

UNITED STATES DISTRICT COURT

for the
Central District of California

FILED CLERK, U.S. DISTRICT COURT
12/8/2024
CENTRAL DISTRICT OF CALIFORNIA
BY: <u>bm</u> DEPUTY

UNITED STATES OF AMERICA,

v.

YINPIAO ZHOU,

Defendant.

Case No. **2:24-MJ-07256-DUTY**

CRIMINAL COMPLAINT BY TELEPHONE OR OTHER RELIABLE ELECTRONIC MEANS

I, the complainant in this case, state that the following is true to the best of my knowledge and belief.

On or about the date of November 30, 2024, in the County of Santa Barbara in the Central District of California, the defendant violated:

Code Section

49 U.S.C. § 46306
49 U.S.C. § 46307

Offense Description

Failure to register an aircraft not providing transportation
Violation of national defense airspace

This criminal complaint is based on these facts:

Please see attached affidavit.

Continued on the attached sheet.

/s/

Complainant's signature

Printed name and title

Attested to by the applicant in accordance with the requirements of Fed. R. Crim. P. 4.1 by telephone.

Date: December 8, 2024

Judge's signature

City and state: Los Angeles, California

Hon. Jean P. Rosenbluth, U.S.M.J.

Printed name and title

AUSA: Kedar S. Bhatia

AFFIDAVIT

I, [REDACTED], being duly sworn, declare and state as follows:

I. PURPOSE OF AFFIDAVIT

1. This affidavit is made in support of criminal complaint and arrest warrant against Yinpiao Zhou ("ZHOU") for a violation of 49 U.S.C. § 46306 (failure to register an aircraft not providing transportation) and 49 U.S.C. § 46307 (violation of national defense airspace).

2. The facts set forth in this affidavit are based upon my personal observations, my training and experience, and information obtained from various law enforcement personnel and witnesses. This affidavit is intended to show merely that there is sufficient probable cause for the requested complaint and arrest warrant and does not purport to set forth all of my knowledge of or investigation into this matter. Unless specifically indicated otherwise, all conversations and statements described in this affidavit are related in substance and part only.

II. BACKGROUND OF [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

III. SUMMARY OF PROBABLE CAUSE

4. On November 30, 2024, ZHOU traveled to a park near Vandenberg Space Force Base ("VSFB") and used a drone to fly over and photograph sensitive areas of the military facility for approximately 59 minutes. Notably, on that same day, November 30, 2024, a sensitive payload developed for the National Reconnaissance Office had been launched to orbit by a space contractor.

5. After military personnel detected the drone inside VSFB's restricted airspace, investigators traveled to the park, contacted ZHOU and another individual ("Individual-1"), and found that ZHOU had the drone (defined below as the "DJI Drone") inside his jacket. During a Mirandized interview with FBI agents, ZHOU admitted he flew his drone from the park to take photographs of VSFB. ZHOU further admitted that he had

downloaded specific software onto the drone to bypass the drone's built-in restrictions to prevent it from taking off and flying in no-fly zones. ZHOU further admitted that he knew taking photographs of the space contractor facility at VSFb was "probably not a good idea."

6. A search of the DJI Drone pursuant to a federal search warrant revealed several photographs of VSFb taken from an aerial viewpoint on November 30, 2024. A search of ZHOU's cellphone pursuant to the same federal search warrant showed ZHOU conducted a Google search approximately a month earlier for the phrase "Vandenberg Space Force Base Drone Rules" and messaged with another person about hacking his drone to allow it fly higher than it could otherwise.

7. ZHOU admitted to traveling from the People's Republic of China to the United States, with ZHOU most recently coming on February 12, 2024. Individual-1 most recently arrived in the United States on November 26, 2024. Both ZHOU and Individual-1 are scheduled to leave the United States and return to China on an international flight scheduled on December 9, 2024.

IV. STATEMENT OF PROBABLE CAUSE

A. Background on the Relevant Statutes and Regulations

1. National Defense Airspace

8. Title 49, United States Code, Section 46307 provides that "[a] person that knowingly or willfully violates section 40103(b)(3) of this title or a regulation prescribed or order issued under section 40103(b)(3) shall be fined under title 18, imprisoned for not more than one year, or both."

