CITY OF BEVERLY HILLS
STAFF REPORT

Meeting Date:	May 6, 2014
To:	Honorable Mayor & City Council
From:	Lieutenant Lincoln Hoshino Sergeant David Hamel
Subject:	Request by Councilmember Krasne for Discussion of Developing Local Regulations for Use of Unmanned Aerial Vehicles
Attachments:	FAA 4910-13; FAA Advisory Circular AC 91-57; City of Rancho Mirage 10-1.

INTRODUCTION

Councilmember Krasne is asking the City Council to consider introducing a local privacy protection ordinance for use of drones over the City when they are not within the FAA regulations.

An Unmanned Aerial System (UAS) or "Drone" is a type of aircraft which has no onboard crew or passengers. UASs include both autonomous drones (controlled by GPS) and remotely piloted vehicles (RPVs). A UAS is capable of controlled, sustained level flight and is powered by a jet, reciprocating or electric engine. Due to falling costs of UAS technology including vehicles and camera equipment, they have become readily available and affordable to the general public. Private ownership and operation of a UAS/drone is now possible with costs starting as low as $100. UAS/drones may be equipped with high definition, infrared, and night vision cameras.

DISCUSSION

Existing federal law requires the Administrator of the Federal Aviation Administration to develop and implement operational and certification requirements for the operation of public unmanned aircraft systems in the national airspace system by December 31, 2015. Current FAA policy prohibits the use of UAS/Drones for commercial purposes. That being said, a recent court decision in ***Huerta v. Pirker***, on March 6, 2014, a Federal Judge at a National Transportation Safety Board (NTSB) hearing ruled that the FAA ban on commercial UAS/Drones is advisory and not a law thus unenforceable.

Throughout the United States in 2013, 43 states introduced 130 bills and resolutions addressing UAS/drone issues. At the end of 2013, 13 states had enacted UAS/drone laws and 11 states had adopted 16 resolutions.

The State of California currently has Assembly Bill 1327 introduced in February 2013 and Senate Bill 15 introduced in December of 2012. Both bills regulate the use and operation of publicly and privately operated UAS/drones. Both the Assembly Bill and the Senate Bill are currently working through their respective committees. Assemblyman Gorell, is the author of AB1327. Based on information from Assemblyman Gorell's office their bill is moving forward, but they do not have a time line as to when it might be ready to be signed into law. Senator Padilla is the author of SB15. Senator Padilla's office made a similar statement regarding their bill.

Currently there is no specific law in the state of California that covers the use of misuse of a UAS/drone. The City of Rancho Mirage is considering the implementation of an ordinance and a vote by their city council had been delayed until May 2, 2014. We were unable to locate any other California city with a UAS/drone ordinance.

The PD has seen UASs deployed by civilian operators within the City during one protests and footage was discover on You Tube taken during the 2014 L.A. Marathon as it passed thru Beverly Hills. https://www.youtube.com/watch?v=wNKldnEMafs. The PD is not aware of any complaints in regards to any UAS/drones in Beverly Hills.

FISCAL IMPACT

Unknown

RECOMMENDATION

Staff seeks direction from the Council on whether or not it wishes to work on preparation of an ordinance for future consideration.

Captain Tony Lee, Acting Chief

Approved By

Attachment 1

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 91

Docket No. FAA-2006-25714

Unmanned Aircraft Operations in the National Airspace System

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of policy; opportunity for feedback.

SUMMARY: This notice clarifies the FAA's current policy concerning operations of unmanned aircraft in the National Airspace System.

