Congress of the United States
House of Representatives
SELECT COMMITTEE ON THE CHINESE COMMUNIST PARTY

August 20, 2024

The Honorable Gina Raimondo
Secretary
U.S. Department of Commerce
1401 Constitution Ave NW
Washington, D.C. 20230

Dear Secretary Raimondo,

We write to request that the Department of Commerce examine whether two unmanned aerial vehicle (UAV) manufacturers, Anzu Robotics and Cogito Tech Company Ltd., are serving as cut-outs for the People's Republic of China (PRC) Unmanned Aerial Vehicle (UAV) manufacturer SZ DJI Technology Co., Ltd. (DJI), a company on the Commerce Department's Entity List[i] that holds approximately 80% of the global drone market share.[ii]

As described in detail below, security researchers have confirmed that Anzu's Raptor T is essentially a DJI Mavic 3 painted green, with its remote control and application all running on DJI technology. Researchers have likewise found that Cogito's Specta Air is likewise effectively identical to the DJI Air 3—including parts that are interchangeable with those on DJI's drones and an internal code that lists "DJI" as the manufacturer. DJI appears to be using these companies as part of a concerted effort to thwart current and prospective restrictions on its operations imposed by the United States.

DJI's partnership with these companies came to light shortly after a congressional committee unanimously voted out legislation that would add DJI (or any subsidiary or affiliate thereof) to the Federal Communications Commission's (FCC's) Covered List, resulting in new models of DJI drones being prohibited from operating on U.S. communications infrastructure. It appears that DJI is using Anzu and Cogito as passthrough companies in an attempt to avoid current and anticipated U.S. restrictions on DJI products. Beyond state action and anticipated federal legislation, these restrictions would also include restraints that the Commerce

Department, the Department of Defense (DOD) under Section 1260H of the National Defense Authorization Act for Fiscal Year 2021, and other Executive Branch departments and agencies have already placed on DJI products.

DJI maintains close ties to the PRC government, though DJI long sought to obscure this fact. On its official blog, DJI has alleged that it "did not receive any Chinese government investments."[iii] However, contrary to DJI's false statements, an IPVM/Washington Post investigation revealed that "at least four PRC government entities have invested in DJI,"[iv] including:

- China Chengtong Holdings Group, "a 100% subsidiary of SASAC, the State-Owned Assets Supervision and Administration Commission of the State Council, the PRC government entity which administers the country's vast State-Owned Enterprise sector."[v] China Chengtong states that "military-civilian integration" is a core "goal" of the company.[vi]
- Shanghai Venture Capital Guidance Fund, "which is administered under the Shanghai Municipal Government" and mixes "state assets with private funds to advance Beijing's industrial development goals in emerging industries."[vii]
- Guangdong Hengjian Investment Holding, a state-run PRC fund that has invested in and with sanctioned companies including SenseTime, which was added to the Biden Administration's sanctions list for human rights violations in Xinjiang.[viii]
- SDIC Unity Capital, "a state-owned investment holding company approved by China's State Council."[ix]

DJI has also expressed allegiance to Chinese Communist Party (CCP) General Secretary Xi Jinping's authoritarian practices. For example, Chinese websites show China Chengtong's deputy party secretary visiting a DJI facility to "conduct special research" on its investment.[x] China Chengtong's website states that its goals are "to mainly serve the innovation and development of central enterprises … and increase capital support for major national strategies such as the Belt and Road project and military-civilian fusion."[xi] An article reporting on the deputy party secretary's visit to the DJI facility confirmed that "DJI adheres to the guidance of Xi Jinping Thought."[xii] Xi Jinping Thought includes "ensuring party leadership over all work" and "upholding absolute [Chinese Communist] Party leadership over the people's forces."[xiii]

