

TOPIC: HIGH-ALTITUDE BALLOONS

BLUF

- The People's Republic of China's (PRC) high-altitude balloon (HAB) surveillance operations violated international law and the sovereignty of more than 40 countries across five continents.
- The PRC sought to justify violation of U.S. sovereignty by characterizing its HAB as a "civilian airship" used for "meteorological" purposes while blaming "force majeure" for "unintended entry" – not only are these claims false, they do not provide a legal justification even if true.
- Irrespective of the PRC's attempts at legal justification, HABs are aircraft under international law subject to the rules and norms governing safety of flight and observance of national boundaries.
- Under international law every nation has complete and exclusive sovereignty over the airspace above its territory.
- Every nation may take measures within its airspace to mitigate threats posed by unlawful HAB surveillance.
- By propagating the term "near space" in various publications, the PRC likely aims to foment a gray zone in which to execute unlawful surveillance under a false veneer of legitimacy.
- There is no "near space" in international law – only airspace and outer space, and HABs fly in airspace.
- International law does not specify where airspace ends and space begins, but all proposals demarcating the airspace / outer space divide begin at altitudes significantly higher than those where HABs operate.
- In contrast to the PLA's unlawful use of HABs, the United States and its allies have employed HABs in full compliance with international law.

WHY THIS MATTERS

- The PRC's HAB surveillance operations undermine international law and the rules-based international order.
- If left unchecked, the PRC and other autocratic regimes could establish a new norm whereby they are emboldened to take similar action to the detriment of sovereign rights and international peace and security.

DETAILED DISCUSSION

1. Background

- On 4 Feb 2023, U.S. forces conducted a successful operation to take down a PRC HAB above the territorial sea off South Carolina. Following the operation, a senior U.S. defense official confirmed in a public statement that:ⁱ
 - The PRC's HAB purposefully traversed the U.S. and Canada for surveillance purposes.
 - Another HAB was observed operating over central and South America.
 - These HABs are "all part of a PRC fleet of balloons developed to conduct surveillance operations, which have also violated the sovereignty of other countries...often at the direction of the PLA."
 - Over the past several years, PRC HABs were spotted "over countries across five continents, including in East Asia, South Asia, and Europe."
 - PRC intrusions that violate U.S. sovereignty and the sovereignty of other countries are "unacceptable."
- Secretary of State Blinken later commented that "Beijing violated international law and U.S. sovereignty," and that "countries across five continents have also had surveillance balloons overfly their territory."ⁱⁱ
- A 4 Feb 2023 statement by Secretary of Defense Austin noted that the HAB in U.S. airspace was "being used by the PRC in an attempt to surveil strategic sites in the continental United States."ⁱⁱⁱ

- On 9 Feb 2023, U.S. officials said that the HAB shot down by U.S. forces was equipped to collect signals intelligence (SIGINT) for a People's Liberation Army (PLA) run surveillance program that had targeted more than 40 countries.^{iv}
- The U.S. Congress condemned the PRC for the “brazen violation” of U.S. sovereignty and efforts to “deceive the international community through false claims about its intelligence collection campaigns.”^v

