

Vigilant Spirit UAV Ground Control Software

Air Force's multi-drone, multi-sensor control software available to businesses

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Vigilant Spirit: Designed with the User Experience in Mind



While UAVs play a crucial role in conflict, they are only as good as the GCS that operate them.



Multiple Aircraft Control (MAC) Challenge



Past



Present



Market Opportunity



News Products Industries Enthusiasts Regulations Business

Dividing a Mission Between Multiple Drones – With a Single Pilot: Atlas Multi-Drone System Secures Soccer Tournament in Rio [Video]

Posted By: staff on: August 05, 2019

Unmanned Aerial
Online

Flirtey Demos Deliveries With Multiple Drones Per Pilot

Posted by Betsy Lillian - September 14, 2018

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The City of Reno, Nev., and drone delivery company Flirtey have [completed](#) their first flights under the Federal Aviation Administration's Drone Integration Pilot Program (IPP).

Conducting the first multi-drone delivery demonstration under [the FAA's IPP](#), a single Flirtey pilot simultaneously operated multiple Flirtey drones and simulated the delivery of

automated external defibrillators (AEDs) in the presence of the FAA. They were conducted under Flirtey's regulatory waiver allowing the operation of multiple small unmanned aircraft systems (UAS) by one pilot.

Multi-drone Operations are
“very much aligned”
with where the market's going.



Market Competitors



- Insitu Inexa ~\$50000 / seat



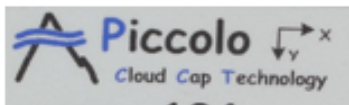
- UAS Europe SkyView: \$8k/seat



- SPH Engineering uCGS: \$600/seat for single user, \$2,000 for network license



- Lockheed Martin VCS: \$15k/seat (outdated)



- Collins Piccolo Command Center (PCC): free with purchase of Piccolo (Piccolo can be as low as \$4k)



- MicroPilot Horizon GCS: \$1,500



Vigilant Spirit: Pilot-Centric Ground Control Station

- Open Source Platform
- Allow a single drone crew to control up to seven UAVs
- Built of years of research investigating human engagement with autonomous system control
- Graphical User interface



Comprehensive Control Station Software Solution



A Vigilant Spirit screen shot shows what an operator sees while flying multiple drones in the Air Force Research Lab project. TY GREENLEES / STAFF



III. Organization



Jason Davis , Gregory Feitshans

Dr. Mark Draper




Rapid Acquisition Pathways for Software



FEDERAL REGISTER
The Daily Journal of the United States Government



 Notice

Notice of Availability of Software and Documentation for Licensing

A Notice by the [Air Force Department](#) on 09/26/2018



PUBLISHED DOCUMENT

AGENCY:

Department of the Air Force, Department of Defense.

ACTION:

Availability of VIGILANT SPIRIT Software and Documentation for Licensing.

SUMMARY:

The Department of the Air Force announces the availability of VIGILANT SPIRIT software and related documentation that enables flexible operator teaming arrangements, including single operator control, of multiple heterogeneous Unmanned Air Vehicles ("UAVs").

DOCUMENT DETAILS

Printed version:

[PDF](#)

Publication Date:

09/26/2018

Agencies:

[Department of the Air Force](#)

Document Type:

Notice

Document Citation:

83 FR 48606

Page:

48606-48607 (2 pages)

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2018-20943



V. License Strategy Sought

Negotiated Terms AFRL / 711th Human Performance Wing	
Licensed Software	Vigilant Spirit® shall mean the LICENSOR designated core source code capabilities of the Vigilant Spirit Control Station (VCS) and Vigilant Spirit Simulation. Existing documentation will also be included.
License type	Non-Exclusive License
Term of license	5 years from effective date
Licensed territory	World-wide
Field of use	Control of Military Operations
Calendar Quarter	Means any three-month period commencing on 1 January, 1 April, 1 July, or 1 October.
Agreement Year	Means four (4) consecutive CALENDAR QUARTERS next following the first day of a CALENDAR YEAR. The first AGREEMENT YEAR shall include the first CALENDAR QUARTER beginning on the EFFECTIVE DATE and the four (4) consecutive CALENDAR QUARTERS thereafter.



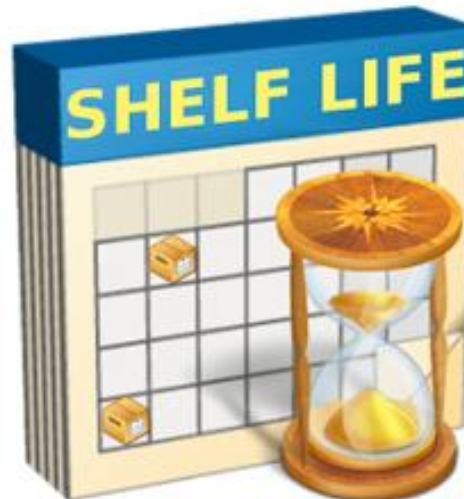
V. License Strategy Sought

	Negotiated Terms AFRL / 711th Human Performance Wing
Royalty base product	Means a product, apparatus, method, or service that uses the Licensed Software in whole or in part.
Royalty & license fee Upfront Running royalty Definition	<div>Up Front License Fees</div> <p>BSIDIARIES, and CT in the licensed territory</p>
Minimum annual royalty	\$2000 - \$8
Version update/patch fee	From effect
Annual version update/patch fee (optional)	<div>Royalties</div> <p>\$2,500/yr starting at the end of the first Agreement Year and each Agreement Year thereafter</p> <p>Version update and/or patch frequency: Minimum annually; others - as needed</p> <p>Annual version update/p</p> <p>Should a Licensee decli</p> <p>date, LICENSEE will be c</p> <div>Updates Available, Optional</div> <p>a later</p>
Licensee performance	Licensee is responsible for all ITAR/Export Control considerations



VI. License Opportunity Benefits

- Timeliness
- Budget
- Continuity





- Licensing DoD Technology

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