The U.S. government has repeatedly found that DJI poses national security and cybersecurity risks. For example, DOD found that "systems produced by [DJI] pose potential threats to national security"[xiv] and designated DJI as a Chinese Military Company;[xv] the Treasury Department prohibited U.S. investors from investing in DJI on human rights grounds after determining that "DJI has provided drones to the Xinjiang Public Security Bureau, which are used to surveil Uyghurs in Xinjiang;"[xvi] and the Commerce Department added DJI to its Entity List (banning U.S.-based companies from exporting technology to the company).[xvii] DOD suspended procurement of off-the-shelf DJI drones and the Department of the Interior has grounded all DJI and PRC-manufactured drones that it purchased.[xviii]

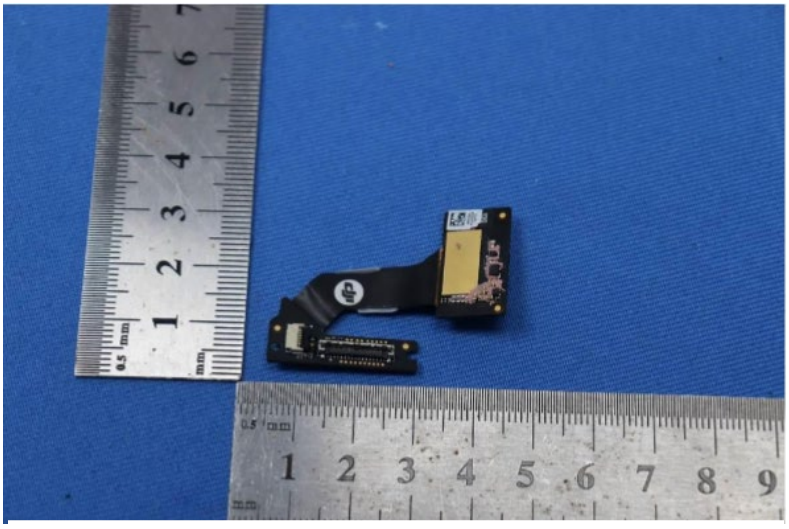
DJI's Efforts to Circumvent Existing and Prospective U.S. Limitations on DJI Products

Congress has recently taken further steps to address these national security and privacy risks. The Countering CCP Drones Act, which would require the FCC to add DJI to the FCC Covered List, thereby prohibiting future models of DJI drones from operating on U.S. communications infrastructure, is currently before Congress. Simultaneous to this bill's consideration, DJI appears to have created business relationships with at least two companies that are actively engaged in white labeling DJI products, essentially taking DJI hardware and some version of its software and rebranding it as their own. This appears to be an attempt to circumvent existing restrictions on DJI and the new restraints that would be imposed by Congress or the Executive Branch.