2. Assessment of the PRC's HAB Operations and the U.S. Response

- Following public disclosure of the HAB intrusion into U.S. airspace, the PRC sought to justify its violation of U.S. sovereignty by characterizing the HAB as a “civilian airship used for research, mainly meteorological, purposes” while blaming “force majeure” for the “unintended entry” into U.S. airspace.^{vi}
- Not only are these claims “false”,^{vii} they do not provide a legal justification for the PRC's actions even if true.
- Under international law, force majeure is an event that is “unforeseeable, uncontrollable, and makes the performance of an obligation impossible.”^{viii}
- Privileges to enter national airspace due to force majeure are “subject to the control” of the airspace owner.^{ix}
- The PRC's pattern of sovereignty violations makes any claim to actual force majeure implausible, but force majeure or not, the PRC violated international law (and U.S. law)^x by not notifying U.S. authorities or making any publicly apparent attempt to terminate the reported SIGINT payload.^{xi} Instead, the PRC reported the HAB's alleged distress only when U.S. officials publicly disclosed its unlawful presence in U.S. airspace.
- The PRC's claim that the HAB served “mainly meteorological purposes” is also not a legal excuse.^{xii} While international law affords some leeway for “light balloons” used “exclusively” for meteorological purposes, the dimensions of the PRC's HAB far exceed that of a light balloon.
- The PRC's characterization of the HAB as an “airship” (distinguishable from an “unmanned free balloon” by virtue of a power-driven capacity to steer) further undermines any notions of “light balloon” status.^{xiii}
- The apparent size of the PRC's fleet of HABs place them firmly in the category of “aircraft” subject to the rules and norms applied to aircraft under international law, even when operated at high altitudes in uncontrolled airspace.^{xiv}
- In fact, both international law and U.S. law include balloons within the definition of “aircraft.”^{xv}
- In general, an object that ascends, descends, and maintains flight within and because of the atmosphere is an aircraft operating within airspace.
- Notwithstanding the PRC's claims to the contrary, the linkage by U.S. officials of the PRC's HAB surveillance program to the PLA means that the PRC's HABs are presumably State aircraft.
- Although State aircraft are not subject to civil aircraft standards, State aircraft are nonetheless prohibited by international law from flying “over the Territory of another State...without authorization.”^{xvi}
- Likewise, the parties to the Chicago Convention – including the PRC – “recognize that every State has complete and exclusive sovereignty over the airspace above its territory.”^{xvii}
- These requirements are reflected in U.S. law, which prohibits foreign military aircraft from flying in the United States unless “authorized by the Secretary of State.”^{xviii}
- U.S. law also provides authority for the Secretary of Defense to use certain means, including the use of reasonable force, to destroy, damage, or disable an unmanned aircraft system (UAS) or unmanned aircraft (UA) like the PRC HAB, necessary to mitigate the threat posed to the safety or security of a covered facility or asset.^{xix}
- The PRC's use of the HAB to surveil strategic Department of Defense sites (i.e. covered facilities) provided a domestic legal basis for the Secretary of Defense to authorize measures to take down the HAB.
- In addition, as a matter of international law, nations are not prohibited from taking action against an unmanned foreign HAB that enters and operates unlawfully in their airspace.^{xx}
- The measures taken by U.S. forces to mitigate the threat posed by the PRC's HAB were consistent with longstanding practice of States exercising jurisdiction in their territories and airspace in such circumstances.
- Despite the PRC's assertions to the contrary,^{xxi} U.S. authorities are under no obligation to return HAB debris acquired in accordance with U.S. law^{xxii} from areas within U.S. jurisdiction – this includes U.S. territory and territorial sea / airspace, and in certain circumstances may include international waters / airspace.^{xxiii}

3. Distinguishing Airspace and Outer Space

- Although “aircraft” including HABs operate in “airspace,”^{xxiv} recent open-source reports nevertheless reflect an effort by the PRC to sow confusion regarding the distinction between airspace and outer space.
- Of note, CNN reported that searches on CNKI, the PRC’s largest online academic database, show PRC researchers – military and civilian – published more than 1,000 papers and reports on “near space.”^{xxv}
- The term “near space” has no meaning in international law – there is only airspace and outer space.
- Propagation of the term “near space” could be an attempt by the PLA’s legal warfare arm to foment a gray zone in which to execute unlawful surveillance under a false veneer of legitimacy.
- Notwithstanding the PRC’s own admission that its HAB entered U.S. “airspace”, some PRC propaganda has gone so far as to claim that the Outer Space Treaty and its provisions on “exploration and use by all states” should be applied to HAB flights.^{xxvi}
- Such claims have no merit because while it is true that states do not agree on the exact altitude where airspace ends and space begins, all proposals demarcating airspace from outer space begin at altitudes significantly higher than those where HABs operate.^{xxvii}
- The lowest of these proposed divides begins at 50 miles (264,000 feet), and the most commonly used demarcation, the Karman Line, is at 100 kilometers (300,000 feet).
- The PRC’s HAB reportedly traversed U.S. airspace at or near 60,000 feet, well below the airspace/outer space divide under any reasonable interpretation of international law.^{xxviii}

