



ULTRAVANCE

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Ultravance matches
high-performance UAVs, specialized
payloads, and expert crews with
challenging requirements.





We start at the end.



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**What are you trying to do?
What's the desired end
product?**

“Think and Listen Broadly.”

Ellen Faurot-Daniels





The “Art of the possible.”



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Recent discussions:

Fresh burial site detection in Asia
Illegal pipeline tapping in Africa
Anti-narco in Central America
Legal gold mining in South America
Illegal gold mining in South America
Crop Health in South America
Mapping and Ag in India



Hardware...



PENGUIN B UAV PLATFORM



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Own or Hire?

Staffing? Currency? Maintenance?
Insurance? Regs, i.e. 333 to 107?

Contracting can be used:

To stay current with technology

As an extended test & for initial waivers

To observe procedures

To broaden portfolio

To reduce exposure



Important Considerations...

Spec sheet claims

Empirical or Calculated?

i.e. Path loss calculations/link budget

i.e. Payload or useful load?

References as adjunct

See claims demonstrated



Suggestions (examples...)

Test endurance by adding weight and weighing outcome

Step down amp to establish effective comms range

Run engine at multiple RPMs to establish true electrical output



Important non-spec considerations:

Support/response times/methods

Parts availability / costs

Ease of repairs

Fragile or “robust” (and which parts)





Important non-spec considerations:

Training (initial/recurring)

Warranty/Insurance

Ability to fly legally

Ease of payload integration





Have realistic expectations



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100 kilometer range





100 kilometer range

Hills, mountains, buildings interrupt LOS.

Earth curves 8" for every mile of distance.

Is your sensor up to it?



What about velocities?

Inclement weather operation





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Need different capabilities?



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Twin Engine for reliability/redundancy 130+kts, 70-90lb useful load



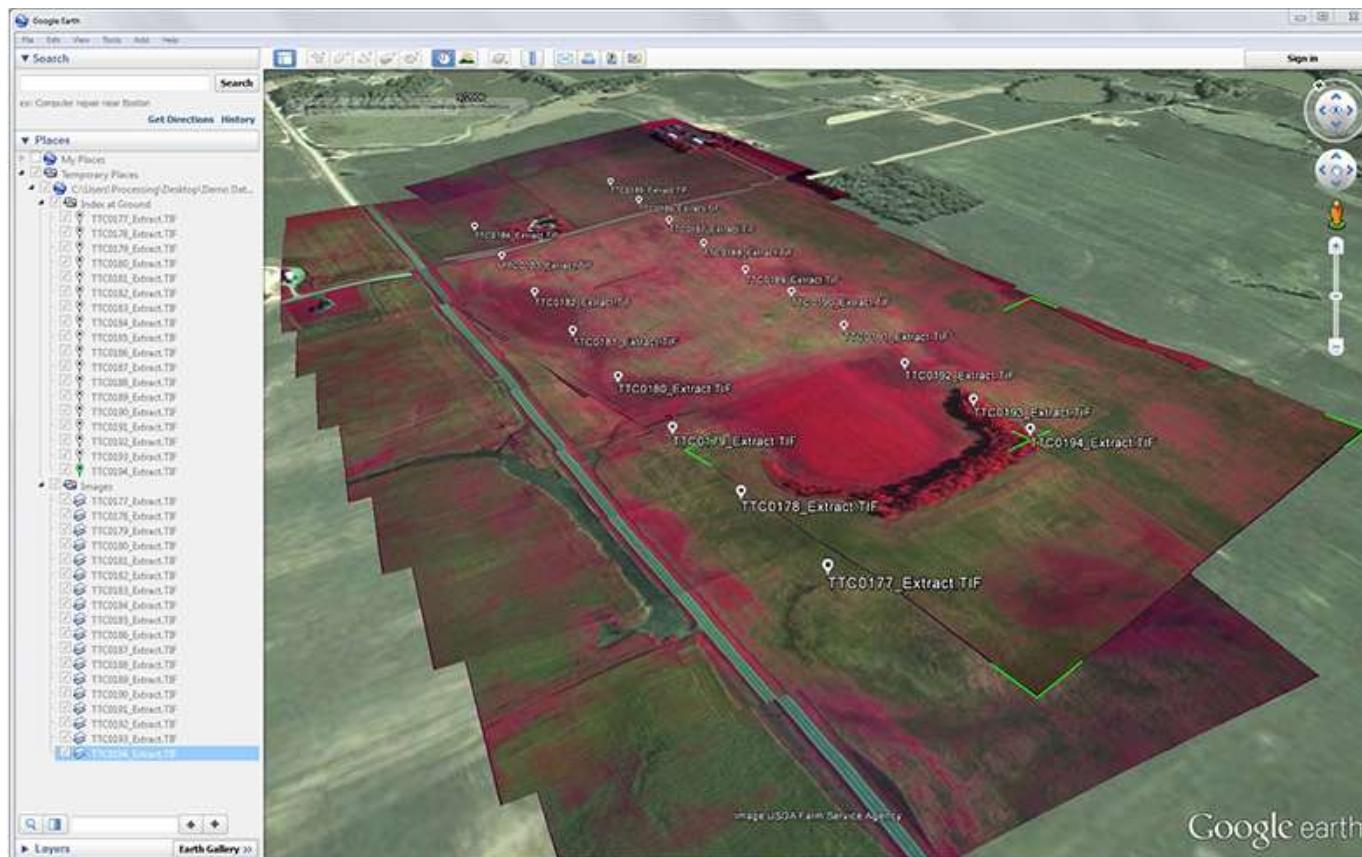


Be open to suggestions



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For example, this instead of FMV?





Ideas

Verify false alarms with UAV GPS response

Use UAV to relay comms

Digital surface modeling for beach slopes

Incendiary payloads. Liquid & solid payloads.

Up to 200lb useful loads

SWaP. Environment. Budget. Import/Export.

Other constraints.



Establish which specs matter

Consider testing system by working with service provider before committing to being an owner/operator/maintainer

Surge capacity in private industry.



May exercise planned

Regularly flying in U.S. and abroad



Is it possible?
Let's talk.



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