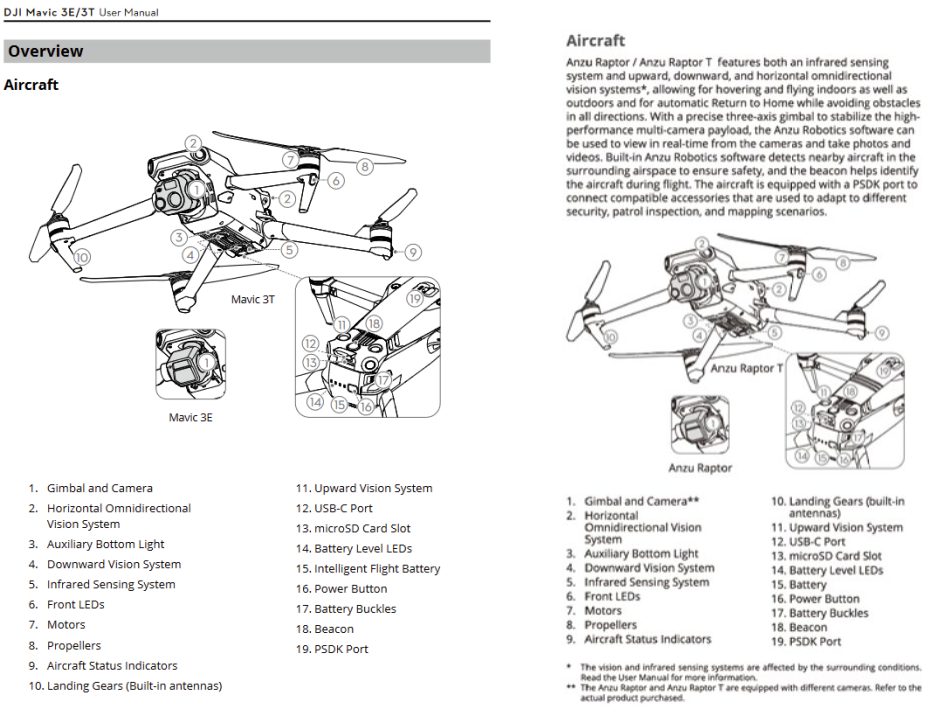
Anzu Robotics

Anzu Robotics is a U.S.- based company that presently sells DJI's Mavic 3 drone painted in green as the "Anzu Raptor T." Based on a review of the available documentation, Anzu did not disclose its relationship with DJI in its filings with the FCC, even while the Anzu drone was found to include DJI parts.[xix]

Instead, Anzu only revealed its partnership with DJI after security researchers publicized the fact that Anzu's Raptor T was in fact a repainted DJI Mavic 3.[xx] After the security community confirmed these facts, both Anzu and DJI divulged their partnership, with a DJI spokesperson acknowledging that "DJI has a business partnership with Anzu Robotics [that] was established with the goal of enhancing the accessibility of capable and cost-effective drones in the market."[xxi]



DJI part found within the Anzu Raptor T during teardown.



DJI Mavic 3E/3T User Manual

Overview

Aircraft

Mavic 3T

Mavic 3E

1. Gimbal and Camera
2. Horizontal Omnidirectional Vision System
3. Auxiliary Bottom Light
4. Downward Vision System
5. Infrared Sensing System
6. Front LEDs
7. Motors
8. Propellers
9. Aircraft Status Indicators
10. Landing Gears (Built-in antennas)
11. Upward Vision System
12. USB-C Port
13. microSD Card Slot
14. Battery Level LEDs
15. Intelligent Flight Battery
16. Power Button
17. Battery Buckles
18. Beacon
19. PSDK Port

Aircraft

Anzu Raptor / Anzu Raptor T features both an infrared sensing system and upward, downward, and horizontal omnidirectional vision systems*, allowing for hovering and flying indoors as well as outdoors and for automatic Return to Home while avoiding obstacles in all directions. With a precise three-axis gimbal to stabilize the high-performance multi-camera payload, the Anzu Robotics software can be used to view in real-time from the cameras and take photos and videos. Built-in Anzu Robotics software detects nearby aircraft in the surrounding airspace to ensure safety, and the beacon helps identify the aircraft during flight. The aircraft is equipped with a PSDK port to connect compatible accessories that are used to adapt to different security, patrol inspection, and mapping scenarios.

Anzu Raptor T

Anzu Raptor

1. Gimbal and Camera**
2. Horizontal Omnidirectional Vision System
3. Auxiliary Bottom Light
4. Downward Vision System
5. Infrared Sensing System
6. Front LEDs
7. Motors
8. Propellers
9. Aircraft Status Indicators
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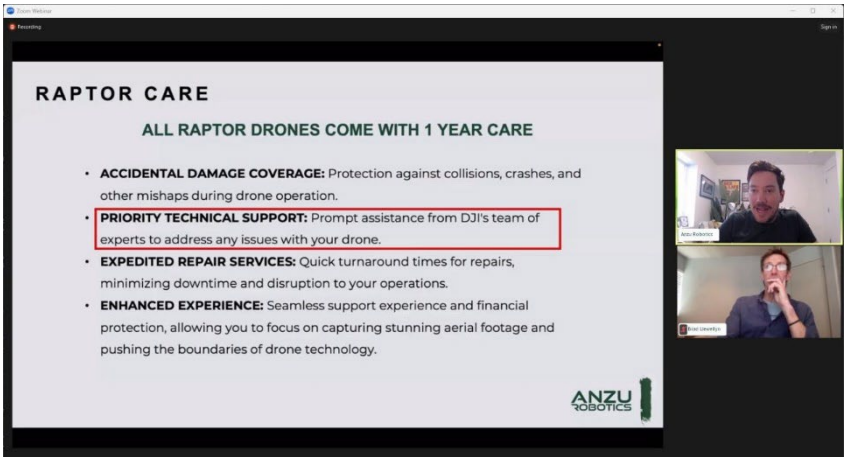
15. Battery
16. Power Button
17. Battery Buckles
18. Beacon
19. PSDK Port