FOR FURTHER INFORMATION CONTACT: Kenneth D. Davis, Manager, Unmanned Aircraft Program Office, Aircraft Certification Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591, (202) 385-4636, email: *kenneth.d.davis@faa.gov.*

Background

Simply stated, an unmanned aircraft is a device that is used, or is intended to be used, for flight in the air with no onboard pilot. These devices may be as simple as a remotely controlled model aircraft used for recreational purposes or as complex as surveillance aircraft flying over hostile areas in warfare. They may be controlled either manually or through an autopilot using a data link to connect the pilot to their aircraft. They may perform a variety of public services: surveillance, collection of air samples to determine levels of pollution, or rescue and recovery missions in crisis situations. They range in size from wingspans of six inches to 246 feet; and can weigh from approximately four ounces to

over 25,600 pounds. The one thing they have in common is that their numbers and uses are growing dramatically. In the United States alone, approximately 50 companies, universities, and government organizations are developing and producing some 155 unmanned aircraft designs. Regulatory standards need to be developed to enable current technology for unmanned aircraft to comply with Title 14 Code of Federal Regulations (CFR).

The Federal Aviation Administration's current policy is based on whether the unmanned aircraft is used as a public aircraft, civil aircraft or as a model aircraft.

Unmanned Aircraft Systems Operating as Public Aircraft

The most common public use of unmanned aircraft today in the United States is by the Department of Defense. U.S. operations in Iraq, Afghanistan and elsewhere have fueled a huge increase in unmanned aircraft demand. In Iraq alone, more than 700 unmanned aircraft are in use for surveillance and weapons delivery.

Other agencies have also found public uses for unmanned aircraft. For example, the Customs and Border Protection uses them to patrol along the US/Mexican border. In the future, unmanned aircraft could be used to provide first responder reports of damage due to weather or other catastrophic causes.

In response to this growing demand for public use unmanned aircraft operations, the FAA developed guidance in a Memorandum titled "Unmanned Aircraft Systems Operations in the U.S. National Airspace System – Interim Operational Approval Guidance" (UAS Policy 05-01). In this document, the FAA set out guidance for public use of unmanned aircraft by defining a process for evaluating applications for Certificate(s) of Waiver or Authorization (COA's) for unmanned aircraft to operate in the National Airspace System. The concern was not only that unmanned aircraft operations might interfere with

commercial and general aviation aircraft operations, but that they could also pose a safety problem for other airborne vehicles, and persons or property on the ground. The FAA guidance supports unmanned aircraft flight activity that can be conducted at an acceptable level of safety. In order to ensure this level of safety, the operator is required to establish the Unmanned Aircraft System's (UAS) airworthiness either from FAA certification, a DOD airworthiness statement, or by other approved means. Applicants also have to demonstrate that a collision with another aircraft or other airspace user is extremely improbable as well as complying with appropriate cloud and terrain clearances as required. Key to the concept are the roles of pilot-in-command (PIC) and observer. The PIC concept is essential to the safe operation of manned aircraft. The FAA's UAS guidance applies this PIC concept to unmanned aircraft and includes minimum qualifications and currency requirements. The PIC is simply the person in control of, and responsible for, the UAS. The role of the observer is to observe the activity of the unmanned aircraft and surrounding airspace, either through line-of-sight on the ground or in the air by means of a chase aircraft. In general, this means the pilot or observer must be, in most cases, within 1 mile laterally and 3,000 feet vertically of the unmanned aircraft. Direct communication between the PIC and the observer must be maintained at all times. Unmanned aircraft flight above 18,000 feet must be conducted under Instrument Flight Rules, on an IFR flight plan, must obtain ATC clearance, be equipped with at least a Mode C transponder (preferably Mode S), operating navigation lights and / or collision avoidance lights and maintain communication between the PIC and Air Traffic Control (ATC). Unmanned aircraft flights below 18,000 feet have similar requirements, except that if operators choose to operate on other than an IFR flight plan, they may be required to pre-coordinate with ATC.

The FAA has issued more than 50 COA's over the past 2 years and anticipates issuing a record number of COA's this year.

For more information, Memorandum on UAS Policy (05-01) and other policy guidance is available at the FAA Website: *http://www.faa.gov/uas.*

Unmanned Aircraft Systems Operating as Civil Aircraft

Just as unmanned aircraft have a variety of uses in the public sector, their application in commercial or civil use is equally diverse. This is a quickly growing and important industry. Under FAA policy, operators who wish to fly an unmanned aircraft for civil use must obtain an FAA airworthiness certificate the same as any other type aircraft. The FAA is currently only issuing special airworthiness certificates in the experimental category. Experimental certificates are issued with accompanying operational limitations (14 CFR § 91.319) that are appropriate to the applicant's operation. The FAA has issued five experimental certificates for unmanned aircraft systems for the purposes of research and development, marketing surveys, or crew training. UAS issued experimental certificates may not be used for compensation or hire.