9. Title 49, United States Code, Section 40103(b)(3) provides that "[t]o establish security provisions that will encourage and allow maximum use of the navigable airspace by civil aircraft consistent with national security, the Administrator, in consultation with the Secretary of Defense, shall (A) establish areas in the airspace the Administrator decides are necessary in the interest of national defense; and (B) by regulation or order, restrict or prohibit flight of civil aircraft that the Administrator cannot identify, locate, and control with available facilities in those areas."

10. Title 49, United States Code, Section 40102(a)(6) provides that "'aircraft' means any contrivance invented, used, or designed to navigate, or fly in, the air."

11. Title 14, Code of Federal Regulations, Section 99.7 provides that "[e]ach person operating an aircraft in an ADIZ or Defense Area must, in addition to the applicable rules of this part, comply with special security instructions issued by the Administrator in the interest of national security, pursuant to agreement between the [Federal Aviation Administration ("FAA")] and the Department of Defense, or between the FAA and a U.S. Federal security or intelligence agency."

12. Based on my review of the FAA webpage for Notices to Air Missions ("NOTAMS"),¹ I have learned that on August 28, 2023, the FAA issued NOTAM 3/2496. The NOTAM started on September 2,

¹ See *FNS NOTAM Search*, FAA.gov, <https://notams.aim.faa.gov/notamSearch/nsapp.html#/> (last visited Dec. 6, 2024).

2023, and ends on September 1, 2025. The NOTAM provides, among other things, the following:

PURSUANT TO 49 U.S.C. SECTION 40103(B)(3), THE FAA CLASSIFIES THE AIRSPACE DEFINED IN THIS NOTAM AND IN FURTHER DETAIL AT THE FAA WEBSITE IDENTIFIED BELOW AS 'NATIONAL DEFENSE AIRSPACE'. OPERATORS WHO DO NOT COMPLY WITH THE FOLLOWING PROCEDURES MAY FACE THE FOLLOWING ENFORCEMENT ACTIONS: THE UNITED STATES GOVERNMENT MAY PURSUE CRIMINAL CHARGES, INCLUDING CHARGES UNDER 49 U.S.C. SECTION 46307

PURSUANT TO 14 C.F.R. SECTION 99.7, SPECIAL SECURITY INSTRUCTIONS (SSI), ALL UAS FLIGHT OPERATIONS ARE PROHIBITED: WITHIN THE DEFINED AIRSPACE OVER SELECT NATIONAL SECURITY SENSITIVE LOCATIONS EXCEPT AS PROVIDED FOR BELOW.

REFER TO THE FOLLOWING FAA WEBSITE: [HTTPS://UDDS-FAA.OPENDATA.ARCGIS.COM](https://udds-faa.opendata.arcgis.com) FOR: A LIST OF THESE SELECTED LOCATIONS AND FACILITIES, AND VISUAL DEPICTIONS, ALTITUDES, AND GEOSPATIAL DEFINITIONS OF THE OVERLYING AIRSPACE IN WHICH UAS OPERATIONS ARE PROHIBITED

13. Based on my review of publicly available mapping data from the FAA,² I have learned that the area over VSFB is listed as part of a "National Security UAS Flight Restriction." Furthermore, based on the mapping data, the area surrounding Ocean Park and parts of VSFB is designated as Class D airspace. Flight in Class D airspace requires authorization from Air Traffic Control. See 14 C.F.R. § 107.41. Individuals seeking authority to fly drones in Class D airspace must seek authorization through one of two online FAA systems. See Section 19-6-1, FAA Order 7210.3DD (April 20, 2023).

² See *UAS Data Delivery System*, FAA.gov, <https://udds-faa.opendata.arcgis.com> (following link to "Map of "FAA UAS Data") (last visited Dec. 7, 2024).

2. Registration Requirements

14. Title 49, United States Code, Section 46306(b) provides, among other things, that "a person shall be fined under title 18, imprisoned for not more than 3 years, or both, if the person . . . knowingly and willfully operates or attempts to operate an aircraft eligible for registration under section 44102 of this title knowing that . . . the aircraft is not registered under section 44103 of this title"

15. Title 49, United States Code, Section 44102(a) provides, among other things, that "[a]n aircraft may be registered under section 44103 of this title only when the aircraft is . . . not registered under the laws of a foreign country and is owned by (A) a citizen of the United States; [or] (B) an individual citizen of a foreign country lawfully admitted for permanent residence in the United States."