* The vision and infrared sensing systems are affected by the surrounding conditions. Read the User Manual for more information.
** The Anzu Raptor and Anzu Raptor T are equipped with different cameras. Refer to the actual product purchased.

A picture of the DJI Mavic 3 (left) and Anzu Raptor T (right) instruction manuals, with the Anzu diagram appearing to be a copy/paste of the original.

The nature of the DJI-Anzu relationship appears to defy common business conventions. For instance, Anzu claims that DJI is providing its industry-leading drone technology to it through a license that gives "Anzu Robotics the rights to modify and manufacture this technology at will. There are no royalties shared with the licensing organization, no joint or shared ownership of Anzu Robotics, and no reporting on customer data."[xxii] On top of that, according to an Anzu presentation, DJI is also providing "priority technical support" for all Anzu drones. Given these facts, it is hard to understand the business rationale for DJI to enter into this relationship aside from using it as a passthrough to circumvent legal restrictions (current and prospective) placed on its products. And yet, according to Anzu, it "was essentially DJI's idea" to enter into this licensing agreement with a "one-man startup" with no technical expertise or pre-existing drone customer base.[xxiii] **It is further disconcerting that Anzu's CEO Randall Warnas admitted in a recent interview that the purpose of the Anzu/DJI relationship is to overcome legislative bans on**



Anzu CEO boasting on a webinar that its products are covered by DJI Technical Support.

DJI products. In particular, Warnas stated that DJI officials had expressly told him that they "were losing market share [and] not seeing the same volume in states like Florida, Mississippi, and where there's state legislation that has impacted the drone use" of DJI products, with the DJI executives asking Warnas "what can we do?"[xxiv] Warnas then acknowledged that this conversation was the genesis for the eventual Anzu licensing agreement with DJI.[xxv]

Beyond the hardware, security researchers have ascertained that DJI has also provided the firmware and, ultimately, much of the software employed on the Anzu drone. Despite claims by Anzu Robotics that they have developed custom firmware, an in-depth examination revealed that the firmware was signed and encrypted using DJI's keys, with DJI Mavic 3 Enterprise keys successfully decrypting the Anzu device.[xxvi] This fact, along with researchers finding standard DJI binaries and start scripts within the Anzu drone's firmware,[xxvii] strongly indicates that the Anzu firmware was directly sourced from DJI. This would potentially leave all Anzu drones vulnerable to a PRC-based supply chain attack. Anzu moreover claims that, thanks to a partnership with Aloft, it has eliminated the underlying security risks of the DJI software. That does not appear to be the case. The remote controller (RC) provided with the Anzu Raptor drone also mirrors DJI's technology.[xxviii] Labeled as RRC01, it is essentially a relabeled DJI RC Pro. The firmware within the controller is identical to the DJI RC Pro's firmware, apart from the inclusion of a different app. This app, Aloft ai, appears to be built using the DJI Software Development Kit (SDK) and retains many of the functionalities and services typical of DJI's control systems.[xxix] Even though Aloft ai is presented as a unique application, it heavily relies on DJI's technology, including cloud control functions, which undermines Anzu Robotics' claims of proprietary development and data security.