4. Lawful and Responsible use of HABs by U.S. and Allied Forces

- In contrast to the PLA’s unlawful use of HABs and notwithstanding the PRC’s false claims that U.S. HABs overflowed PRC airspace,^{xxix} the United States and its allies have employed HABs in accordance with international law.
- As an example, the Armed Forces of the Philippines (AFP) and U.S. forces assigned to USINDOPACOM coordinated on the use of HABs for combined maritime domain awareness during Balikatan, a large-scale bilateral exercise that showcased partnership between the two joint forces from March 28-April 8 2022 in the Philippines.^{xxx}
- Owing to the fact that HABs operated by military forces are State aircraft under international law subject to the same requirements as all State aircraft, the AFP and USINDOPACOM ensured their cooperative use of HABs during Balikatan conformed to international law and standards governing navigational freedoms and safety of flight.
- USINDOPACOM coordinated extensively with AFP authorities and air traffic control to ensure the safety of people on the ground and civil and military aircraft operating nearby.
- Before the exercise, U.S. forces received authorization from the Philippine government to operate the HABs in Philippine national airspace as required by international law and Philippine domestic law.
- U.S. allies including Australia also use HABs responsibly in accordance with international law.^{xxxi}
- In a demonstration of combined commitment to upholding the rules-based international order, the legal staffs of USINDOPACOM and Australia’s Headquarters Joint Operation Command (HQJOC) collaborated on an August 2022 bilateral legal memo on international law applicable to HAB operations.^{xxxii}
- Of note, USINDOPACOM and HQJOC legal advisors agreed that HABs operate in airspace and do not cross into outer space, and that “any State’s use of HABs must conform to international rules and norms governing safety of flight. This includes the exercise of due regard as well as observance of boundaries of national airspace.”

GRAPHICS



Lawful use of HABs by U.S. forces in coordination with the Armed Forces of the Philippines during exercise Balikatan 2022.