16. Title 49, United States Code, Section 44103(a)(1) provides that "[o]n application of the owner of an aircraft that meets the requirements of section 44102 of this title, the Administrator of the Federal Aviation Administration shall (A) register the aircraft; and (B) issue a certificate of registration to its owner."

17. Statutes and FAA rules create an exception to the registration requirement for drones that weight less than 0.55 pounds and are used for recreational flight. See 14 C.F.R. § 107.110 (weight threshold); 49 U.S.C. § 44809 (requirements for qualifying as recreational flight). Title 14, Code of Federal Regulations, Section 48.15, provides, among other

things, that "[n]o person may operate a small unmanned aircraft that is eligible for registration under 49 U.S.C. 44101-44103 unless one of the following criteria has been satisfied: (a) The owner has registered and marked the aircraft in accordance with this part; [or] (b) The aircraft is operated exclusively in compliance with 49 U.S.C. 44809 and weighs 0.55 pounds or less on takeoff"

18. The FAA website summarizes the drone registration requirement this way: "All drones must be registered, except those that weigh 0.55 pounds or less (less than 250 grams) and are flown under the Exception for Limited Recreational Operations."³

B. VSFB Learns About ZHOU's Drone Flying Over the Base on November 30, 2024

19. Based on my communication with VSFB Security Forces and OSI personnel, I have learned, among other things, the following:

a. On the morning of November 30, 2024, VSFB personnel were alerted to the presence of an unmanned aerial system ("UAS" or "drone") flying over the base. The personnel were alerted by a drone detection system employed by VSFB Security Forces and a drone detection system employed by the FBI.

³ *How To Register Your Drone*, FAA.gov, https://www.faa.gov/uas/getting_started/register_drone (last visited Dec. 6, 2024). The recreational flight requirements - and the reasons ZHOU does not meet them - are described in more detail below.

b. The FBI drone detection system identified the UAS as a DJI model Mavic 2 UAS, bearing drone identification number 163CG98R0A18BW (the "DJI Drone"). The OSI drone detection system detected that the DJI Drone appeared to originate from Ocean Park, a publicly accessible park adjacent to VSFB, and then travel south toward VSFB Space Launch Complexes Three and Four. Based on my training and experience, a Space Launch Complex is a facility used to launch rockets and other spacecraft into space.

c. The FBI drone detection systems identified that the DJI Drone was in flight for a total of approximately 59 minutes. A report from the FBI UAS detection system shows the path of travel for the drone originating in the vicinity of Ocean Park and traveling south near Surf Beach and directly toward Space Launch Complex Three and Four. The drone then returned to the vicinity of Ocean Park. The drone traveled to a maximum height of approximately 4939 feet, or approximately .9 miles.

d. Space Launch Complex Four is currently utilized by Space Exploration Technologies Corp. ("SpaceX") to conduct commercial and government launches into space. Notably, earlier in the morning on November 30, 2024, Space Launch Complex Four had hosted a launch of a National Reconnaissance Office payload built by SpaceX and another contractor.

20. Based on my communications with VSFB Security Forces and my review of VSFB Security Forces reports, I have learned, among other things, the following:

a. After detecting the DJI Drone, approximately four VSFB Security Forces traveled to Ocean Park to investigate the drone travel.⁴ There, Security Forces personnel saw two individuals, ZHOU and Individual-1. Security Forces personnel asked to speak with ZHOU and Individual-1. When Security Forces personnel began talking to them, ZHOU and Individual-1 walked away. Security Forces personnel again asked to talk to ZHOU and Individual-1, who stopped and began speaking to them. The personnel then asked if ZHOU and Individual-1 had seen any drones flying nearby and, if so, whether they had seen the pilot. ZHOU stated that he had seen a drone but that he did not see the pilot.

b. While ZHOU and Individual-1 were speaking to Security Forces personnel, ZHOU had his hands inside his jacket. Security Forces personnel asked ZHOU to remove his hands from his pocket. After they did that, ZHOU removed his hands, exposing a drone underneath his jacket.

