

TRANSPORTATION

APRIL 2024

IN THIS ISSUE

This article provides commentary regarding the North American Aerospace Defense Command and discusses legal issues involving objects entering the U.S. National Airspace System.

It's a Bird, It's a Plane! No... It's a Spy Balloon!

ABOUT THE AUTHOR



Mica Nguyen Worthy is a partner in the Charlotte, NC office of Cranfill Sumner LLP and chair of the firm's Aviation Law Practice Group and the International Business Law Group. She serves as legal counsel to clients in the aviation and global supply chain industries, representing aircraft owners, pilots, charter jet companies, flight schools, airports, general aviation companies, fixed base operators, air carriers, as well as Aerospace/Aviation manufacturing, technology, and service companies. She has experience assisting clients in defending claims involving aviation business disputes, aircraft contract and ownership transactions, products liability, aviation accidents, personal injury, and wrongful death claims, as well as providing analysis of issues involving aviation expert witness challenges, aircraft valuation and damages, and contract dispute resolution. Mica assists clients through pre-suit negotiations, mediation, arbitration, and litigation in State and Federal Courts, and internationally. She can be reached at mworthy@cshlaw.com.

ABOUT THE COMMITTEE

This IADC Committee was formed to combine practices of aviation, rail, maritime with trucking together to serve all members who are involved in the defense of transportation including aviation companies (including air carriers and aviation manufacturers), maritime companies (including offshore energy exploration and production), railroad litigation (including accidents and employee claims) and motor carriers and trucking insurance companies for personal injury claims, property damage claims and cargo claims. Learn more about the Committee at www.iadclaw.org.



Adam Rust
Vice Chair of Newsletters
Lewis, Thomason, King, Krieg and Waldrop, P.C.
arust@LewisThomason.com

Many of viewers watched as the U.S. military shot down a Chinese-operated high-altitude balloon on February 4, 2023. However, many were not aware of how the balloon was spotted or tracked prior to making the news. This article provides additional background on NORAD, the North American Aerospace Defense Command and discusses legal issues involving balloons and other objects entering the U.S. National Airspace System.

Who and What is NORAD?

The North American Aerospace Defense Command (“NORAD”), also famously known for tracking Santa every year, was founded in 1957 and is a United States and Canada bi-national organization responsible for the missions of aerospace warning, aerospace control and maritime warning for North America.¹ NORAD’s responsibility of aerospace warning includes the detection, validation, and warning of potential attacks against North America whether by aircraft, missiles, space vehicles, or other objects through mutual support arrangements with other commands monitoring the airspace.²

Spy Balloons in U.S. Airspace

On February 4, 2023, six miles off the coast of South Carolina, the United States military shot down what has been referred to as a Chinese surveillance balloon. The balloon first entered United States airspace on January 28, 2023, north of the Aleutian Islands in Alaska. It was not determined to be a physical threat to North America and was not demonstrating hostile intent initially, per a report from General Glen VanHerck, NORAD Commander, and United States Northern Command.³ By not shooting down the balloon immediately, NORAD took the opportunity to assess what the purpose of the balloon was, what kind of capabilities existed on the balloon, and what kind of transmission capabilities existed.⁴

For example, while China stated⁵ that the balloon or airship was being used for meteorological research and that it drifted into the United States’ airspace unintentionally, United States officials evaluated its movements and indicated that the balloon was stocked with equipment that a normal weather balloon would not need, including large solar panels, multiple antennas and sensors, more consistent with intelligence surveillance.⁶ Scientific

¹ <https://www.norad.mil/About-NORAD/>

² *Id.*

³

<https://www.defense.gov/News/Transcripts/Transcript/Article/3289888/gen-glen-vanherck-commander-north-american-aerospace-defense-command-and-united/>

⁴ *Id.*

⁵ Foreign Ministry Spokesperson’s Remarks on the Unintended Entry of a Chinese Unmanned Airship into US Airspace Due to Force Majeure

(<https://www.fmprc.gov.cn/>)

⁶

<https://www.npr.org/2023/02/14/1156731462/china-spy-balloon-timeline-key-dates>

investigation also indicated that the balloon had maneuverability rather than a wind drift functionality only.⁷ Viewers that spotted the balloon described it as floating about 60,000 feet above the ground, which is on the border of U.S. Class A airspace, at an altitude generally twice that of civilian air traffic.⁸ U.S. Class A airspace includes airspace from 18,000 feet mean sea level up to and including Flight Level (“FL”) 600 (or 60,000 feet).⁹ The balloon measured about 200 feet tall, weighed a few thousand pounds, and the payload was about the size of a regional jet such as an Embraer Regional Jet.¹⁰

Recently, the Pentagon confirmed that the balloon did not collect information over the US. After analyzing the debris from the balloon, the U.S. noted that it was “crammed with commercially available U.S. gear” interspersed with “more specialized Chinese sensors” to collect photos, video, and other information, but the balloon did not appear to send that information back to China. The U.S. was also able to trace purchase orders for some of the equipment to purchasers’ relationship to the Chinese government.¹¹ There were other such balloons that were detected over Europe, Asia, and Latin America over the years as well.