Cogito Tech

Cogito Tech is a Hong Kong-based company that sells the Specta Air drone, which appears to be a DJI drone in all but name. Analysis of the internal components of the Cogito Specta Air drone reveals striking similarities to the popular DJI Air 3. Critically, the propellers, ND filters, and chargers are all interchangeable, indicating the interchangeability in design and component specifications.[xxx]

Importantly, **a review of the Specta's internal code reveals that, while the vendor brand is set to "SPECTA" the manufacturer is still set to "DJI,"** revealing apparent white labeling.[xxxi]

```
23 ro.vendor.build.version.sdk=30
24 ro.product.vendor.brand=SPECTA
25 ro.product.vendor.device=rc331
26 ro.product.vendor.manufacturer=DJI
27 ro.product.vendor.model=SPECTA RC
28 ro.product.vendor.name=rc331
29 # end common build properties
30 #
```

Cogito's Specta drone's internal code lists DJI as the manufacturer.

This effort represents a second ongoing attempt by DJI to white label its products. It is unknown how many more may be ongoing.

While the United States government welcomes and encourages a robust domestic UAV manufacturing base, we cannot afford to allow these manufacturers to operate on behalf of the PRC and an Entity Listed firm. For these reasons, we request that by September 6, 2024, you provide a detailed response to the following inquiries:

1. What steps can the Department of Commerce and the Executive Branch take, or has the Department already taken, to identify PRC companies facing restrictions in the U.S. attempting to sell white labeled products through passthrough companies?

2. What additional authorities, if any, are needed to address this issue?

3. What steps should the Department of Commerce take in relation to DJI, Anzu, Cogito, and any other companies attempting to white label DJI products for sale in the United States?

We appreciate your attention and response on this important matter. Thank you for your work on behalf of the American people.

Sincerely,

John Moolenaar
Chairman

Raja Krishnamoorthi
Ranking Member

[i] "Addition of Entities to the Entity List, Revision of Entry on the Entity List, and Removal of Entities from the Entity List, 85 Fed. Reg. 83416 (Dec. 22, 2020), https://www.federalregister.gov/documents/2020/12/22/2020-28031/addition-of-entities-to-the-entity-list-revision-of-entry-on-the-entity-list-and-removal-of-entities.
[ii] "DJI in China: from a small drone to a tech tycoon," *Daxue Consulting*, March 16, 2022, https://daxueconsulting.com/dji-in-china-drones-technology/
[iii] DJI ViewPoints Team, "BUSTED: Five Common Myths About DJI," *Viewpoints: The Official DJI Blog*, October 26, 2020, https://viewpoints.dji.com/blog/busted-five-common-myths-about-dji.
[iv] Charles Rollet, "DJI Lied About PRC Government Investments, Adheres To Xi Jinping Thought," *IPVM*, February 1, 2022, https://ipvm.com/reports/dji-prc; Cate Cadell, "Drone company DJI obscured ties to Chinese state funding, documents show," *The Washington Post*, February 1, 2022, https://www.washingtonpost.com/national-security/2022/02/01/china-funding-drones-dji-us-regulators/.
[v] Charles Rollet, "DJI Lied About PRC Government Investments, Adheres To Xi Jinping Thought," *IPVM*, February 1, 2022, https://ipvm.com/reports/dji-prc.
[vi] *Id.* The company's website also includes a prominent "Party Building Work" tab and a post celebrating the CCP's anniversary and states that it has "strengthened the Party's leadership."