c. Security Forces personnel asked ZHOU why he had lied about not seeing the drone pilot, and ZHOU responded that he was afraid because he believed that the Security Forces personnel were from the military.

d. Security Forces personnel later asked ZHOU for his driver's license. ZHOU responded that his license was in his car. Security Forces personnel followed ZHOU when he walked to

⁴ Based upon my conversations with OSI Special Agents, I have learned Ocean Park has concurrent law enforcement jurisdiction shared between VSFB and the Santa Barbara County Sherriff's Office.

his car, where ZHOU retrieved his driver's license. While ZHOU was at his car, he placed the drone that was on his person inside a large bag on the passenger seat.

e. During the contact with ZHOU, ZHOU showed Security Forces personnel footage that ZHOU had taken using his drone. ZHOU showed the Security Forces personnel the footage on a cellphone device attached to the drone controller (the "ZHOU Cellphone"). Upon seeing that the footage consisted of parts of VSFB, Security Forces personnel instructed ZHOU to delete footage of the base from the cellphone and watched ZHOU delete the footage.⁵

C. Interview with ZHOU and Search of ZHOU's Car

21. On November 30, 2024, I interviewed ZHOU at Ocean Park. Before the interview, I advised ZHOU of his *Miranda* rights, and he agreed to speak with me.⁶ Based on my interview of ZHOU, I learned, among other things, the following:

a. ZHOU stated that on November 28, 2024, he and Individual-1 stayed overnight at Kirk Creek campground in the Big Sur area of Monterey County, California. ZHOU stated that he tried to fly his drone at their campsite at Kirk Creek, but a park ranger told him not to fly it.

b. On November 29, 2024, ZHOU and Individual-1 drove further south from Kirk Creek, arriving at Ocean Park, in the

⁵ As discussed below, the FBI later obtained a federal warrant to search the drone, the drone controller, a cellphone belonging to ZHOU, a handheld camera belonging to ZHOU, and two cellphones belonging to Individual-1.

⁶ The interview with ZHOU was audio recorded. The interview was conducted in English.

vicinity of VSFB, later in the day. According to ZHOU, after arriving at Ocean Park, he learned about the imminent SpaceX launch that night, *i.e.*, the one that took place in the early morning hours on November 30, 2024. ZHOU said he took pictures of the launch with his handheld camera.

c. ZHOU said that in the morning on November 30, 2024, he took pictures of the SpaceX Space Launch Complex with his drone. ZHOU stated that he knew the SpaceX facility was on a military installation. ZHOU said that his drone flew for 10 or 15 minutes and went approximately one to two miles south towards the SpaceX facility.⁷

d. ZHOU also admitted he purchased software on a particular website that allowed the DJI Drone to bypass restrictions on altitude as well as no-fly-zone restrictions that would otherwise not allow his DJI drone to fly at VSFB. ZHOU expressed an understanding that drones operated in the United States had to comply with altitude limits and no-fly limits. ZHOU explained that the DJI mobile application featured a map that would outline for the user which areas contain a no-fly zone restriction. ZHOU originally downloaded the bypass software in 2019 to get around the no-fly zones in Shanghai. Referencing the bypass software and his UAS, ZHOU said, "Normally, if you didn't have that software, it wouldn't be able to take off from here."

⁷ As noted above, this contradicts the flight time identified by the FBI drone detection system, which identified the DJI drone in flight for a total of approximately 59 minutes.

e. ZHOU also said that he had not registered his drone with the FAA. ZHOU said FAA instructions for registering drones were not clear. ZHOU was familiar with licensing requirements for operating a UAS in China, but he never himself got a license for his UAS. ZHOU was not familiar with specific United States requirements for UAS licensing, but he assumed that there must be some requirements.

f. ZHOU said he previously got into trouble in China for flying a UAS in a restricted area. More specifically, ZHOU was arrested for flying a UAS near a government building at People's Square in Shanghai. He was subsequently fined for this. ZHOU did not register the UAS in China either.

g. ZHOU claimed he entered the United States on February 12, 2024, on an immigrant visa. ZHOU stated that he and Individual-1 were returning to China on or about December 9, 2024.

h. During the interview, ZHOU stated that he had rented the car. ZHOU gave consent to search that car. ZHOU signed an FBI consent to search form, which also authorized agents to seize items inside the car.