The applicable regulations for an experimental certificate are found in 14 CFR §§21.191, 21.193, and 21.195. In general, the applicant must state the intended use for the UAS and provide sufficient information to satisfy the FAA that the aircraft can be operated safely. The time or number of flights must be specified along with a description of the areas over which the aircraft would operate. The application must also include drawings or detailed photographs of the aircraft. An on-site review of the system and demonstration of the area of operation may be required. Additional information on how to apply for an

experimental airworthiness certificate is available from Richard Posey, AIR-200, (202) 267-9538; email: *richard.posey@faa.gov.*

Recreational/Sport Use of Model Airplanes

In 1981, in recognition of the safety issues raised by the operation of model aircraft, the FAA published Advisory Circular (AC) 91-57, Model Aircraft Operating Standards for the purpose of providing guidance to persons interested in flying model aircraft as a hobby or for recreational use. This guidance encourages good judgment on the part of operators so that persons on the ground or other aircraft in flight will not be endangered. The AC contains among other things, guidance for site selection. Users are advised to avoid noise sensitive areas such as parks, schools, hospitals, and churches. Hobbyists are advised not to fly in the vicinity of spectators until they are confident that the model aircraft has been flight tested and proven airworthy. Model aircraft should be flown below 400 feet above the surface to avoid other aircraft in flight. The FAA expects that hobbyists will operate these recreational model aircraft within visual line-of-sight. While the AC 91-57 was developed for model aircraft, some operators have used the AC as the basis for commercial flight operations.

Policy Statement

The current FAA policy for UAS operations is that no person may operate a UAS in the National Airspace System without specific authority. For UAS operating as public aircraft the authority is the COA, for UAS operating as civil aircraft the authority is special airworthiness certificates, and for model aircraft the authority is AC 91-57.

The FAA recognizes that people and companies other than modelers might be flying UAS with the mistaken understanding that they are legally operating under the authority of

AC 91-57. AC 91-57 only applies to modelers, and thus specifically excludes its use by persons or companies for business purposes.

The FAA has undertaken a safety review that will examine the feasibility of creating a different category of unmanned "vehicles" that may be defined by the operator's visual line of sight and are also small and slow enough to adequately mitigate hazards to other aircraft and persons on the ground. The end product of this analysis may be a new flight authorization instrument similar to AC 91-57, but focused on operations which do not qualify as sport and recreation, but also may not require a certificate of airworthiness. They will, however, require compliance with applicable FAA regulations and guidance developed for this category.

Feedback regarding current FAA policy for Unmanned Aircraft Systems can be submitted at www.faa.gov/uas. (Scroll down to the bottom of the page and find Contact UAPO. Click into this link.)

Issued in Washington, DC on February 6, 2007

/s/ Nick Sabatini

Nicholas Sabatini
Associate Administrator for Aviation Safety

Attachment 2

AC 91-57

DATE June 9, 1981

ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
Washington, D.C.

Subject: MODEL AIRCRAFT OPERATING STANDARDS

1. PURPOSE. This advisory circular outlines, and encourages voluntary compliance with, safety standards for model aircraft operators.

2. BACKGROUND. Modelers, generally, are concerned about safety and do exercise good judgement when flying model aircraft. However, model aircraft can at times pose a hazard to full-scale aircraft in flight and to persons and property on the surface. Compliance with the following standards will help reduce the potential for that hazard and create a good neighbor environment with affected communities and airspace users.

