



Open Source Hardware Summit

New York City, 27 September 2012

John Nicol



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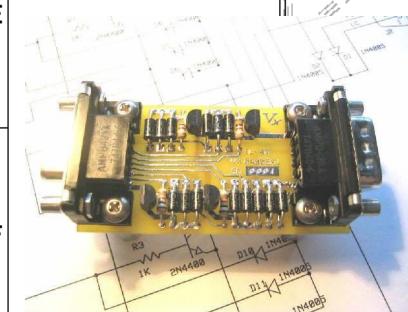
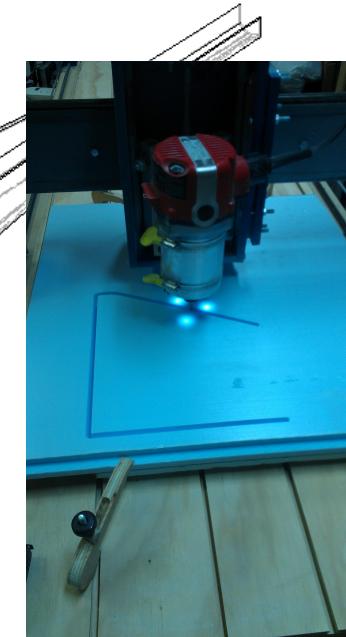
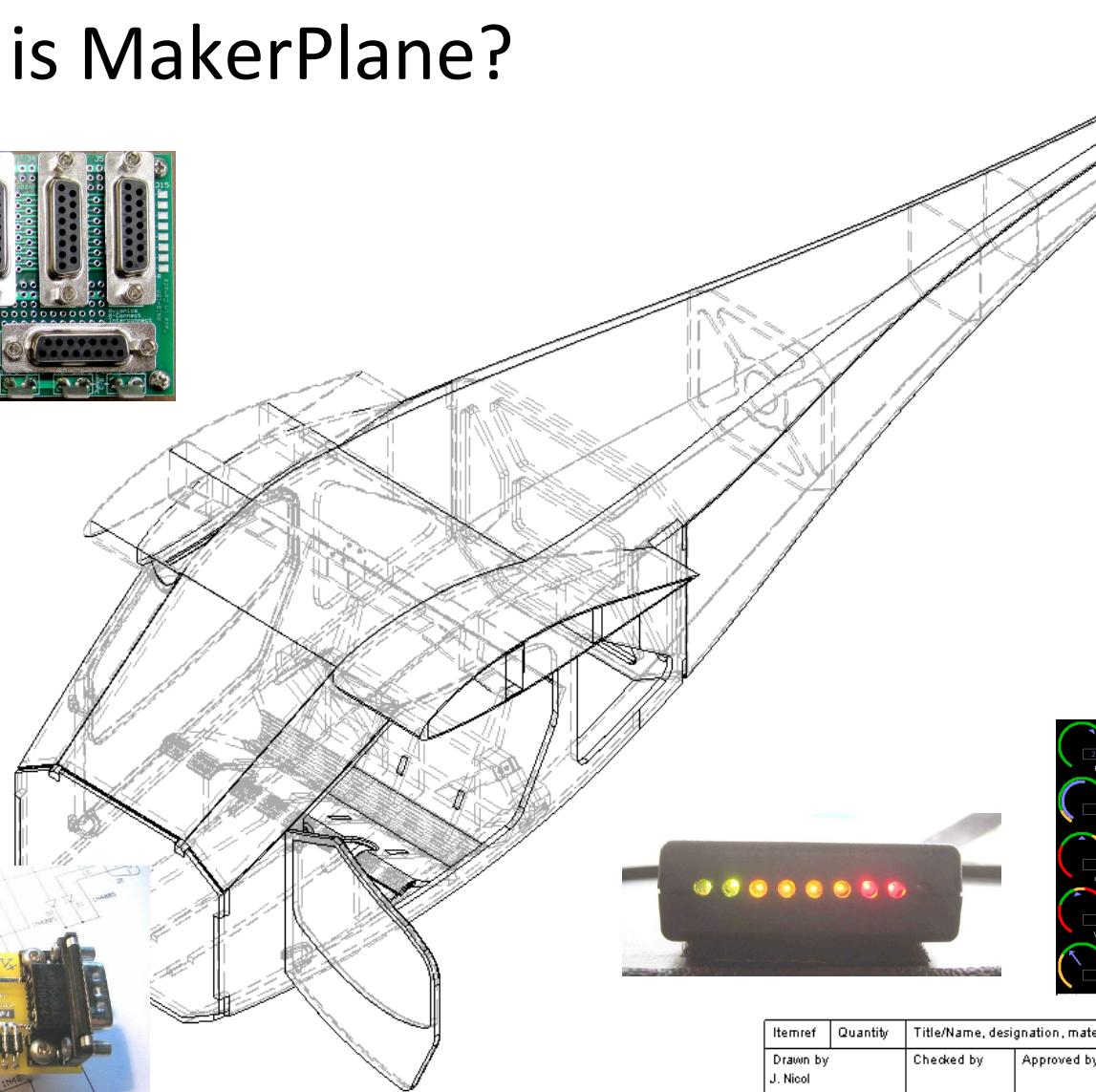
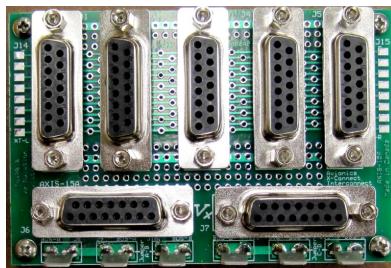
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What is MakerPlane?



Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference			
Drawn by J. Nicol		Checked by		Approved by - date	File name	Date 12-09-12	Scale
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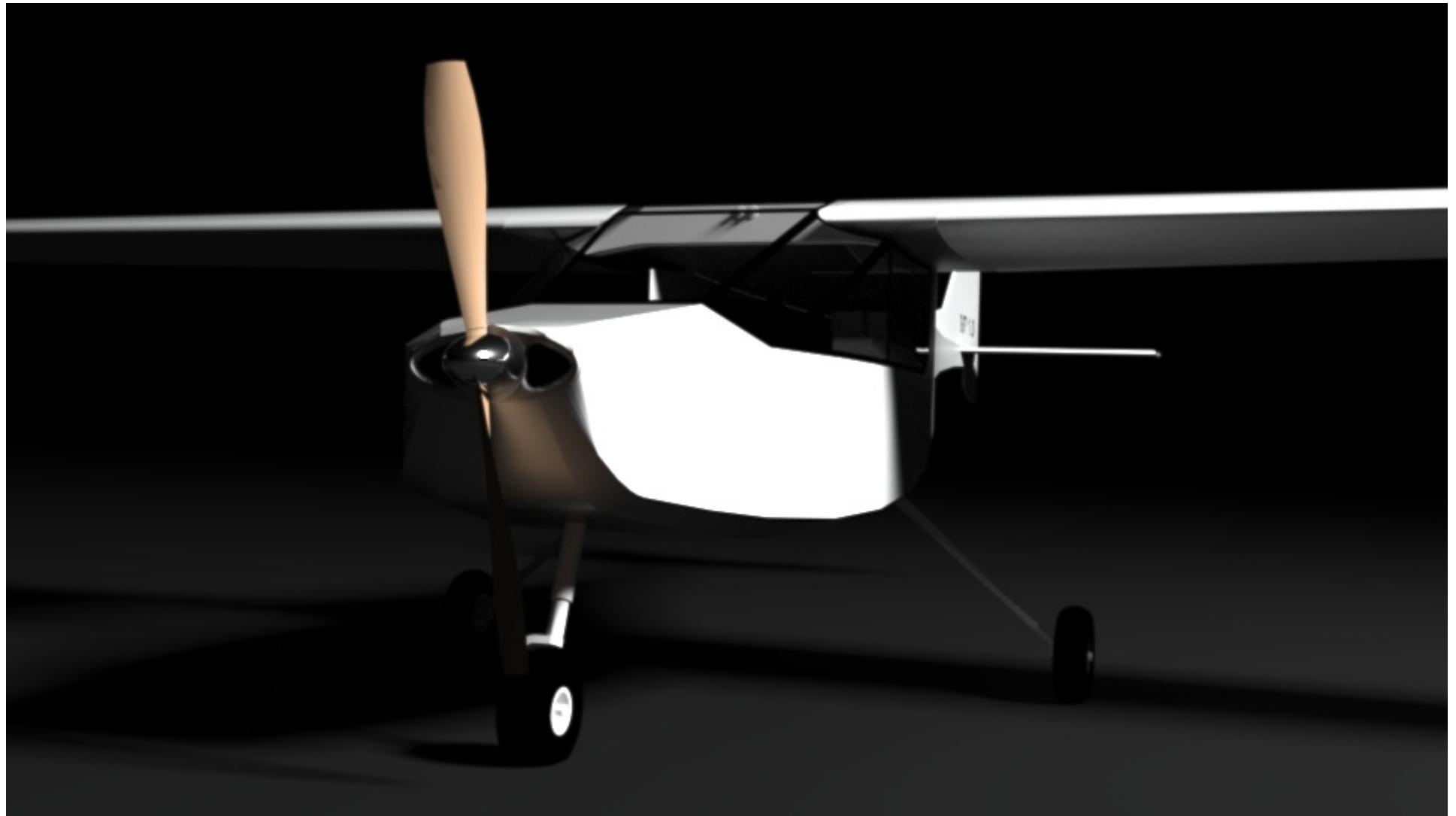