22. Based on my participation in that search and my communication with other law enforcement officers, I have learned, among other things, the following:

a. On or about November 30, 2024, after ZHOU consented to the search of his car, other FBI agents and I searched the car. Inside, agents found a large bag on the passenger seat, which contained the following:

i. A DJI drone. The serial number for DJI Drone matches the drone identification number for the UAS identified as flying above VSFB, as described above. Accordingly, based on my training and experience, I believe the drone on ZHOU's person and then placed in his car was the DJI Drone that was flying above VSFB.

ii. A DJI drone controller.

iii. The ZHOU Cellphone, a black Apple iPhone that was connected to the DJI controller.

iv. A Canon EOS 5D Mark III camera, which contained an SD card.

b. Agents subsequently seized the aforementioned items.

23. Based on my communications with a United States Citizenship and Immigration Services officer, I have learned, among other things, that ZHOU is a Chinese citizen and a lawful permanent resident of the United States. Based on my review of United States Customs and Border Patrol records and my communications with a United States Citizenship and Immigration Services officer, I know that Individual-1 arrived in the United States on a visitor visa on or about November 26, 2024.

D. Evidence Found During Preliminary Search of ZHOU's Drone and Other Digital Devices

24. On or about December 4, 2024, the Hon. Alicia G. Rosenberg, United States Magistrate Judge, authorized a warrant to search the DJI Drone, the drone controller, the ZHOU Cellphone, ZHOU's handheld camera, and Individual-1's

cellphones,⁸ as well as storage medium inside the devices. See Case No. 2:24-MJ-7204 (C.D. Cal.).

25. Based on my personal observations and my communications with an FBI Computer Analysis Response Team examiner, I have learned, among other things, that the DJI Drone contained an SD card (the "Drone SD Card"), which is a type of digital information storage device. A review of the contents of the Drone SD Card showed several photographs of VSFB taken from an aerial viewpoint. Metadata for those photographs show they were taken on November 30, 2024, and location-related metadata shows they were taken from an area above VSFB. Accordingly, based on my training and experience, I believe the photographs were taken by ZHOU from the DJI Drone while it was flying to, from, or above VSFB.

26. Based on my review of a data image of the ZHOU Cellphone provided to me by an FBI Computer Analysis Response Team examiner, I have learned, among other things, the following:

a. On or about November 10, 2024, ZHOU searched on Google for the phrase "Vandenberg Space Force Base Drone Rules." On or about December 8, 2024, I conducted the same search on Google and saw various search results cautioning that drones were not permitted at VSFB.

b. The phone contained a WeChat messaging service conversation between WeChat user wxid_mpgagydy8cp12, believed

⁸ On or about November 30, 2024, Individual-1 gave officers consent to search two cellphones found on his person.

to be an account associated with the user of the phone, ZHOU, and WeChat user wxid_v9nttsu3fyli12. In a conversation that took place on October 21 and 22 2024, communications focused on photographs ZHOU claimed to have taken with his drone.

Specifically, starting at 11:58:47 PM on October 21, ZHOU shared five photographs that appeared to show a city and mountains from a high altitude. At 11:59:44 PM, ZHOU messages the other user, saying "first one taken from 1800 ft, the others about 8000 ft". At 12:03:33 AM on October 22, the other WeChat user says to ZHOU "Oh wow that damn thing flys high". At 12:04:20 AM, ZHOU then remarked "I hacked my drone. It's not supposed to go that high lol". As set forth above, during my interview with ZHOU, he acknowledged that he downloaded software for his drone that allowed him to bypass UAS altitude restrictions.

E. Investigation Regarding the Violation of National Defense Airspace

27. As set forth above, the area over VSFB is designated as a "National Security UAS Flight Restriction." As set forth above, ZHOU acknowledged to agents that he had to download software that would specifically bypass the typical device restrictions on flying over VSFB. ZHOU also recognized that photographing the SpaceX facility on VSFB was "probably not a good idea."

28. As set forth above, the area surrounding Ocean Park and parts of VSFB is also designated as Class D airspace in FAA maps. Based on my communications with FAA employees, I have learned that ZHOU's drone was not registered in a small unmanned

aerial systems database and, without being registered in this database, ZHOU's drone would not be permitted to operate in Class D airspace.

