



CONCEPT NOTE: HIGH ALTITUDE OPERATIONS (HAOs) WORKSHOP



**THEME: “UNLOCKING THE STRATOSPHERE: UTILITY FOR HIGH ALTITUDE
OPERATIONS IN KENYA”**

2 – 3 September 2025

JW Marriott Hotel, Nairobi



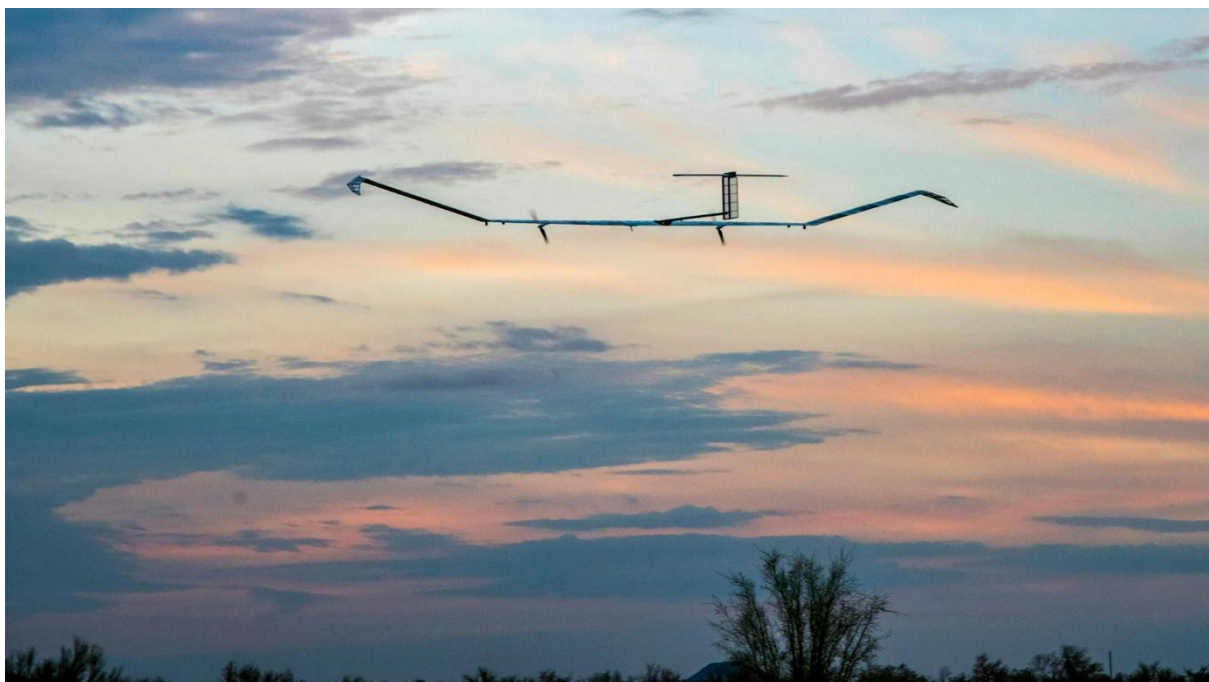
1. Introduction/Background

High Altitude operations are operations below the Karman line and above the International Civil Aviation Organisation (ICAO) controlled Airspace of FL600. This area which exists within the stratosphere at heights of 17- 30 Km is a grey area for national territorial control and in most cases it serves as a transitional corridor for cruise missiles. The area is deemed to be a suborbital flight corridor, and only specialized platforms have the capacity to operate in it.

Notable platforms with such capability include High Altitude Pseudo Satellites (High Altitude Platforms) famously referred to as HAPS, High Altitude Balloons, Airships, Amateur Sounding Rockets among others. These systems have onboard power generation capabilities using solar energy and can support services traditionally supported by Satellites and Orbital vehicles.

HAPS have the potential of supporting the following services and applications: Communications relay, Earth Observation, weather instrumentation, environmental monitoring, natural resources management, disaster management, border security management and intelligence, surveillance and reconnaissance applications, among others.

Kenya has had experience with high altitude platforms since 2020 through collaborative partnerships on the following: Google Loon project from July 2020 to March 2021; Aerostar high altitude balloon projects from June – August 2023, ALTOO Zephyr high altitude platform from April 2024 to date.



2.Aim of the Conference

The aim of the conference is to:

1. Establish a cohesive national framework for High Altitude Operations (HAOs) that enhances operational efficiency, safety, and security through improved procedures and regulatory clarity.
2. Raise awareness, foster stakeholder collaboration, and promote the adoption of High Altitude Platform Systems (HAPs) for socio-economic, civil, and defence applications in Kenya.