Actually, several other balloons entered United States airspace during the early stages of the Biden Administration and a few transited during the Trump Administration, however, NORAD was not able to detect those “threats” due to what it called a “domain awareness gap,” the General VanHerck said at a media briefing.¹² The cause of this domain awareness gap in U.S. air defenses has not yet been identified and NORAD is already working to address this potential vulnerability.¹³ NORAD is now undergoing several upgrades that will help its effectiveness going forward.

NORAD Upgrades

NORAD plans to strengthen its ability to detect, deter, and defend potential aerospace threats to North America by investing in new technological innovations. In August 2021, the Minister of National Defence of Canada, Harjit Sajjan, and the Secretary of Defense of the United States, Lloyd James Austin III, approved a joint statement to guide cooperation between Canada and the United States to enhance the ability of NORAD to face evolving

⁷ Chinese Spy Balloon Has Unexpected Maneuverability - Scientific American

⁸ <https://www.reuters.com/world/what-we-know-dont-know-about-chinese-balloon-2023-02-08/>

⁹ https://aspm.faa.gov/aspmhelp/index/Airspace_Classification.html#:~:text=Airspace%20Classification%20%20%20Class%20%20,B%2C%20C%20...%20%202%20more%20rows%20

¹⁰

<https://www.defense.gov/News/Transcripts/Transcript/Article/3289888/gen-glen-vanherck-commander-north-american-aerospace-defense-command-and-united/>

[north-american-aerospace-defense-command-and-united/](https://www.defense.gov/News/Transcripts/Transcript/Article/3289888/gen-glen-vanherck-commander-north-american-aerospace-defense-command-and-united/)

¹¹

https://apple.news/A_XvVOGdmSEme8RyOcRWN7A

¹²

<https://www.defense.gov/News/Transcripts/Transcript/Article/3289888/gen-glen-vanherck-commander-north-american-aerospace-defense-command-and-united/>

¹³ *Id.*

threats.¹⁴ In June 2022, Canada announced its \$38.8 billion plan to modernize NORAD over the next two decades.¹⁵ The current amount pledged by the U.S. government towards future NORAD improvements and advancements is unknown.¹⁶ However, NORAD's new investments will focus on¹⁷:

- Situational awareness regarding new capabilities to complement and eventually replace the North Warning System to improve early warning and consistent surveillance of North American airspace;
- Modernized command and control systems, including continued exploration and integration of data from all-domain sensors into a common, comprehensive operating picture, enabling faster and better-informed decision-making;
- Capabilities to deter and, if necessary, defeat evolving aerospace threats to North America, including investments to upgrade and modernize the

framework to support innovative NORAD operations; and

- Research, Development, and Innovation, to address threats and create new solutions to ongoing challenges.

What this means for U.S. airspace is that civilian commercial usage should remain unaffected and able to operate without disruption in the years ahead.

U.S. Airspace Generally

As many of our clients already understand, generally, controlled airspace is a term the Federal Aviation Administration ("FAA") uses that covers the different classifications of airspace (Class A, Class B, Class C, Class D, and Class E airspace) and which defines dimensions within which Air Traffic Control ("ATC") service is provided. Certain Instrument Flight Rules ("IFR") and Visual Flight Rules ("VFR") apply to certain flights in accordance with these respective airspace classifications.¹⁸ There is also uncontrolled airspace, or Class G airspace, which is the portion that has not been designated as Class A, B, C, D, or E.¹⁹ In addition, the U.S. has special use airspace and restricted

¹⁴

<https://www.defense.gov/News/Releases/Release/Article/2735041/joint-statement-on-norad-modernization/#:~:text=The%20DND%20and%20DoD%20intend%20to%20move%20forward,secure%20base%20for%20active%20engagement%20around%20the%20world.>

¹⁵ <https://www.canada.ca/en/department-national-defence/services/operations/allies-partners/norad/norad-modernization-project-timelines.html>

¹⁶ <https://theconversation.com/amid-tumultuous-times-norad-needs-a-consistent-canada-u-s-commitment-197162>

¹⁷

<https://www.defense.gov/News/Releases/Release/Article/2735041/joint-statement-on-norad-modernization/>

¹⁸

https://www.faa.gov/air_traffic/publications/atpubs/aim_html/chap3_section_2.html

¹⁹ [https://en.wikipedia.org/wiki/Airspace#cite_note-](https://en.wikipedia.org/wiki/Airspace#cite_note-1)

[1](#)

airspace where specific restrictions apply to entering, exiting and flying therein.

