICKSBURG	AMANFUL	
11.	FORT NASSAU	MOURI	
12.	FORT WILLIAM	ANOMABO	
13.	THE LITTLE FORT	ANOMABO	
14.	FORT AMSTERDAM	ABANDZI	
15.	FORT PATIENCE	APAM	
16.	FORT GOOD HOPE	SENYA BREKU	

3.5.3 GREATER ACCRA REGION

SRL	FACILITIES	LOCATION	REMARKS
1.	JAMES TOWN	JAMES TOWN	
2.	USSHER FORT	USSHER TOWN	

3.	CHRIATIANBORG CASTLE	OSU	
4.	FORT AUGUSTABORG	TESHIE	
5.	FORT VERNON	PRAMPRAM	
6.	FORT FREDENSBORG	OLD NINGO	

3.5.4 VOLTA REGION

SRL	FACILITIES	LOCATION	REMARKS
1.	FORT PRINZENSTEN	KETA	

3.5.5 ASHANTI REGION

SRL	FACILITIES	LOCATION	REMARKS
1.	THE FORT	KUMASI	

3.6 MUSEUMS

SRL	FACILITIES	LOCATION	REMARKS
1.	THE NATIONAL MUSEUM	ACCRA	
2.	MUSEUM OF SCIENCE AND TECHNOLOGY	ACCRA	
3.	VOLTA REGIONAL MUSEUM	НО	
4.	CAPE COAST CASTLE MUSEUM	CAPE COAST	
5.	MUSEUM OF NZEMA CULTURE AND HISTORY	NZEMA	
6.	UPPER EAST REGIONAL MUSEUM	BOLGATANGA	
7.	ST GEORGE CASTLE MUSEUM	ELMINA	
8.	USSHER FORT MUSEUM	ACCRA	
9.	KUMASI FORT (GHANA ARMED FORCES MUSEUM)	KUMASI	
10.	KWAME NKRUMAH MUSEUM	ACCRA	
11.	MANHYIA PALACE MUSEUM	KUMASI	
12.	JAVA MUSEUM	ELMINA	
13.	NEW JUABEN PALACE MUSEUM	KOFORIDUA	
14.	YAA ASANTEWAA MUSEUM	EJISU	

3.7 PORTS AND HARBOUR

SRL	FACILITIES	LOCATION	REMARKS
1.	PORT OF TAKORADI	TAKORADI	
2.	PORT OF ELMINA	ELMINA	
3.	PORT OF TEMA	TEMA	
4.	PORT OF SALTPOND	SALTPOND	

3.8 COMPANIES

SRL	FACILITIES	LOCATION	REMARKS
1.	TEMA OIL REFINERY	TEMA	
2.	VALCO	TEMA	
3.	GH GAS	ATUABO	
4.	ATL	TEMA	

3.9 GHANA NAVY

SRL	FACILITIES	LOCATION	REMARKS
1.	NAVAL HEADQUARTERS	ACCRA	
2.	WESTERN NAVAL COMMAND	SEKONDI	
3.	EASTERN NAVAL COMMAND	TEMA	
4.	NAVAL TRAINING COMMAND	NUTEKPOR	

3.10 OP DETACHMENTS

SRL	FACILITIES	LOCATION	REMARKS
1.	NEW TOWN		
2.	JEWI WHARF		
3.	BUI		
4.	YEJI		
5.	KETEKRACHI		
6.	DAMBAI		
7.	TEPA ABOTOASE		
8.	KPANDO TORKOR		
9.	AKOSOMBO		
10.	АТІМРОКИ		
11.	ADA FOAH		
12.	AFLAO		

3.11 GHANA AIRFORCE

SRL	FACILITIES	LOCATION	REMARKS
1.	AIR FORCE HEADQUARTERS	ACCRA	
2.	AIR FORCE BASE	ACCRA	
3.	AIR FORCE BASE	TAKORADI	
4.	AIR FORCE BASE	TAMALE	

3.12 GHANA POLICE

SRL	FACILITIES	LOCATION	REMARKS
1.	NATIONAL POLICE HEADQUARTERS	ACCRA	
2.	ALL REGIONAL POLICE HEADQUARTERS	ALL REGIONS	
3.	NATIONAL POLICE TRAINING SCHOOL	TESANO	
4.	POLICE COUNTER TERRORISM ENACTMENT AND CONCENTRATION CAMP	HUHUNYA	
5.	POLICE PUBLIC SAFETY TRAINING SCHOOL	PWALUGU	
6.	ALL PRISONS IN GHANA	ALL REGIONS	

3.13 DETACHMENTS

SRL	FACILITIES	LOCATION	REMARKS
1.	НО		
2.	KUMASI		
3.	WA		

3.14 PRISONS

TBD

End of Advisory Circular