OFME AAM Challenge: DNR FAQ

11/14/2025

Program Details & Eligibility

1. **What is the deployment period for DNR?**
   - The applications close on December 5, 2025; companies will be notified January 26, 2026 and the 18-month deployment will begin after a 6-8 week contracting period.

2. **Are proposals that include both VTOL platforms and mobile charging infrastructure eligible?**
   - Yes, those proposals would be eligible. If the partner can address the requirements and collect the necessary data, that would be acceptable.

3. **Is the emphasis more on VTOL over UAS, or are proposals regarding both/ either eligible?**
   - The emphasis does lean more toward VTOL platforms, primarily because fixed-wing VTOL systems offer significant efficiencies compared to multi-rotor machines, especially for mapping large areas. However, proposals for UAS or for both VTOL and UAS are also eligible. There is no reason to discourage submissions that include either or both.

4. **Would an off-road, mobile energy storage/power distribution support asset be considered? (For example, DANNAR has supported eVTOL and drone field power/charging for the defense department.)**
   - A standalone mobile energy storage and power distribution asset is outside the scope of this challenge, which focuses on addressing specific operational and data-related requirements. However, such a solution could be considered if integrated into a broader proposal that includes drone or VTOL capabilities to deliver on the intended use cases and data objectives. On its own, energy storage and distribution does not meet the core objectives of this challenge.

5. **Is this aerial drone grant limited to aerial drones only, or will inclusion of land drones (either as accessories or standalone) be eligible?**
   - The focus of this challenge is on aerial drone solutions. Land drones on their own would not be eligible. However, if a land-based drone is included as a supplementary component to an aerial drone system, that could be considered. Proposals that integrate both, where the land drone supports the aerial operations, may be of interest.

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6. **Are you specifically looking for a company partner, or could a university also be a partner?**
   - Anyone who is able to meet the project deliverables is eligible, which could be a university.

7. **Can proposals focus solely on the software stack for VTOL or fixed-wing aircraft (existing fleet or new drones), or must they include both hardware and software?**
   - Proposals should include both hardware and software components. The goal of this challenge is to enable the Department of Natural Resources to evaluate long-term solutions that could potentially replace or phase out existing drones. Hardware is therefore a critical factor, as the solution must be something that can be deployed and used effectively. Integration with existing software systems is important, but hardware capability is essential for consideration.

8. **Is the funding intended to cover delivery of hardware and software, or only for the test and evaluation (T&E) period?**
   - The funding is intended to support what is necessary for the project, which may include hardware, software, and activities related to the test and evaluation period. Additional clarification and details can be provided separately.

9. **Which technology readiness levels (TRLs) are ideal for proposals?**
   - TRL 7+

10. **What is the required match percentage for this grant?**
    - There is no minimum match percentage requirement. However, some level of match is mandatory, which can be provided as either a cash cost share or an in-kind contribution, such as donated labor hours. The match can come from the applicant or project partners.

11. **Does providing a higher match percentage result in a higher score?**
    - Currently, the scoring matrix does not award additional points for a higher match percentage. While applicants are encouraged to provide as much match as possible, the amount is ultimately at the discretion of the applicant and their partners.

12. **Can matching funds be in the form of a discount in pricing?**
    - Yes, a discount in pricing can be considered as part of the match if it is clearly documented and quantified in the budget sheet. However, cost-share contributions must be calculated based on the actual cost of goods or services provided, not the discounted market or selling price.

Operations & Technical Requirements

13. What is the estimated kick-off date for flight operations?

   o   Flight operations can begin as soon as the contract is signed. The timeline for contract execution depends on how detailed and complete the scope of work and budget are during the planning phase. On average, this process takes approximately 6 to 8 weeks, though it can be expedited with thorough preparation. Based on the current project timeline, contracts are expected to be finalized by mid to late March, making early spring a realistic start date for flight operations.

14. What is the BVLOS expectation, and will DNR be submitting for the required evaluations?

   o   DNR is currently working through the BVLOS evaluation process and expects to have the necessary approvals by the end of this year or early 2026.

15. For fixed-wing eVTOL, are you looking for small drones (e.g., Syways, Wingcopter) or large eVTOLs (e.g., Joby, Archer, Wisk, MightyFly)?

   o   The primary interest is in smaller fixed-wing drones with VTOL capabilities, such as Wingcopter or similar platforms. Larger eVTOL systems like Joby or MightyFly are also of interest, though the focus is on solutions that are practical for the intended use cases.

16. Does DNR currently conduct its drone operations under Part 107, Part 91 CoA PAO, or both?

   o   DNR operates under both. All pilots are Part 107 certified, and DNR holds a nationwide COA as well as a Michigan-specific COA. The team is also working through the COW process to obtain BVLOS approval.

17. What systems are you currently flying?

   o   DNR operates a fleet of 26 drones, primarily DJI models, ranging from Mavic series to larger Matrice platforms (including T30, 210, 300, and 350). The fleet also includes Agras T25 and T40 units for spraying applications and one FreeFly Alta X equipped with a plastic sphere dispenser for prescribed burning using the Ignis system. Payloads include Zenmuse cameras such as P1, H20T, XT1, XT2, and various RGB sensors.