Image Credit: PETTY OFFICER DARBI COLSON/U.S. ARMY

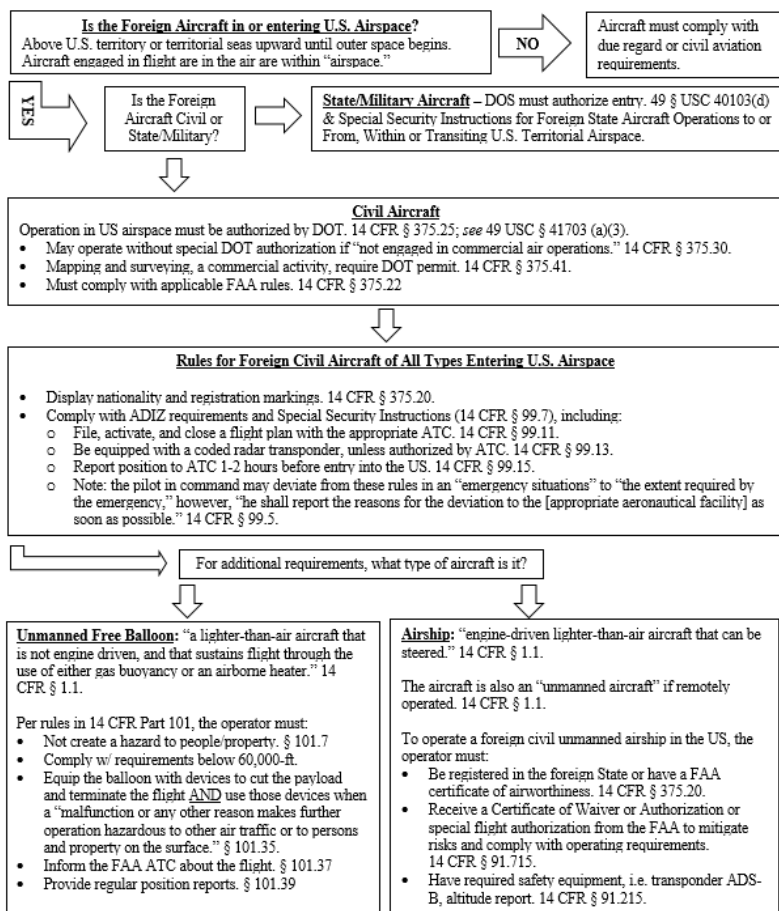


PRC HAB operating unlawfully over Billings, Montana on 1 Feb 2023.

Image Credit: Larry Mayer/The Billings Gazette via AP)

DOMESTIC LAW FLOWCHAT

Foreign Flights in U.S. Airspace under U.S. Law



PROPOSED COUNTER-LAWFARE APPROACH

- The PRC's HAB surveillance operations violated international law and the sovereignty of more than 40 countries across five continents.
- The PRC sought to justify violation of U.S. sovereignty by characterizing its HAB as a "civilian airship" used for "meteorological" purposes while blaming "force majeure" for "unintended entry" – not only are these claims false, they do not provide a legal justification even if true.
- Irrespective of the PRC's attempts at legal justification, HABs are aircraft under international law subject to the rules and norms governing safety of flight and observance of national boundaries.
- Under international law every nation has complete and exclusive sovereignty over the airspace above its territory.
- Every nation may take measures within its airspace to mitigate threats posed by unlawful HAB surveillance.
- By propagating the term "near space" in various publications, the PRC likely aims to foment a gray zone in which to execute unlawful surveillance under a false veneer of legitimacy.
- There is no "near space" in international law – only airspace and outer space, and HABs fly in airspace.
- International law does not specify where airspace ends and space begins, but all proposals demarcating the airspace / outer space divide begin at altitudes significantly higher than those where HABs operate.
- In contrast to the PLA's unlawful use of HABs, the United States and its allies have employed HABs in full compliance with international law.

ⁱ <https://www.defense.gov/News/Transcripts/Transcript/Article/3288618/senior-defense-official-and-senior-military-official-hold-an-off-camera-on-back/>

ⁱⁱ <https://www.state.gov/secretary-antony-j-blinken-and-nato-secretary-general-jens-stoltenberg-at-a-joint-press-availability-2/>

ⁱⁱⁱ <https://www.defense.gov/News/Releases/Release/Article/3288535/statement-from-secretary-of-defense-lloyd-j-austin-iii/>

^{iv} <https://apnews.com/article/chinese-balloon-military-involvement-e45c759cb00294e83989fa35970935bc>

^v <https://apnews.com/article/politics-united-states-government-china-beijing-f56da0416e019a2d32217af5334fc4cb>

^{vi} https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2535_665405/202302/t20230203_11019484.html

^{vii} <https://www.defense.gov/News/Transcripts/Transcript/Article/3288618/senior-defense-official-and-senior-military-official-hold-an-off-camera-on-back/>

^{viii} <https://jusmundi.com/en/document/publication/en-force-majeure>

^{ix} Convention on International Civil Aviation ("Chicago Convention"), Article 25. PRC's claim that the HASB was a "civilian airship" means it does not enjoy sovereign immunity, and as such, the Chicago Convention directly pertains.

^x 49 USC § 41703 (a)(3).

^{xi} See 14 CFR 101; See also ICAO, App. 4 to Annex 2 of the Chicago Convention.