3. OPERATING STANDARDS.

a. Select an operating site that is of sufficient distance from populated areas. The selected site should be away from noise sensitive areas such as parks, schools, hospitals, churches, etc.

b. Do not operate model aircraft in the presence of spectators until the aircraft is successfully flight tested and proven airworthy.

co Do not fly model aircraft higher than 400 feet above the surface. When flying aircraft within 3 miles of an airport, notify the airport operator, or when an air traffic facility is located at the airport, notify the control tower, or flight service station.

d. Give right of way to, and avoid flying in the proximity of, full-scale aircraft. Use observers to help if possible.

e. Do not hesitate to ask for assistance from any airport traffic control tower or flight service station concerning compliance with these standards.

R. J. VAN VUREN
Director, Air Traffic Service

Initiated by: AAT-220

Attachment 3

CITY OF RANCHO MIRAGE ©

STAFF REPORT

TO: Hon. Mayor Scott Hines
Members of the City Council

DATE: April 4, 2013

FROM: Randal K. Bynder, City Manager
Steven B. Quintanilla, City Attorney

SUBJECT: Drone Prohibition Ordinance

SPECIFIC REQUEST OR RECOMMENDATION:

That the City Council adopt the attached ordinance which will prohibit the flying of drones in residentially zoned areas of the City with some exceptions.

Background:

Drones, which are unmanned aircraft that can fly under the control of a remote pilot or via a geographic positions system (GPS) guided autopilot mechanism, have become increasingly available to private citizens for personal and recreational uses due to their declining costs. Drones can fly at altitudes below the navigable airspace (generally at 400 feet) which is under the jurisdiction, regulation and control of the Federal Aviation Administration.

Some drones are equipped with high definition cameras, night vision cameras and infrared-see-though scopes. Drones can be used to fly above private residences and to hover outside somebody's window or in their backyards without the knowledge of the resident who has a reasonable expectation of privacy in his or her home and in his or her backyard.

There are no existing state or federal regulations regarding who may purchase a drone which presents a safety risk to residents in that drones may be purchased and operated by sex offenders, and other persons with certain criminal backgrounds, such as but not limited to domestic violence, theft, burglary, breaking and entering, trespass,

City Council Action:

Approved as Requested: _____
Approved as Amended: _____
Denied: _____
Other: _____

Referred to: _____
For: _____
Cont. to Agenda of: _____
Hearing Set: _____

AGENDA ITEM

assault and battery.

In light of the foregoing concerns, the proposed ordinance would prohibit the flying of drones in any airspace below 400 feet within or over any residentially zoned area in the city, unless otherwise exempt under the ordinance. For instance, the proposed ordinance will exempt the use of drones in residential areas by any law enforcement agency of the city, state or federal government for lawful purposes and in a lawful manner. In addition, drones will be permitted to make visual recordings of a single residence, with the owner's written consent, provided the owner and/or operator of the subject drone obtains a validly issued drone permit from the city. This is intended to accommodate the practice of some realtors who use drones to advertise properties for sale or lease.

Any person found to be in violation of the provisions of the proposed ordinance will be guilty of an infraction which is punishable by: (a) a fine in an amount not to exceed one hundred dollars for a first violation; (b) a fine in an amount not to exceed two hundred dollars for a second violation of the same provision within a twelve month period commencing on the date of the first violation; and (c) a fine in an amount not to exceed five hundred dollars for the third violation of the same provision within a twelve month period commencing on the date of the first violation. A fourth violation and subsequent violations of the same provision within a twelve month period from the date of the first violation shall be deemed a misdemeanor.

Attachment:

Ordinance

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO MIRAGE AMENDING DIVISION III "OFFENSES AGAINST PUBLIC PEACE" OF TITLE 9 "PUBLIC PEACE, MORALS AND WELFARE" OF THE RANCHO MIRAGE MUNICIPAL CODE TO PROHIBIT THE FLYING OF DRONES IN RESIDENTIALLY ZONED AREAS OF THE CITY

WHEREAS, drones, which are unmanned aircraft that can fly under the control of a remote pilot or via a geographic positions system (GPS) guided autopilot mode, have become increasingly available to private citizens for personal and recreational uses due to their declining costs; and