3.Theme of the Conference

The theme of the Conference is “**Unlocking the Stratosphere: Utility for High Altitude Operations in Kenya.**”

4. Key Objectives

The objectives of the conference are to:

1. Assess the current status, successes, and challenges of High Altitude Operations (HAOs) in Kenya.
2. Develop and harmonise national guidelines to regulate and oversee HAOs.
3. Enhance awareness of High Altitude Platform Systems (HAPs) and their socio-economic, civil, and defence applications.
4. Foster stakeholder engagement and collaboration to shape the future of HAOs in Kenya.
5. Identify synergies and propose strategic measures to support the growth and sustainability of the HAO sector.



5. Methodology

The conference will be conducted through presentations, plenary discussions sessions and breakout sessions to deliberate on key issues affecting high altitude operations in Kenya.

6. Target Participants

The Conference is expected to bring together key stakeholders and players in HAOs, this includes but not limited to KDF, NIS, KSA, KCAA, CA, KMD, KRA, State Department of Aviation and Aerospace Development and other invested private sector players with potential to benefit from HAPs such as the Telcos.

7. Expected Outcome

This workshop is expected to deliver tangible outcomes that will shape the future of High-Altitude Operations in Kenya. Through collaborative dialogue, expert insights and stakeholder engagement, the following key outcomes are anticipated:

- A Standardised HAOs framework that integrates the operational needs of diverse stakeholders.
- Definition of immediate action plans and strategic steps to accelerate the growth and integration of HAO sector in Kenya.
- Recommend policy frameworks that will support research, innovation and testing of HAO capabilities.
- Increased stakeholder awareness on HAPS, their strategic importance and their potential to contribute to the Kenya's socio-economic development.
- Clarification of roles and responsibilities within a multi-agency framework for HAOs, supported by a national operational guideline.
- Review and enhance existing operation procedures to improve efficiency, safety and security in HAO activities.
- Strategies for seamless integration of HAOs into existing national operations without compromising safety and security.
- Create a predictable environment for HAO to operate and coexist in Kenyan regulatory environment and airspace.





8. Programme

Day 1

Time	Activity	Facilitator
07:00 - 08:30 AM	Arrival & Registration	KSA Secretariat & AALTO
08:30 - 09:00 AM	Arrival of the Chief Guest	
09:00 - 09:05 AM	Word of Prayer & National Anthem	KSA Secretariat
09:05 - 10:00 AM	Remarks	-Welcome by KSA DG Remarks by AALTO CEO. Remarks by KCAA DG Comd KAF. Official Opening Remarks Guest of Honour
10:00- 10:30 AM	Photo opportunity – Coffee Break & Networking	
10:30 - 12:00 PM	1.Introduction to High Altitude Platforms (HAP): Definitions, History, and Global Applications and Capabilities of HAPS, Opportunities and Challenges	AALTO
12:00 -12:30 PM	Experiences in supporting Zephyr Ops in Kenya.	KSA
12:30 - 1:00 PM	Responsibility and Liability	KCAA
1:00 - 2:00 PM	Lunch Break	
2:00 – 2:30PM	Frequency Requirements for HAOs	CA
2:30- 3:00 PM	Safety and Airworthiness of HAOs	KCAA
3:00 – 3:30PM	Approval Process for HAOs and continuous Supervision	KSA
3:30- 4:00 PM	Integration of HAPS with Existing Navigation systems to provide continuous visibility	AALTO



Day 2

Time	Activity	Facilitator
07:00 - 8:30 AM	Scene setting for break out session	MC
08:30 - 10:00 AM	Break out Session	Moderators
	Group 1: Security	Moderators
	Group 2: Responsibility and liability on HAOs	
	Group 3: Airworthiness and Payload Inspection	
	Group 4: Flight Operations: Launch, Crash and Rescue Coordination, Actual mission International Operations, Emergency and rescue coordination	
	Group 5: Personnel and Infrastructure Requirements.	
10:00 - 10:20 AM	Tea Break	
10:20 - 11:10 AM	Break-out sessions' summary & Key Takeaway Discussion	Breakout sessions representatives
11:10 - 12:30 PM	Feedback from AALTO & GoK	MC
12:30 - 2:00 PM	Lunch Break	
2:00 - 3:00 PM	Way Forward	MC
3:00 - 3:30 PM	Closing Remarks & Appreciation	
3:30 - 4:00 PM	Departure at Own Pleasure	ALL