The Chinese-operated balloon was found at the upper limit of Class A airspace. When flying in Class A airspace, each aircraft operator must conduct the operation under the Federal Aviation Regulations (“FARs”) and be in regulatory compliance with clearance, communications (each pilot must maintain two-way radio communications with ATC), equipment requirements, and ATC authorization.²⁰ Class A airspace is the most restrictive of all the airspace categories. Compliance with the FARs is to ensure that pilots avoid other aircraft and to ensure that pilots are aware of the terrain and weather conditions that they are flying over and/or through.²¹ Operating aircraft in Class A airspace, or any controlled airspace, without compliance with the necessary requirements and ATC authorization can potentially interfere with civil air traffic and lead to dangerous outcomes. Furthermore, failure to obtain proper clearance can be in direct violation of FARs and even international law.

Legal Issues with Flying Objects Detected by NORAD

Once NORAD has detected a potential threat to North America airspace, the issue can become one of international law. As noted in the news articles and rhetoric between the countries, the Chinese spy balloon issue became a diplomatic incident that caused

additional tension between the nations. Generally, each country has complete and exclusive sovereignty over its airspace over its land territory under certain treaty conventions. (Paris Convention of 1919²²). Importantly, the general consensus is that the upper limit to that airspace is wherever commercial and military aircraft operate. As noted above, U.S. Class A airspace extends to FL 600, which is 60,000 feet—right at the height at which the balloon was approximately floating. While military aircraft can fly higher than civilian aircraft and even exceed 50,000 feet, their exact maximum capabilities in the U.S. are not disclosed publicly for national security reasons. Regardless, the international law on a country’s exclusive control and sovereignty is not well settled above FL 600 (i.e. 60,000 feet).

The Chicago Convention of International Civil Aviation, which superseded the Paris Convention of 1919, established the agency within the United Nations, called the International Civil Aviation Organization (“ICAO”) that establishes harmonized rules for the aviation and aerospace industries, but IACO has not formally addressed the upper limits of airspace control in light of military usage. Generally, if another country wants access to U.S. airspace, it must request permission or authorization under each country’s regulations consistent with IACO protocols. Ultimately, there is no international consensus as to the upper limit of a country’s exclusive control and

²⁰ <https://www.law.cornell.edu/cfr/text/14/91.135>

²¹ <https://www.blade.com/VFR>

²² Paris Convention of 1919 – Wikipedia

sovereignty over its airspace – once an object goes beyond the troposphere and stratosphere (i.e. “near space”), they enter into a brave new legal atmosphere.²³

Conclusion

NORAD is a very useful system for North America’s detection of objects in the clear levels of U.S. and Canadian airspace, but what we learned from the events surrounding the Chinese-operated balloon is that there is a question of unsettled law as to the limits of the control over the airspace.

23

https://apple.news/A_XvVOGdmSEme8RyOcRWN7A

Past Committee Newsletters

Visit the Committee's newsletter archive online at www.iadclaw.org to read other articles published by the Committee. Prior articles include:

MARCH 2024

[Your Chance of Getting Hit by Space Junk Is Extremely Low, But Not Zero! \(The Current "Universe" of Space Insurance\)](#)

Mica Nguyen Worthy

FEBRUARY 2024

[Aircraft Ownership Considerations - So You Bought a Plane, Now What?](#)

Mica Nguyen Worthy

JANUARY 2024

[Flying Foul Play: Legal Issues Take Flight in Monday Night Football's Drone Incident](#)

Mica Nguyen Worthy and Charlie Raphun

DECEMBER 2024

[Better Late Than Never Does NOT Apply to Carrier Confirmation Sheets: The Simple Rules of Contracting Must Be Followed](#)

Heather C. Devine

JUNE 2023

[Punitive Damages Amendment Seeks to Provide Statutory Authority Altering the Landscape of Wrongful Death Recovery](#)

Lara R. Lickhalter and Justin Dobek

MAY 2023

[Trucking Accident Critical Initial Decision—Points](#)

Floyd G. Cottrell

APRIL 2023

[I Spy with My Little Eye... but Should I? The 10 Dos and Don'ts of Monitoring Your Competition](#)

Heather C. Devine and Michael Furyk

DECEMBER 2022

[The Biometric Data Fallout - What are Biometrics and Why Businesses Should Beware](#)

Lara Lickhalter

OCTOBER 2022

[Lessons Learned from the Trenches to Defeat the Reptile Strategy](#)

John Spainhour

SEPTEMBER 2022

[Motor Carriers Will Need to Learn the ABCs of AB 5](#)

Jaion Chung

AUGUST 2022

[A Disconnect from Work Policy Does Not Require Employee Disconnection... Yet!](#)

Heather C. Devine and Michael Furyk

APRIL 2022

[The Stakes Just Got Higher! With the \\$150 million Pizza Hut Class Action – Do Independent Contractors Fit Your Business Model?](#)

Heather C. Devine and Johann Annisette