WHEREAS, drones can fly at altitudes below the navigable airspace (generally at 400 feet) which is under the jurisdiction, regulation and control of the Federal Aviation Administration (FAA); and

WHEREAS, some drones are equipped with high definition cameras, night vision cameras and infrared-see-though scopes; and

WHEREAS, some drones can be used to fly above private residences and to hover outside somebody's window or in their backyards without the knowledge of the resident who has a reasonable expectation of privacy in his or her home and in his or her backyard; and

WHEREAS, there are no existing regulations regarding who may purchase a drone which presents a safety risk to residents in that drones may be purchased and operated by sex offenders, and other persons with certain criminal backgrounds, such as but not limited to domestic violence, theft, burglary, breaking and entering, trespass, assault and battery.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO MIRAGE DOES ORDAIN AS FOLLOWS:

Section 1. Recitals.

The recitals set forth above are true and correct.

Section 2. Amendment to Division III "Offenses Against

Public Peace"

Division III "Offenses Against Public Peace" of Title 9 "Public Peace, Morals and Welfare" shall be amended as follows:

Chapter 9.30 DRONES

9.26.10 Definitions.

"Drone" shall mean an unmanned aircraft that can fly under the control of a remote pilot or by a geographic positions system (GPS) guided autopilot mechanism.

9.26.20 Prohibition.

Drones are prohibited from flying in any airspace below 400 feet within or over any residentially zoned area in the city, unless otherwise exempt under this chapter

9.26.30 Exemptions.

(a) This chapter shall not prohibit the use of drones by any law enforcement agency of the city, state or federal government for lawful purposes and in a lawful manner.

(b) Use of drones may be used to make visual recordings of a single residence, with the owner's written consent, provided the owner and/or operator of the subject drone obtains a validly issued drone permit from the city.

9.26.40 Violations.

Any person found to be in violation of the provisions of this chapter shall be guilty of an infraction as set forth in chapter 14.100.

Section 3. CITY ATTORNEY REVIEW

The City Attorney prepared and framed this ordinance pursuant to Section 1.04.010 of the Municipal Code and finds that the City Council has the authority to adopt this ordinance, that the ordinance is constitutionally valid and that the ordinance is consistent with the general powers and purposes of the City as set forth in Section 1.04.031 of the Municipal Code.

Section 4. **SEVERABILITY**

The City Council declares that, should any provision, section, paragraph, sentence or word of this ordinance be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this ordinance as hereby adopted shall remain in full force and effect.

Section 5. **REPEAL OF CONFLICTING PROVISIONS**

All the provisions of the Rancho Mirage Municipal Code as heretofore adopted by the City of Rancho Mirage that are in conflict with the provisions of this ordinance are hereby repealed.

Section 6. **AMENDING OF MUNICIPAL CODE**

The City Attorney's Office is hereby directed to determine whether this ordinance necessitates amendment of the City's Municipal Code and to cause such necessary amendments to be made and filed with the local branches of the Superior Court of the County of Riverside.

Section 7. **EFFECTIVE DATE**

This ordinance shall take effect thirty (30) calendar days after its second reading by the City Council.

Section 8. **CEQA FILING**

The City Council hereby finds that under Title 14 of the California Code of Regulations section 15061(b)(3), this Ordinance is exempt from the requirements of CEQA since the prohibition against flying drones in residentially zoned areas of the city would not have the potential for causing a significant effect on the environment. The City Council, therefore, directs that a Notice of Exemption be filed with the County Clerk of the County of Riverside in accordance with CEQA Guidelines

Section 9. **CERTIFICATION**

The City Clerk shall certify to the passage of this ordinance and shall cause the same to be published according to

law.

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The foregoing Ordinance was approved and adopted at a meeting of the City Council held on _____, 2013 by the following vote:

Ayes:
Noes:
Abstain:
Absent:

_____
Scott M. Hines, Mayor

ATTEST:

_____
Cindy Scott, CMC
City Clerk

APPROVED AS TO FORM:

_____
Steven B. Quintanilla
City Attorney