The Emerging Economic Impact of Unmanned Aircraft Systems (aka "Drones")

Tom Hagen
AUVSI Cascade Chapter
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The Growth of UAS

- 1,500,000 Drones registered in U.S.
 - 413,000 Commercial Drones
 - 1,100,000 Recreational Drones
- 157,000 Remote Pilots certificated
- \$100B \$125B UAS market this decade



Operational Missions

- Infrastructure inspections
- Real estate / aerial photography
- Precision agriculture
- Insurance claims
- Research and development
- Search and Rescue
- Resource management
- Package delivery
- Urban Mobility
- Mining
- Media coverage
- First responder support
- Security
- ...and more yet unknown!



Power Lines



Precision Agriculture



Resource Management



Bridges & Infrastructure



Damage assessment



Package Delivery

Top 20s





DRONE INDUSTRY INSIGHTS TOP 20 Drone Service Providers 2019 MAIN CATEGORY RANK COMPANY 10% 20% 30% 40% 50% 60% 70% 80% ZIPLINE DULIVERY TERRA DRONE MAPPING/SURVEYING, INSPECTION ALPIODYNE GROUP MAPPING/SCIENCENIO, INSPECTION CYBERRAWK MAPPING/SURVEYING, INSPECTION SO CYPCERAME HEMAY Mappais/Surveyers HEARAY) MEASURE MAPPING/SURVEYING, INSPECTION AN HEATURE DROTTES . SKYLARK DRONES MAPPING/SURVEYING, INSPECTION MATTERNET MATTERNET DELIVERY MAPPING/SURVEYING, INSPECTION verity DHONE SHOWS Flirtoy MAPPING/SURVEYING, INSPECTION Art. declara MAPPING/SURVEYING, INSPECTION DELIVERY FLYTREX SHARPER SHAPE MAPPING/SURVEYING, INSPECTION auav MAPPING/SURVEYING, INSPECTION PORONE MAPPING/SUMEVING, INSPECTION Магельфиниство, Інверстон 20 DRONE DUDES Ристовилен/Уюсовили:



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July 2019, bears of assessment: The ranking is based on the following indicators: Size of company, market shared-sake ligures, number of following, public attention, and the extend of which society. This highest accessing consequer is each distriction reserves a rating of 100%, while all office done occupants resolution at the properties for the highest processor. The total score is an average of all have researed dimensions. A company on each an index of 100% it it leads all considered sources.

DRONEII.COM

Workforce Opportunities

- Engineering
- Operations
- Data Collection,
 Exploitation, Dissemination
- Imagery Analysis
- Communications
- Avionics and Payloads
- Airframes and Engines
- Field Support
- Marketing
- First Responders

- Attorneys
- Insurance Sales
- Human Factors
- Advanced Manufacturing
- Regulators
- Flight Test Operations /
 Management
- Science and Research
- Air Traffic Controllers
- Consultants

...and many more!

Regional Unmanned Systems Stakeholders



























FLIGHTHOUSE









FREEFLY















Northwest UAV



















Applewhite Aero





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PNWER Can Play a Critical Role...

- Critical mass of aerospace firms and skilled workforce
- Advanced manufacturing and materials companies
- Information and communication technology businesses
- Strong academia baseline / workforce development
- Wide variety of services and support industries
- Much-needed focus on regional disaster resilience
- An abundance of geographical resources
- YOU!





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