^{xii} ICAO Appendix 4 Annex 2 to the Chicago Convention.

^{xiii} 14 C.F.R. 1.1 and ICAO Annex 2 to the Chicago Convention. Under both regimes, a balloon is a non-powered, lighter-than-air aircraft, while a powered, lighter-than-air aircraft is an "airship." Of note, the PRC blamed the "westerlies" and "limited self-steering capability" for the violation of U.S. airspace, but did not contend outright that power had been lost or steerage disabled.

^{xiv} Uncontrolled airspace refers to airspace not under air traffic control.

^{xv} 14 C.F.R. 1.1; ICAO Annex 2 to the Chicago Convention. Both U.S. and international law contemplate that balloons may operate at altitudes above 60,000.

^{xvi} Art. 3, Chicago Convention.

^{xvii} Art. 1, Chicago Convention.

^{xviii} 49 USC 40103(a)(d).

^{xix} The term "covered facility or asset" means any facility or asset that – (1) is identified by the Secretary of Defense, in consultation with the Secretary of Transportation with respect to potentially impacted airspace, through a risk-based assessment for purposes of Section 130i. (2) is located in the United States (including territories and possessions of the United States); and (3) directly relates to one of the nine DOD missions identified in Section 130i. See 10 U.S.C. 130i(j)(3)

^{xx} See the "Lotus Principle" as defined in the Max Planck Encyclopedia of Public International Law, ("[T]he Lotus principle [is] that States have the right to do whatever is not prohibited in international law.") <https://opil.ouplaw.com/abstract/10.1093/law:epil/9780199231690/law-9780199231690-e162?rskey=CBGIPS&result=1&prd=EPIL>

^{xxi} https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/202302/t20230207_11021532.html

^{xxii} 18 USC § 794.

^{xxiii} International law generally permits the prescription, adjudication, and enforcement of domestic law when "conduct outside [a State's] territory . . . has or is intended to have substantial effect within its territory" and when "certain conduct outside its territory by [foreign] nationals . . . is directed against the security of the State or against a limited class of other State interests." See Third Restatement of U.S. Foreign Relations Law, § 402(l)(c)(3).

^{xxiv} Under U.S. law, an object is an "aircraft" when it operates for flight "in the air." See 49 U.S.C. 1.1.

^{xxv} <https://www.cnn.com/2023/02/09/china/china-balloon-near-space-development-intl-hnk/index.html>

^{xxvi} <https://www.chinadaily.com.cn/a/202302/05/WS63df185ba31057c47ebacf49.html>

^{xxvii} The U.S. takes the position that "there is no need to seek a legal definition or delimitation for outer space." See statement of U.S. Delegation to 61st Session of the COPUOS Legal Subcommittee, March 29, 2022, avail. At: <https://vienna.usmission.gov/2020-copuos-lsc-u-s-on-the-definition-and-delimitation-of-outer-space/>. See also <https://www.forbes.com/sites/jillgoldenzel/2023/02/04/how-to-respond-to-chinas-illegal-trial-balloon/?sh=3b8a69f67dfb>

^{xxviii} <https://www.defense.gov/News/Transcripts/Transcript/Article/3288618/senior-defense-official-and-senior-military-official-hold-an-off-camera-on-back/>

^{xxix} https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/202302/t20230213_11024546.html

^{xxx} <https://www.dvidshub.net/image/7127744/usarpac-launches-high-altitude-balloon-during-balikatan-22>

^{xxxi} <https://www.australiandefence.com.au/news/defence-tests-high-altitude-balloon>

^{xxxii} <https://www.pacom.mil/Contact/Directory/J0/J06-Staff-Judge-Advocate/>; see also Shahrman Lockman on Twitter: "What are the rules and norms on high-altitude balloons? A possible explanation: <https://t.co/MZt8pxVB2g> <https://t.co/4shbC9zZGu>" / Twitter