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19 November 2014

Hon. Michael Huerta
Administrator
Federal Aviation Administration
U. S. Department of Transportation
Docket Management System
1200 New Jersey Ave., SE
Washington, DC 20590

Re: Exemption Request under Section 333 of the FAA Reform Act and Part 11 of the Federal Aviation Regulations from certain parts of the FARs.

Dear Administrator Huerta:

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (the Reform Act) and 14 C.F.R. Part 11, Hoovy LLC, a California limited liability company, CA Secretary of State # 201428310042, hereby applies for an exemption from the listed Federal Aviation Regulations ("FARs") to allow it to operate a small Unmanned Aircraft System ("sUAS") under the conditions and limitations set forth in this Petition.

The requested exemption would permit the operation of small, unmanned and relatively inexpensive sUAS under controlled conditions in airspace that (1) is limited, (2) is predetermined, and (3) would provide safety enhancements to the already safe aerial advertising operations using manned helicopters and airplanes in the Los Angeles area. Approval of this exemption would thereby enhance safety and fulfill the FAA Administrator's responsibilities to "...establish requirements for the safe operation of such aircraft systems in the national airspace system." Section 333(c) of the Reform Act.

The name and address of the applicant is:

Hoovy LLC

Attn: Henry H. Perritt, Jr., counsel for Petitioner

Telephone: (312) 504-5001

Email: hperritt@gmail.com

Address: 1131 Carol Lane, Glencoe, IL 60022

Regulations from which the exemption is requested:

14 CFR Part 21

14 C.F.R. § 45.23(b)

14 CFR § 61.3

14 C.F.R. § 91.7 (a)

14 CFR § 91.9 (b) (2)

14 C.F.R. § 91.103

14 C.F.R. § 91.109

14 C.F. R. § 91.119

14 C.F.R. § 91.121

14 CFR § 91.151 (a)

14 CFR § 91.203 (a) & (b)

14 CFR § 91.205(b)

14 CFR § 91.215

14 CFR § 91.405 (a)

14 CFR § 407 (a) (1)

14 CFR § 409 (a) (2)

14 CFR § 417 (a) & (b)

Appendix 1 describes the FARs from which an exemption is requested and summarizes the justification for each requested exemption.

The Petition is submitted to fulfill Congress' goal under Section 333(a) through (c) of the Reform Act, which directs the Secretary of Transportation to consider whether certain unmanned aircraft systems may operate safely in the national airspace system (NAS) before completion of the rulemaking required under Section 332 of the Reform Act. In making this determination, the Administrator must determine which types of UASs do not create a hazard to users of the NAS or the public or pose a threat to national security in light of the following:

- The UAS's size, weight, speed, and operational capability;
- Operation of the UAS in close proximity to airports and populated areas; and
- Operation of the UAS within visual line of sight of the operator.

Reform Act § 333 (a).

If the Administrator determines that such vehicles “may operate safely in the national airspace system, the Secretary shall establish requirements for the safe operation of such aircraft in the national airspace system.” Id. § 333(c).

The Secretary has delegated his aviation authority to the Administrator of the FAA.

The Federal Aviation Act expressly grants the FAA the authority to grant exemptions from its regulatory requirements for civil aircraft, a term defined under §40101 of the Act, which includes sUASs. The Administrator may grant an exemption from a requirement of a regulation prescribed under subsection (a) or (b) of this section or any sections 44702-44716 of the Federal Aviation Act if Administrator finds the exemption in the public interest. 49 U.S.C. § 44701(f) See also 49 USC § 44711(a); 49 USC § 44704; 14 CFR §91.203 (a) (1).

The Petitioner is a startup company, Hoovy LLC, with local business contacts that seek new methods for advertising their businesses. The founder of the company received an MBA from USC Marshall School and has vast experience in aerospace and in launching companies in the Los Angeles area. Prior to starting Hoovy LLC, the founder launched Gametime, a startup mobile ticket app, in the Los Angeles area. Under his supervision the team grew to 20 people, engaged in a number of promotional campaigns using

various advertising methods, and ultimately tripled its revenue. Prior to Gametime, the founder worked at Space Exploration Technologies (SpaceX) in developing its supplier network and establishing operations processes. The founder grew up in Los Angeles and has a strong familiarity with the geographic area and is a productive member of a local community. Additionally, the founder has a strong interest in UASs and has been recreationally flying them for approximately 1.5 years, amassing over 100 hours of flight time.