18. How many aircraft and sensors are in your current fleet?

   o   The fleet consists of 26 drones with multiple payload options, including thermal, RGB, and specialized sensors for mapping and operational tasks.

19. How many certified pilots does DNR have?

   o   DNR currently has 26 certified pilots across the department.

20. What payloads are you prioritizing, assuming the budget is limited?
- The highest priority payloads are RGB cameras, which are essential for large-scale mapping and videography. Thermal cameras are also a key focus due to their value in mapping and fire applications and wildlife monitoring. Additional payloads of interest include magnetometers, LiDAR, and gas detection sensors (e.g., for hydrogen sulfide), which are not currently part of the fleet but represent areas for future expansion. Multispectral sensors are another priority for forestry studies; the department currently has only one and would like to increase capacity in this area.

21. What is LTE coverage like in your service territory?
- LTE coverage is generally reliable in the northern Lower Peninsula, though there are occasional gaps in remote areas where many surveys occur. The Upper Peninsula has significant coverage gaps, requiring careful planning and preloading of data for field operations. The southern Lower Peninsula typically has strong coverage, but connectivity becomes spotty as you move north.

22. Any interest in hyperspectral sensors?
- Yes, hyperspectral sensors are of interest, as they can provide valuable data and improve workflow efficiency.

23. What radio frequency band do you use for the moose collars?
- Telemetry is through GPS collars and UAS will only be used to observe animals in known locations.

24. When monitoring bear dens, how close can drones get to collect data?
- Drones typically operate within Part 107 guidelines, staying under 400 feet. Approaching within a few hundred feet of a den is generally acceptable and unlikely to cause disturbance, provided operations remain cautious.

25. What additional capabilities are needed for bear den monitoring?
- Current tracking relies on GPS collars to locate dens and thermal cameras to confirm occupancy by detecting heat signatures. Additional capabilities that improve precision and minimize disturbance would be valuable.

26. In respect to tree coverage, are you only collecting data from the top canopy, or do you need data below the canopy as well?
- While most current data collection focuses on canopy closure, data below the canopy is extremely valuable for forestry and fire management applications. Technologies such as LiDAR that enable analysis of forest compartments, tree measurements (e.g., DBH), and fuel load assessments would be highly beneficial

for future planning and wildfire risk management.

27. **For your CoW, you mentioned BVLOS up to 200' shielded. What ranges/distances are you being approved for?**
    - Specific ranges and distances have not yet been finalized. The current understanding is BVLOS operations up to 200 feet shielded, but details are pending due to delays in the approval process. The team is in a holding position and awaiting further guidance.

28. **Do you have datasets for below-canopy environments, such as timber, hardwood, or jack pine?**
    - No, we do not currently have drone-based datasets for below-canopy environments. Any data we have in these areas was collected manually by foresters through on-site measurements. Developing below-canopy datasets would be new for this project.

29. **How quickly can you obtain new approvals or waivers for weight, BVLOS, and height?**
    - The exact timeline for obtaining new waivers or approvals is uncertain. Currently, DNR operates under existing COAs that cover requirements such as exceeding the 55-pound weight limit for spray operations. Since all necessary waivers have been in place so far, the department has not had to apply for additional approvals. If new waivers are needed, the process and timeline would need to be evaluated.

30. **Can data be collected and processed during development stages before a fully deployed technology solution exists?**
    - Yes, data can be collected and processed during development, but feasibility depends on the type of data and the processing requirements. DNR currently uses software primarily for orthomosaic processing and limited cut-fill analysis. Additional capabilities would need to be evaluated based on the specific data being collected.

31. **Are there limitations on the types of data DNR can process?**
    - Yes. Current processing capabilities are focused on orthomosaic imagery and some basic terrain analysis. More specialized data types may require additional tools or workflows.

Data & GIS

32. **What GIS platform do you use?**
    - DNR is fully invested in Esri products, including Drone2Map, ArcGIS Pro, and the full Esri suite. Field Maps is used to share data with staff in the field.

33. **What is the typical size (area/acreage) of your projects?**
    o Project size varies by scope and application. Mapping projects typically range from about 20 acres to over 1,000 acres, depending on the use case.

34. **Does Blue UAS compliance mean being listed on the DIU Blue UAS list, or simply meeting the requirements?**
    o Compliance does not require being listed on the DIU Blue UAS list. Meeting the Blue UAS requirements, along with NDAA considerations, is sufficient.

35. **What regulatory approvals has DNR received so far?**
    o DNR currently holds multiple COA authorizations, including one for the State of Michigan with waivers for aerial ignitions (Ignis system), spray applications, and other operations, as well as a nationwide COA for Class G airspace.

36. **Is DNR working on additional approvals or waivers under the new Part 108 framework?**
    o Yes. The department is working on an additional COW that would allow BVLOS operations up to 200 feet.

Scoring & Documentation

- **Will the scoring matrix be made available?**
    o The full scoring matrix will not be shared. However, the evaluation criteria are available on the website, and these are the same categories used to score applications.

- **Will this video call be available for review later?**
    o No, the recording will not be posted. Instead, a detailed FAQ document and the presentation slides will be made available online to ensure clarity and consistency.

- **Can these slides be shared afterwards?**
    o Yes, the presentation slides will be shared.

Other

- Information about the other challenge with Michigan State Police (MSP Challenge) can be found [here](#).