[vii] Cate Cadell, "Drone company DJI obscured ties to Chinese state funding, documents show," *The Washington Post*, February 1, 2022, https://www.washingtonpost.com/national-security/2022/02/01/china-funding-drones-dji-us-regulators/.
[viii] Haye Kesteloo, "DJI maintains close ties to Chinese government new documents show," *Drone XL*, February 1, 2022, https://dronexl.co/2022/02/01/dji-chinese-government/; Cate Cadell, "Drone company DJI obscured ties to Chinese state funding, documents show," *The Washington Post*, February 1, 2022, https://www.washingtonpost.com/national-security/2022/02/01/china-funding-drones-dji-us-regulators/.
[ix] *Id.*
[x] *Id.*
[xi] *Id.*
[xii] *Id.* (emphasis added).
[xiii] Xiang Bo, "Backgrounder: Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era," *Xinhua*, March 17, 2018, https://www.xinhuanet.com/english/2018-03/17/c_137046261.htm.
[xiv] "Department Statement on DJI Systems," *U.S. Department of Defense Press Release*, July 23, 2021, https://www.defense.gov/News/Releases/Release/Article/2706082/department-statement-on-dji-systems/.
[xv] "Entities Identified as Chinese Military Companies Operating in the United States." *U.S. Department of Defense*, January 31, 2024. https://media.defense.gov/2024/Jan/31/2003384819/-1/-1/0/1260H-LIST.PDF
[xvi] "Treasury Identifies Eight Chinese Tech Firms as Part of The Chinese Military-Industrial Complex," *U.S. Department of the Treasury Press Releases*, December 16, 2021, https://home.treasury.gov/news/press-releases/jy0538
[xvii] Kris Holt, "DJI can no longer buy components from the US for its drones," *Engadget*, December 18, 2020, https://www.engadget.com/dji-entity-list-trade-china-us-commerce-department-171243815.html
[xviii] Lisa Friedman and David McCabe, "Interior Dept. Grounds Its Drones Over Chinese Spying Fears," *The New York Times*, January 29, 2020, https://www.nytimes.com/2020/01/29/technology/interior-chinese-drones.html.
[xix] FCC, "RAPTOR - Raptor /Raptor T Teardown Internal Photos Anzu Robotics," FCC ID, https://fccid.io/2BBYS-RAPTOR/Internal-Photos/Internal-Photos-7014605.
[xx] Gary Mortimer, "Anzu Robotics Raptor T – Mavic 3 clone?" *sUAS News*, March 2024, https://www.suasnews.com/2024/03/anzu-robotics-raptor-t/. Further technical analysis confirmed that the internal hardware was likewise identical between the DJI and Anzu models. For instance, the hardware components of the Anzu Raptor, such as the P1 (Pigeon) module, are identical to those found in the DJI Mavic 3 Enterprise. This identity was confirmed through various comparisons of the printed circuit boards (PCBs), which showed no differences between the two models.
[xxi] Ishveena Singh, "Anzu Robotics launches Raptor drone series as DJI alternative," *DroneDJ*, April 21, 2024 https://dronedj.com/2024/04/21/anzu-robotics-dji-alternative-drone/
[xxii] Anzu Robotics Launch Webinar Q&A, April 26, 2024, available at https://www.anzurobotics.com/2024/04/26/anzu-robotics-launch-webinar-qa/
[xxiii] Kate Kelly, "Are These Drones Too Chinese to Pass U.S. Muster in an Anti-China Moment?" *The New York Times*, May 24, 2024, https://www.nytimes.com/2024/05/24/business/china-drones-anzu-dji.html.
[xxiv] Bill the Drone Reviewer, Anzu Robotics Q&A with CEO Randall Warnas, YouTube (June 19, 2024), https://youtu.be/1fEyiv2gkLg?si=j0RgQ70RODCYobGs&t=562.
[xxv] *Id*.
[xxvi] Andreas, et al. *Anzu Raptor Drone, RC and App a Quick Analysis*, https://think-awesome.com/Anzu_quick_analysis.pdf.
[xxvii] *Id.*
[xxviii] *Id.*
[xxix] *Id.*
[xxx] Haye Kesteloo, "HIGH-FLYING MASQUERADE: DJI'S SHADOWY SHELL GAME UNVEILED," *DroneXL*, March 24, 2024, https://dronexl.co/2024/03/24/dji-shadowy-shell-game-unveiled/?feed_id=220&_unique_id=66004689cc3f4
[xxxi] "Anzu Robotics Introduces Raptor Drone, a Mavic 3 Mirror with a Different Origin Story." Drone UTM, 17 Apr. 2024, www.thedroneu.com/blog/anzu-robotics-introduces-raptor-drone-a-mavic-3-mirror-with-a-different-origin-story/.