


Robot Builders Night Virtual for June 9th, 2026

https://www.youtube.com/watch?v=ogPS_yoWyz0

DPRG Houskeeping

- **Moonday 2026:** The event will be held on July 18 at the Frontiers of Flight Museum. Please contact Mark if you are interested in volunteering to showcase your projects.
- **Power Lunch:** There will be a gathering at Ford's Garage on Sunday at noon. RSVP to Paul via email if you plan to attend.

Discussion Topics

- **Autonomous Mower Project:** Ray C presented his ESP32-based mowing robot, which features a LoRa transmitter and operates using compass and odometry navigation (via a BNO055 sensor) instead of GPS. Ray successfully demonstrated the mower running a grid-pattern path and discussed future plans, including testing a sub-\$9 perimeter wire guidance system, adding a time-of-flight sensor for obstacle avoidance, and potentially upgrading to a solar-powered four-wheel-drive platform. Gold star 
- **Old-School 3D Scanner:** Tom C showed an older 3D scanner equipped with line lasers, a high-definition camera, and a turntable. He is currently troubleshooting issues getting the Windows software to interface with its onboard Arduino Uno.
- **Plug-in Hybrid Vehicles (PHEVs):** Tom C shared his recent experience assisting a family member with a new Ford Escape plug-in hybrid, noting complexities like the need to preheat the battery in cold Canadian climates. This led to a broader discussion on hybrid efficiency, with members like Mike Williamson highlighting that his Prius Prime can achieve up to 60 miles per gallon on long road trips in hybrid mode.
- **The Rising Cost of AI Coding Tools:** Chris N initiated a conversation about AI coding subscriptions, noting that platforms like GitHub Copilot are moving away from subsidized models to usage-based credit systems, which significantly increases costs. Despite the rising financial overhead, the group agreed that paying for top-tier frontier models (like GPT 5.4 or Claude) is worth it due to their 99% success rate. Bringing smaller, less capable LLMs in-house to save money often leads to wasted time and errors, though it may be necessary for highly regulated industries requiring strict data security.

- **Ed M** - posted several video links in the chat; please copy and review them.

Conclusions and Insights

- Integration of AI tools like Github Copilot Pro could be a focal point in future robotics development discussions.