The Petitioner has formulated a business plan for an enterprise that will offer advertising services to businesses in the Los Angeles Metropolitan Area, taking the form of banners towed by small unmanned aircraft (“sUAS” or “microdrones”). Customers will include local businesses such as restaurants, bars, event planning companies, and other mom-and-pop shops who rely on local community to grow their business.

Under the plan, the microdrones will be DJI Inspires, DJI Phantom 2s or DJI Phantom 2 Visions, flying 2 foot by 5 foot banners. They will operate below 400 feet above ground level and never within 3 miles from an airport. They will operate only within the line of sight of the operator and will not operate in populated areas. Flights will be remote from noise sensitive areas such as parks, schools, hospitals, and churches. Flights will be only conducted in permissible weather – rain, snow, or winds above 12 mph will terminate the flights. Additionally, flights will occur only in pre-assigned areas over open terrain that goes along the freeways and never above the freeways themselves (See Appendix 2). The microdrones will be operated by experienced professionals who have considerable experience flying microdrones. Prior to operating the drone, every operator must go through the Petitioner’s training program, comprising four full days on safety and regulations, hands-on training with a smaller drone, and finally hands-on training with the Phantom 2.

Safety will be the paramount concern in defining flight profiles.

The Petitioner has been advised by counsel that its business plan is not now permissible unless it obtains special permission from the FAA. Many potential competitors of Petitioner are actively flying sUAS, notwithstanding the FAA’s stated prohibition. Petitioner also notes and has read the congressional mandate in sections 332 and 333 of the FAA Revitalization and Reform Act of 2012 that the FAA move quickly to

accommodate the economic and societal benefits that can result from widespread deployment of sUAS technology. Accordingly, Petitioner applies for authorization under the Federal Aviation Act and the FARs to undertake the following activities for commercial purposes. Unless the Petition is granted, Petitioner will be at a significant competitive advantage if it, as it prefers, complies with FAA policy.

Vehicle

The Petitioner will fly one or more DJI Phantom 2s, DJI Phantom 2 Visions equipped with a three-axis gimbal and GoPro camera, and eventually, DJI Inspires.

These vehicles have built in capability to limit the height they fly above the ground, to limit the radius of the distance they fly from the operator, and to exclude them from class B, C, and D airspace. The vehicles also have the built-in capability to return to the launching point if the wireless control link is interrupted or if the operator attempts to exceed any of the height, radius, or airspace limitations programmed into them.

The vehicle weighs about five pounds empty and has a maximum gross weight of approximately twenty pounds. It has a top speed of about 30 knots. It has four fixed-pitch rotors, thrust from which is varied by changing RPM. It is powered by a lithium polymer battery.

Flight profiles

The petitioner will program the Phantom so that it will not fly more than 400 feet above ground level, or more than 1500 feet away from its operator. Operators will carefully preflight the vehicle before each mission to assure that its compass and GPS system are properly calibrated and that the return-to-home feature, altitude, and radius limitations work.

It will operate it on aerial advertising missions only over largely unpopulated areas where the potential of uncontrolled descent to cause injury or damage is low.

It will not operate it in controlled airspace. In the unlikely event that a manned aircraft flies below 400 feet AGL where the Petitioner is operating its Phantom, the operator will keep both the vehicle and manned aircraft in sight and avoid the manned aircraft.

More particularly, the Petitioner will fly the Phantom only over the areas in Metropolitan Los Angeles specified in Appendix 2.

It is important to note that the Petitioner does not intend to use the Go Pro camera on the Phantom 2 Vision for recording or photography purposes. The only reason that the camera is attached to the drone is because it comes pre-assembled from the manufacturer. Therefore the privacy issue that is a concern in the drone industry is not applicable in this situation.

Public interest

Granting the petition would be in the public interest because:

1. The Congress of the United States has determined that early accommodation of sUAS into the National Airspace System advances the public interest. The Committee Report leading the House to adopt H.R. 658 said:

"The successful integration of unmanned aircraft systems (UAS) into the National Airspace System (NAS) can support more than 23,000 high-paying jobs in the United States. . . . The absence of a plan to integrate UASs into the NAS is a barrier to such job creation"¹

Granting the Petition represents a step toward such integration, in the absence of a comprehensive regulatory regime for sUAS, and thus would serve the Congressional goal and the public interest.

