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## Bilateral Legal Memo



# Headquarters Joint Operations Command Legal U.S. Indo-Pacific Command Staff Judge Advocate (J06)

Subject: High-Altitude Balloon Operations

## Background:

- This memo is a shared assessment of international law by the legal staffs of Headquarters
  Joint Operations Command (HQJOC) and U.S. Indo-Pacific Command (USINDOPACOM).
  Its purpose is to facilitate combined operational planning and synchronize legal advice to
  HQJOC and USINDOPACOM leadership on international law applicable to high-altitude
  balloon (HAB) operations, including those conducted by the Australian Defence Force
  (ADF) and USINDOPACOM.
- Nation state use of balloons for military and intelligence purposes dates back to the late 18<sup>th</sup> century.<sup>1</sup> Today's HABs perform similar functions to balloons used throughout history, despite operating at much higher altitudes with the benefit of modern technology. The advanced capabilities of modern HABs and other high-altitude platforms do not obviate the responsibility of nation state users to ensure safety of flight and legal compliance.
- USINDOPACOM continues to train and operate with HABs in accordance with international law.<sup>2</sup> Australia is in the process of testing and acquiring HABs.<sup>3</sup> USINDOPACOM employed HABs during exercise BALIKITAN with the Armed Forces of the Philippines in April 2022 to enhance combined maritime domain awareness and identify potential threats.

#### Discussion:

- HABs are 'aircraft' under international law, and relevantly the Chicago Convention defines 'aircraft' as 'any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface'. An object that ascends, descends, and maintains flight within and because of the atmosphere falls within that definition and is regarded as an aircraft operating within airspace. While the delimitation between airspace and outer space is unsettled under international law, 4 HABs and related high-altitude platforms operate in airspace and do not cross into outer space.
- The International Civil Aviation Organization (ICAO) provides specific standards for civil operation of balloons.<sup>5</sup> Although ICAO has few civil aviation requirements when flying above 60,000 feet, a balloon nevertheless remains an aircraft subject to international law and

<sup>&</sup>lt;sup>1</sup> "Air Balloons in the Civil War" https://www.nps.gov/articles/000/air-balloons-in-the-civil-war.htm#:~:text=Nearly%2070%20years%20later%20during,artillery%20fire%20on%20enemy%20positions.

<sup>&</sup>lt;sup>2</sup> U.S. Army photo dated April 1, 2022, available at <a href="https://www.dvidshub.net/image/7127744/usarpac-launches-high-altitude-balloon-during-balikatan-22">https://www.dvidshub.net/image/7127744/usarpac-launches-high-altitude-balloon-during-balikatan-22</a>; U.S. Army Space and Missile Defense Command, High Altitude information sheet, available at: <a href="https://www.smdc.army.mil/Portals/38/Documents/Publications/Fact Sheets/HA.PDF">https://www.smdc.army.mil/Portals/38/Documents/Publications/Fact Sheets/HA.PDF</a>.

<sup>&</sup>lt;sup>3</sup> Australia Ministry of Defence media release dated June 9, 2020, available at: <a href="https://www.minister.defence.gov.au/minister/lreynolds/media-releases/high-altitude-balloon-launch-sends-sensors-soaring-stratosphere">https://www.minister.defence.gov.au/minister/lreynolds/media-releases/high-altitude-balloon-launch-sends-sensors-soaring-stratosphere</a>.

<sup>&</sup>lt;sup>4</sup> The airspace / outer space divide is not defined in law, but proposals range from 50 miles (264,000 feet) up to 100 kilometers (330,000 feet, the Karman line).

<sup>&</sup>lt;sup>5</sup> ICAO, Appendix 4 of Annex 2 to the Chicago Convention on Civil Aviation.

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other rules and norms. One explicit requirement under international law is that civilian remotely piloted aircraft (including balloons) "...shall not be operated across the territory of another State without appropriate authorization issued by each State in which the flight is to operate." The same requirement is also true of civilian unmanned free balloons, unless they are "...a light balloon used exclusively for meteorological purposes and operated in the manner prescribed by the appropriate authority."

• Although military-operated balloons are State aircraft exempt from civil aircraft requirements, international law also explicitly prohibits State aircraft from flying "over the territory of another State ... without authorization by special agreement or otherwise." This sovereign national airspace extends over land territory, territorial seas and archipelagic waters.

#### Conclusion:

- HABs operated by the ADF, USINDOPACOM, and other militaries are State aircraft under international law subject to the same requirements as other State aircraft.
- As such, any State's use of HABs must conform to international rules and norms governing navigational freedoms and safety of flight. This includes the exercise of due regard as well as observance of boundaries of national airspace.<sup>10</sup> A foreign State's permission is required before operating a HAB over its territory.
- The legal staffs of HQJOC and USINDOPACOM are committed to working together to uphold international rules and norms. To that end, the legal staffs of HQJOC and USINDOPACOM will continue to share information, exchange ideas, and collaborate on combined legal assessments what advance shared interest in a Free and Open Indo-Pacific.

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<sup>6</sup> ICAO, Article 1.2, Appendix 4 of Annex 2 to the Chicago Convention on International Civil Aviation. See also Article 8 for further restrictions.

<sup>7</sup> ICAO, Article 2.2, Appendix 5 of Annex 2 to the Chicago Convention on International Civil Aviation. See also Article 8 for further restrictions.

<sup>8</sup> Article 3(c), Chicago Convention on International Civil Aviation.

<sup>&</sup>lt;sup>9</sup> Article 2, Chicago Convention on International Civil Aviation.

<sup>&</sup>lt;sup>10</sup> Article 3, Chicago Convention on International Civil Aviation.