

Possible applications of High Altitude Platform Systems for the security of South America and South Europe

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Abstract: High Altitude Platform Systems, or pseudosatellites are atmospheric, specifically, stratospheric Unmanned Aerial Systems. These systems can provide services comparable to outer space satellite systems, however, they can be realized without the need of an orbital launch capability. While they geographical coverage is limited compared to space satellites, they can provide persistent coverage over a given area for a long time, weeks or even months. Pseudosatellites can carry Earth Observation or radiocommunication payloads, just like satellites.

In my presentation I will provide an overview of HAPS capabilities and potential applications, based on an imaginary operational scenario, namely, the reconnaissance support of a law enforcement operation to defend offshore gas facilities from a planned attack by an eco-terrorist group near Venezuela. At the same time, HAPS can support any defence, emergency response or natural resource observation operation.

The complex air-sea operation scenario will be presented using a simulation generated with the AGI Systems ToolKit multi-domain mission simulator software. My presentation will contain maps and pictures of the operation, and the videos will be presented via the <https://horvath.space> website.

Abstract in Spanish or Hungarian (Presentation Language)

Elsődleges szerző: HORVÁTH, Attila

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