2. Granting the Petition will facilitate the creation, display, and public distribution of advertising, long recognized as advancing the public interest. They are activities that the First Amendment to the United States Constitution seeks to promote and to protect from governmental restrictions.

Advertising falls well within the First Amendment's protections. "Advertising, however tasteless and excessive it sometimes may seem, is nonetheless

¹ H. R. Rep. 112-29 on H.R. 658, 112th Cong., 1st Sess. at 116. The House-Senate Conference Committee on the FAA Modernization and Reform Act of 2012 recommended amendments to H.R. 658 in lieu of amendments adopted by the Senate. Conference Report to Accompany H.R. 658, H.R. Rep. 112-381, 112th Cong., 2d Sess., at p. 1 (Feb. 1, 2012).

dissemination of information as to who is producing and selling what product, for what reason, and at what price. So long as we preserve a predominantly free enterprise economy, the allocation of our resources in large measure will be made through numerous private economic decisions. It is a matter of public interest that those decisions, in the aggregate, be intelligent and well informed. To this end, the free flow of commercial information is indispensable."²

3. Granting the Petition will enable new forms of advertising, enabling the public to know about and to understand new products and services, an activity essential to the effective functioning of markets, and therefore similarly within the core of First Amendment protections, according to *Virginia State Board of Pharmacy*.
4. Granting the Petition will allow local companies to spread awareness about their business more cost effectively and efficiently, allowing them to grow their businesses, create employment opportunities, thereby benefitting the community.
5. Granting the Petition will enable Petitioner to demonstrate the commercial viability of creating advertising with new aeronautical technology, thereby improving the efficiency of markets.

The rules from which Petitioner seeks exemption artificially and irrationally limit the effective use of new technologies to expand advertising and improve the efficiency of markets, thereby subverting the public interest.

6. Granting the Petition will fulfill the FAA's own declaration that encouraging new aviation technologies advances the public interest. The FAA itself has recognized the public interest in its role of "Encouraging and developing civil aeronautics, including new aviation technology."³ Granting the Petition will enhance FAA fulfillment of that commitment, thereby serving the public interest. Air commerce flourishes in the United States because of the rapid pace of innovation in aeronautical and associated technologies, followed by their commercialization and their introduction into the marketplace. The drone technology that the Petitioner uses exemplifies the latest innovative leap forward

² *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748, 765 (1976).

³ FAA, Safety: The Foundation of Everything We Do, http://www.faa.gov/about/safety_efficiency/.

in aeronautical technology. Preventing it from using this in air commerce subverts achievement of the goal.

7. Granting the Petition will fulfill the Congressional determination that integrating sUAS technology into the NAS serves the public interest. Section 330 of the FAA Modernization and Reform Act of 2012, specifically recognizes the advantages to air commerce obtainable from the deployment of sUAS technologies. It mandated several steps by the FAA to accelerate the availability of these technologies in the National Airspace System, thereby representing a congressional determination that the public interest is served by making these technologies more widely available at the earliest practicable date. The Petition represents a way for the FAA to move incrementally, while still satisfying its congressional mandate and meeting its obligation to enhance the public interest by making new technologies available by allowing the use of sUAS technologies in a manner that protects the public and the rest of the aviation community from significant risk.

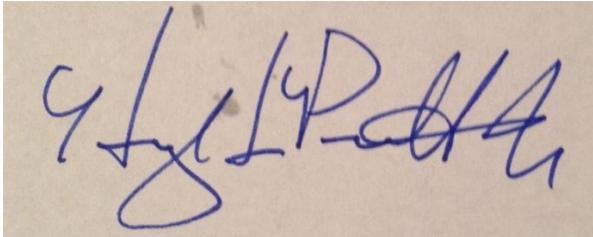
The commercial activities by Petitioner proposed in the Petition represent contributions to new forms of air commerce, thereby fulfilling the FAA's statutory mandate under the 2012 Act.

8. Granting the Petition will enhance aviation safety, thereby advancing the public interest. The Petitioner has committed itself in the Petition to safety practices that reduce or eliminate hazards to aircraft in the National Airspace System and to persons and property on the ground. Many others are flying sUAS without regard to these hazards. Granting the Petition will offer the Petitioner up as an example of how the FAA is willing to accommodate the new technology when it is constrained by appropriate limitations to enhance safety. It will also allow the Petitioner to be a role model for safe commercial sUAS operations.