F. Investigation Regarding the Registration Requirement

29. Based on my review of correspondence from the FAA, I have learned, among other things, the following:

a. On or about December 5, 2024, a Special Agent with the FAA searched the FAA small, unmanned aircraft system ("sUAS") Registration Database to determine if any sUAS are registered to ZHOU.⁹ The search revealed that no sUAS is registered to ZHOU.

b. The FAA Special Agent also searched the FAA sUAS Registration Database to determine if sUAS with serial number 163CG98R0A18BW, *i.e.*, the DJI Drone, is registered with the FAA. The search revealed that sUAS with serial number 163CG98R0A18BW is not registered.

30. As set forth above, FAA rules require the registration of any UAS over .55 pounds, or approximately 250 grams. Based on my review of publicly available specifications the for the DJI model Mavic 2,¹⁰ I have learned that the DJI model Mavic 2 weighs approximately 907 or 905 grams, depending on the exact configuration, both of which are approximately 1.99 pounds and

⁹ Title 49, United States Code, Section 44801(9) provides, in part, that "'small unmanned aircraft' means an unmanned aircraft weighing less than 55 pounds, including the weight of anything attached to or carried by the aircraft." As set forth below, the DJI Drone weighed less than 55 pounds, and was therefore a small unmanned aircraft.

¹⁰ See *Mavic 2*, DJI.com, <https://www.dji.com/mavic-2/info#specs> (last visited Dec. 4, 2024).

therefore above the weight required for registration with the FAA.

31. ZHOU also does not meet the requirements for mere recreational use. Among other things, the DJI Drone was not flown within the visual line of sight of the drone pilot or a co-located observer, see 49 U.S.C. § 44809(a)(3), 14 C.F.R. § 107.31. Based on my review of the report of the DJI Drone's flight and publicly available mapping records, I believe the DJI Drone flew approximately 1.8 miles from its origin in Ocean Park into VSF. As set forth above, the drone flew to approximately .9 miles at its maximum height. Likewise, as set forth above, ZHOU told agents that he lost sight of the DJI Drone while it was flying. Accordingly, the DJI Drone likely went out of the visual line of sight of the drone pilot or a co-located observer.¹¹ For this reason too, ZHOU was required to register the DJI Drone.¹²

¹¹ Publicly available information gives different estimates for what distance would put a drone beyond the visual line of sight, but at least one drone-related website notes that "[d]epending on the terrain, time of day, and use of anti-collision lights, you'll be hard-pressed to see your drone when it's one mile away." *Is there a specific distance implied when the FAA says 'visual line-of-sight'?*, UAV Coach, <https://www.dronepilotgroundschool.com/kb/is-there-a-specific-distance-implied-when-the-faa-says-visual-line-of-sight/> (last visited Dec. 4, 2024); see also *VLOS: How Drone Pilots Determine Maximum Flight Distances*, Aerial Northwest, <https://aerialnorthwest.com/oregon-aerial-drone-flight-blog/oregon-drone-safety/how-far-can-vlos-aerial-drone-pilots-clearly-see.html> (May 9, 2024) ("Some pilots say they can see their drone in the sky no farther than 300 feet away. Some other pilots claim to be able to spot their drone at aerial distances of over one mile away.").

¹² Another requirement for the recreation exception is that the drone pilot obtain prior authorization from the
(footnote cont'd on next page)

V. CONCLUSION

32. For all of the reasons described above, there is probable cause to believe that ZHOU violated 49 U.S.C. § 46306 (failure to register an aircraft not providing transportation) and 49 U.S.C. § 46307 (violation of national defense airspace).

Attested to by the applicant in accordance with the requirements of Fed. R. Crim. P. 4.1 by telephone on this 8th day of December 2024.



THE HON. JEAN P. ROSENBLUTH
UNITED STATES MAGISTRATE JUDGE

administrator for flight (in certain types of airspace) or that the drone pilot fly no higher than 400 feet above ground level (in other types of airspace). See 49 U.S.C. § 44809(a)(5), (6). Given the circumstances above, I believe ZHOU also failed to meet these criteria.