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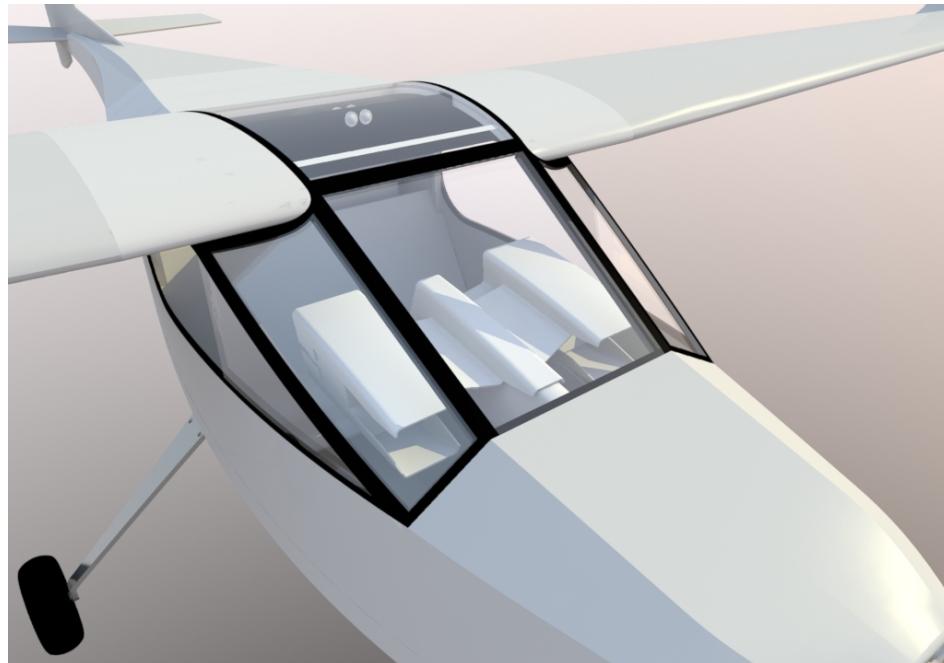
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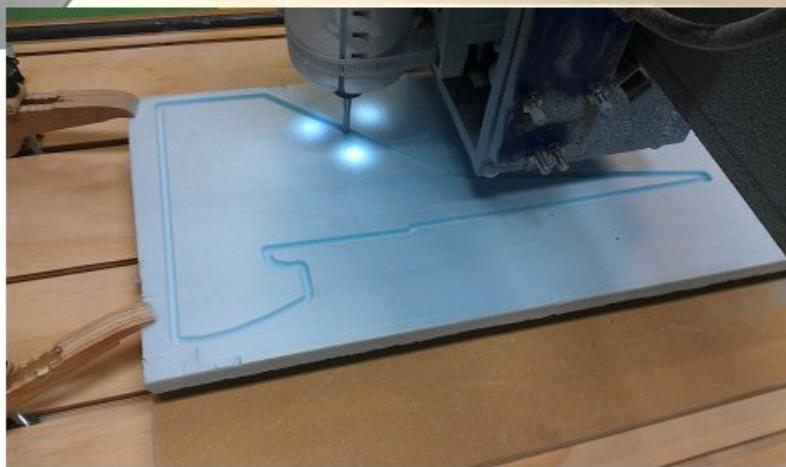
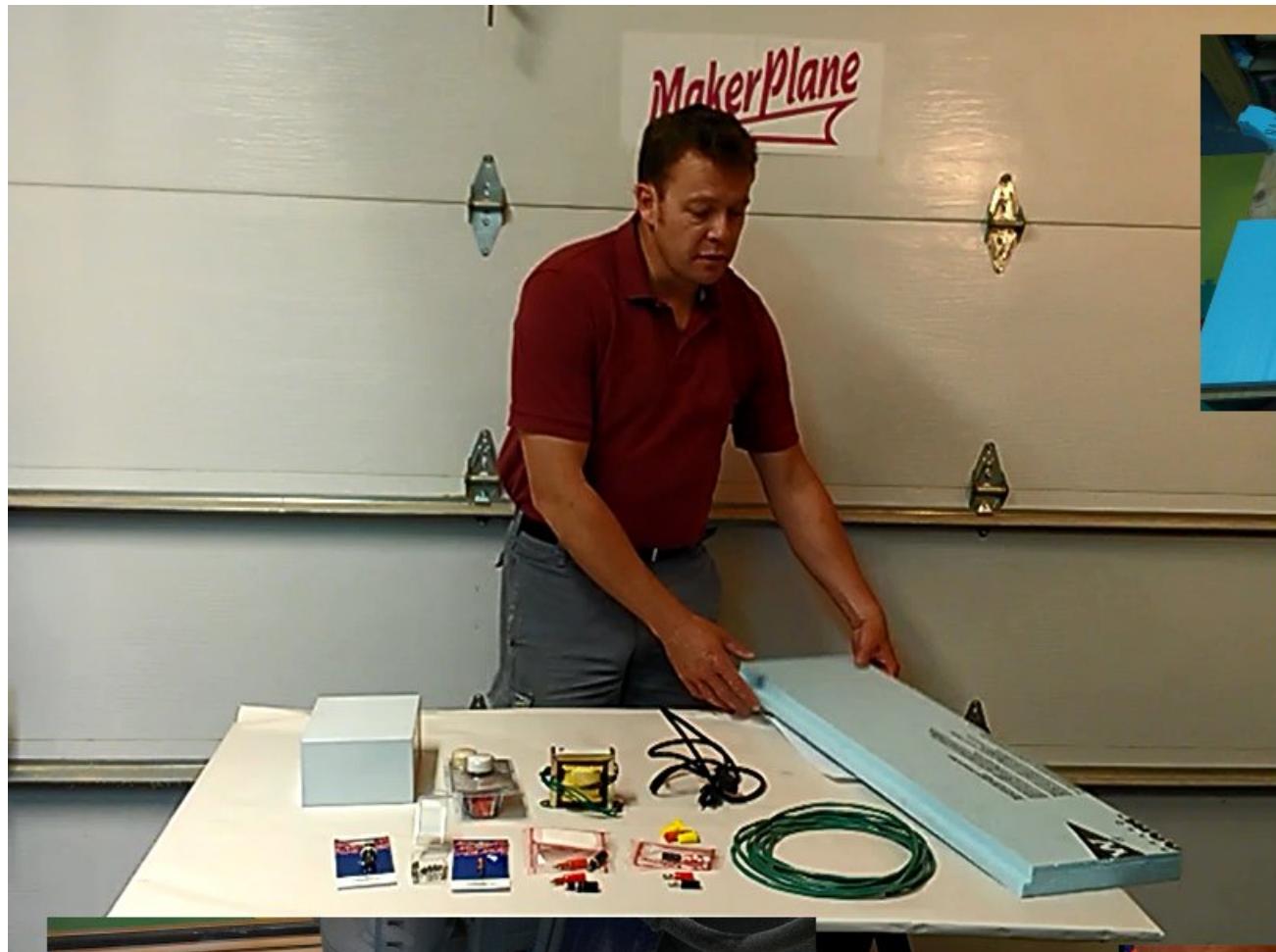
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Problem