Users of the National Airspace System are confronted by mushrooming threats from sUAS flown in defiance of the FAA's ban. Unless the FAA shows some flexibility to accommodate lawful and safe operation of sUAS for legitimate commercial purposes, the level of defiance will increase, intensifying the hazards to manned aircraft and to persons and property on the ground.

The Petitioner's proposed operations satisfy the criteria provided in Section 333 of the Reform Act relating to size, weight, speed, operating capabilities, proximity to airports and populated areas and operation within visual line of sight, and national security. The Petition justifies grant of the requested exemptions to allow the Petitioner to engage in aerial advertising with its microdrones.

Respectfully submitted,

A handwritten signature in blue ink on a light brown background. The signature is cursive and appears to read "H. H. Perritt, Jr.".

Henry H. Perritt, Jr.
Counsel for Petitioner

Appendix 1

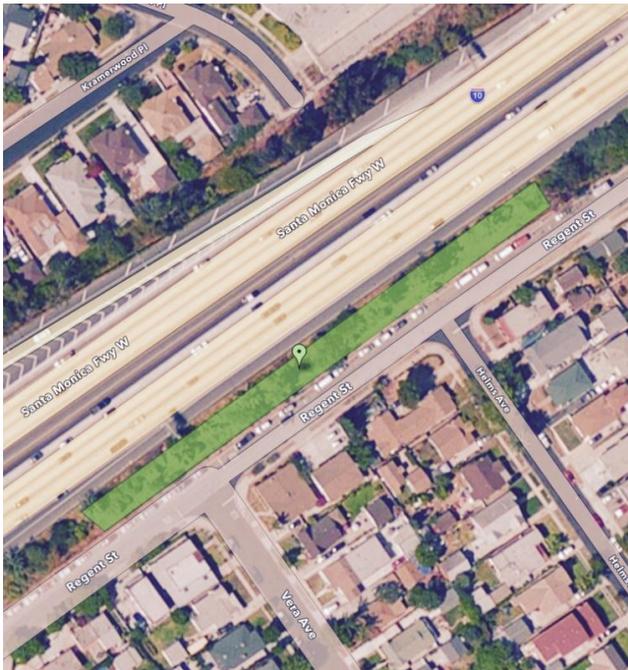
FAR section	Subject	Justification
14 CFR § 45.23(b)	Requirement to display registration number on vehicle	Insufficient space on vehicle
14 CFR Part 21	Aircraft certification requirements and procedures	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 61.3	Requirement for pilot certificate	Part 61 requirements designed for manned aircraft, not sUAS; petition describes training for sUAS operator
14 CFR § 91.7 (a)	Airworthiness requirement	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.9 (b) (2)	Requirement for manual to be available in the cockpit	No one aboard to read manual
14 CFR § 91.103(b)	Requirement for crew members to be onboard	Unmanned vehicle
14 CFR § 91.109	Requirement for dual controls during flight instruction	No one aboard to operate controls
14 CFR § 91.119	Minimum altitudes for safe flight	Safety requires operation below these altitudes
14 CFR § 91.121	Altimeter settings	No one aboard to read altimeter
14 CFR § 91.151(a)	Fuel requirements	Vehicle does not use fuel
14 CFR § 91.203 (a) & (b)	Requirement for registration and airworthiness certificates to be onboard	No one aboard to read certificates
14 CFR § 91.205(b)	Cockpit instruments	No one aboard to read

	requirement	instruments
14 CFR § 91.215	Transponder requirement	Vehicle has insufficient useful load; will be operated below ATC radar coverage
14 CFR § 91.405 (a)	Inspection requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.407(a) (1)	Inspection approval requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.409 (a) (2)	Airworthiness inspection	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.417 (a) & (b)	Maintenance records requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS

Appendix 2

Location 1

The Petitioner intends to fly the UAV(s) over, and well clear of, the 450 ft by 50ft stretch of plants and grass that grows along the Santa Monica Fwy E 10 (see below). The Petitioner intends to fly approximately 80 ft above the ground or about 25-50 ft above the tallest plant. The surface of the proposed area provides sufficient space to ensure that the UAV would never have to fly above the freeway and would always fly above an uninhabited piece of land.



