By letter dated July 12, 2014, Mr. Douglas Trudeau, Realtor®, of Tierra Antigua Realty (Trudeau), 1650 E River Road, Suite 202, Tucson, AZ 85718 petitioned the Federal Aviation Administration (FAA) for an exemption from part 21, subpart H; and Sections 45.23(b), 61.113(a) and (b), 91.7(a), 91.9(b)(2), 91.103(b), 91.109, 91.119, 91.121, 91.151(a), 91.203(a) and (b), 91.405(a), 91.407(a)(1), 91.409(a)(2), and 91.417(a) and (b) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption would allow Trudeau to operate the PHANTOM 2 Vision+ quad-copter unmanned aircraft system (UAS) to conduct aerial videography and cinematography to enhance academic community awareness for those individuals and companies unfamiliar with the geographical layout of the metro Tucson area and augment real estate listing videos.

The petitioner supports his request with the following information:

The petitioner has provided the following information – contained in his petition and supporting documentation including: 1) Supplemental Response for Petition, 2) PHANTOM Flying Flow Chart V1.0 (Simplified Version), PHANTOM Quick Start Manual v1.7, PHANTOM Advanced Manual v.1.4, 3) PHANTOM 2 Vision+ User Manual 4) restricted areas map, 5) personal protocols and controls, and 6) Safety/Flight Manual (all hereinafter referred to as operating documents).

The FAA has organized the petitioner’s information into four sections: 1) the unmanned aircraft system (UAS), 2) the UAS Pilot In Command (PIC), 3) the UAS operating parameters and 4) Public Interest.

Unmanned Aircraft System

The petitioner states he plans to operate a UAS, the PHANTOM 2 Vision+, which is comprised of an unmanned aircraft (UA or PHANTOM) and a transportable ground station.

The PHANTOM is referred to as a quad-copter with a maximum gross weight of about  3 pounds. It is equipped with four rotors that are driven by electric motors powered by batteries. The UA has a maximum airspeed of 30 knots. Petitioner plans to attach a small ultra-6 lightweight GoPro 3+ camera to his UA and operate the UA over various areas near Tucson, Arizona to enhance academic community awareness and augment real estate listing videos.

Petitioner makes the following representations of operational enhancements which he proposes to abide by to ensure this exemption will provide a level of safety at least equal to existing rules:

• He will only operate in reasonably safe environments that are strictly controlled, are away from power lines, elevated lights, airports and actively populated areas; and

• He will conduct extensive preflight inspections and protocols, during which safety carries primary importance.

The petitioner states that given the size, weight, speed, and limited operating area associated with the aircraft to be utilized by him, an exemption from 14 CFR part 21, Subpart H (Airworthiness Certificates) and § 91.203 (a) and (b) (Certifications required), subject to certain conditions and limitations, is warranted and meets the requirements for an equivalent level of safety under 14 CFR part 11 and Section 333 of P.L. 112-95 (Section 333).

Petitioner requests an exemption from § 45.23 Marking of the aircraft because his UA will not have a cabin, cockpit or pilot station on which to mark certain words or phrases. Further, he states that two-inch lettering is difficult to place on such a small aircraft with dimensions smaller than the minimal lettering requirement. Regardless of this, petitioner states that he will mark his UAS in the largest possible lettering by placing the word “Experimental” on its fuselage as required by § 45.29(f) so that he or anyone assisting him as a spotter will see the markings.

The petitioner states that an exemption from §§ 91.405(a), 91.407(a)(1), 91.409(a)(2) and 91.417(a) and (b) Maintenance inspections may be required and should be granted since they only apply to aircraft with an airworthiness certificate. However, the petitioner states as a safety precaution he will perform a preflight inspection of his UAS before each flight as outlined in his operating documents.

UAS Pilot in Command (PIC)

The petitioner asserts that under § 61.113 (a) and (b) private pilots are limited to non commercial  
operations, however he can achieve an equivalent level of safety as achieved by current regulations because his UAS does not carry any pilots or passengers. Further, he states that, while helpful, a pilot license will not ensure remote control piloting skills. He further indicates that the risks of operating a UAS are far less than the risk levels inherent in the commercial activities outlined in 14 CFR part 61, et seq., thus he requests an exemption from § 61.113 Private Pilot Privileges and Limitations: Pilot in command.  
Regarding UAS operational training, the petitioner states he has flown numerous practice flights in remote areas as a hobbyist simulating flights for future commercial use to gain familiarization with the characteristics of his UAS’ performance under different temperature and weather conditions. He further states that he practices computerized simulated flights to maintain adequate skills and response reflex time.

In a supplemental request to the FAA, the petitioner requests consideration of a 120 day temporary airman certificate in accordance with § 63.13, to allow him time to obtain a private pilot certificate or to allow the FAA time to establish minimum UAS airman certification standards.