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Contra Costa County

To: Board of Supervisors

From: Supervisor Diane Burgis & Supervisor Karen Mitchoff

Date: December 18, 2018

Subject: Intent to Explore Testing of Unmanned Aerial Systems at County Airports

RECOMMENDATION(S):

AUTHORIZE the Director of Airports to explore the risks and benefits of entering into a Memorandum of Agreement with two private entities, Dronecode and 3DR Government Service (Private Entities), to enable the Private Entities to test unmanned aerial systems (UAS) at one or both County airports to enable the Federal Aviation Administration to evaluate the efficacy of having UAS perform certain airport inspections. Any Memorandum of Agreement would be submitted to the Board of Supervisors for approval.

FISCAL IMPACT:

There is no impact on the County General Fund. Airport staff time and County Counsel staff time will be charged to the Airport Enterprise Fund.

BACKGROUND:

On November 8, 2017, the Department of Transportation, through the Federal Aviation Administration (FAA), announced the establishment of the Unmanned Aircraft Systems (UAS) Integration Pilot Program (IPP). The Program was established to encourage State, local and tribal governments, in partnership with UAS operators and other private sector stakeholders, to conduct advanced operations safely and with public support in affected

OTHER
NTY RECOMMENDATION OF BOARD COMMITTEE
✓ APPROVED AS RECOMMENDED ☐ OTHER
I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown.
ATTESTED: December 18, 2018
David Twa, County Administrator and Clerk of the Board of Supervisors
David Twa, County Administrator and Clerk of the Board of Supervisors
By: June McHuen, Deputy

252-4500

communities. It was envisioned that these

BACKGROUND: (CONT'D)

partnerships and operations would in turn assist the Federal Government in establishing future UAS regulations. Interested parties were given a short turnaround time of November 28, 2017 to declare interest in the program.

On November 14, 2017, the Board approved and authorized the County to submit a notice of intent to the Federal Aviation Administration (FAA) indicating their interest and intent to submit an application to partner with the U.S. Department of Transportation in their UAS testing program. On January 16, 2018, the Board ratified the executive of a Letter of Intent between the County and the California Department of Technology to participate in an FAA-sponsored UAS IPP test program.

Recently, Dronecode and 3DR Government Services (Private Entities) approached Contra Costa County with the desire to test the accuracy of a UAS program they have developed for use by the FAA in performing inspections of an airports TERPS, which stands for Terminal Instrument Procedures. An airports TERPS and associated electronic equipment are used by aircraft to safely land during nighttime and inclement weather operations. Dronecode and 3DR have proposed this TERPS test program to the Federal Aviation Administration (FAA) as an alternative to their typical inspection process at airports in the United States. They are projecting significant cost savings, reduction in community noise impacts, and improved safety. Dronecode produces software for UAS, using "open-source" coding that is intended to result in a standardized methodology for communicating with UAS. 3DR Government Services produces UAS systems and services for government projects.

Currently, TERPS inspections occur at 3 to 5-year intervals. The infrequency of the inspections is the result of the FAA having to use a jet or turbo-propeller aircraft to perform TERPS calibration testing. Using these types of aircraft means that the test is expensive (approximately \$10,000 per test) and noisy (producing a lot of complaints from nearby residents). If the test could be performed by a UAS, the FAA and or Airport staff would be able to perform the test more frequently, resulting in improved safety for pilots and the general public.

If the County agrees to allow one or both of its airports to be used by the Private Entities to perform tests of the subject UAS, the County will enter into a Memorandum of Agreement (MOA) with the Private Entities. The MOA will require the Private Entities to share the data gathered as a result of the tests with the FAA. There will be little short-term benefit to the County for partnering on this project. However, the County would benefit if the tests conducted by the Private Entities lead to an increase in the frequency of TERPS and a reduction in the noise and pollution that currently result from TERPS. Additionally, in the long-term, the County is expected to benefit by establishing a partnership with the FAA so that other UAS programs within the County could be expedited through the FAA approval process.

CONSEQUENCE OF NEGATIVE ACTION:

The County will not participate as a partner in enabling the FAA to evaluate new technology.

ATTACHMENTS

Federal Register -UAS Integration Pilot Program