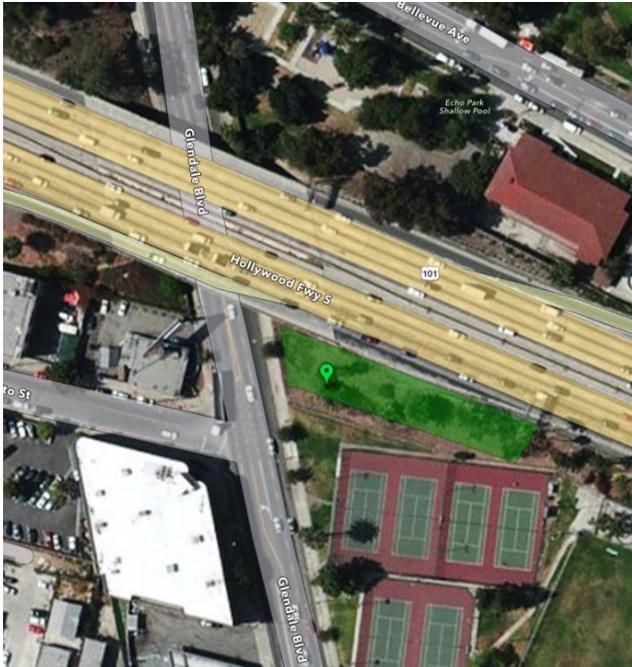
Location 2

The Petitioner intends to fly the UAV(s) over, and well clear of, the 150ft by 60ft stretch of plants and dirt along the Harbor Fwy N 110 (see below). The Petitioner intends to fly approximately 80 ft above ground or about 25-50 ft above the tallest plant. The surface of the proposed area provides sufficient space to ensure that the UAV would never have to fly above the freeway and would always fly above an uninhabited piece of land.



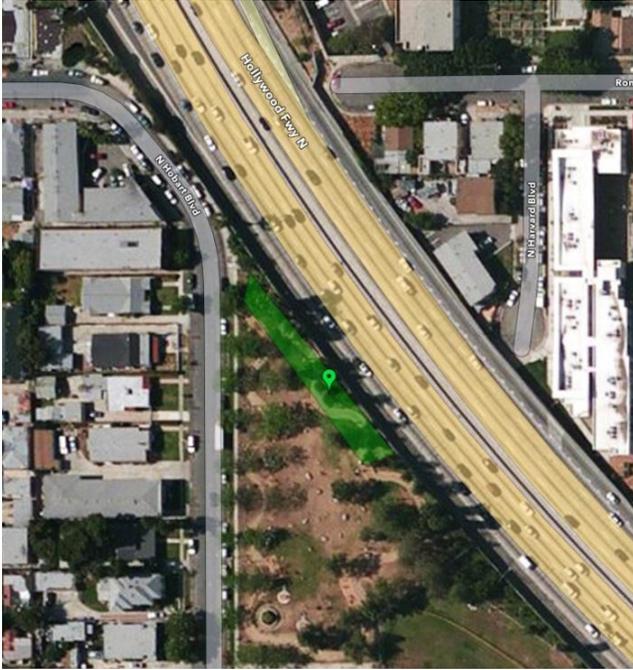
Location 3

The Petitioner intends to fly the UAV(s) over, and well clear of, the 250ft by 75ft stretch of plants and dirt along the Harbor Fwy S 101 (see below). The Petitioner intends to fly approximately 80 ft above ground or about 25-50 ft above the tallest plant. The surface of the proposed area provides sufficient space to ensure that the UAV would never have to fly above the freeway and would always fly above an uninhabited piece of land.



Location 4

The Petitioner intends to fly the UAV(s) over, and well clear of, the 200ft by 50ft stretch of plants and dirt along the Harbor Fwy S 101 (see below). The Petitioner intends to fly approximately 80 ft above ground or about 25-50 ft above the tallest plant. The surface of the proposed area provides sufficient space to ensure that the UAV would never have to fly above the freeway and would always fly above an uninhabited piece of land.



Location 5

The Petitioner intends to fly the UAV(s) over, and well clear of, the 200ft by 50ft stretch of plants and dirt along the Harbor Fwy S 101 and Fwy N 101 (see below). The Petitioner intends to fly approximately 100 ft above ground or about 25-50 ft above the tallest plant. The surface of the proposed area provides sufficient space to ensure that the UAV would never have to fly above the freeway and would always fly above an uninhabited piece of land.



Map of all 5 locations