- **62% of homebuilt aircraft kits and plans are abandoned before finishing**



Project For Sale



60% complete project for sale. No time to finish. Contact [xxxxxxxxxx](#)

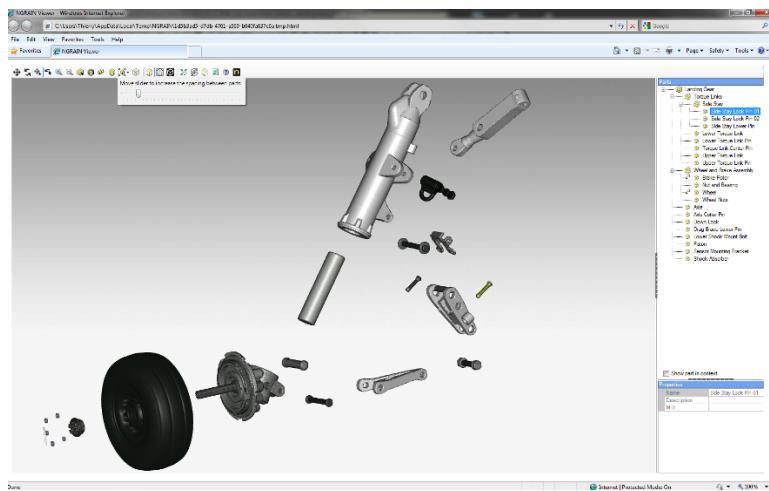
Solution

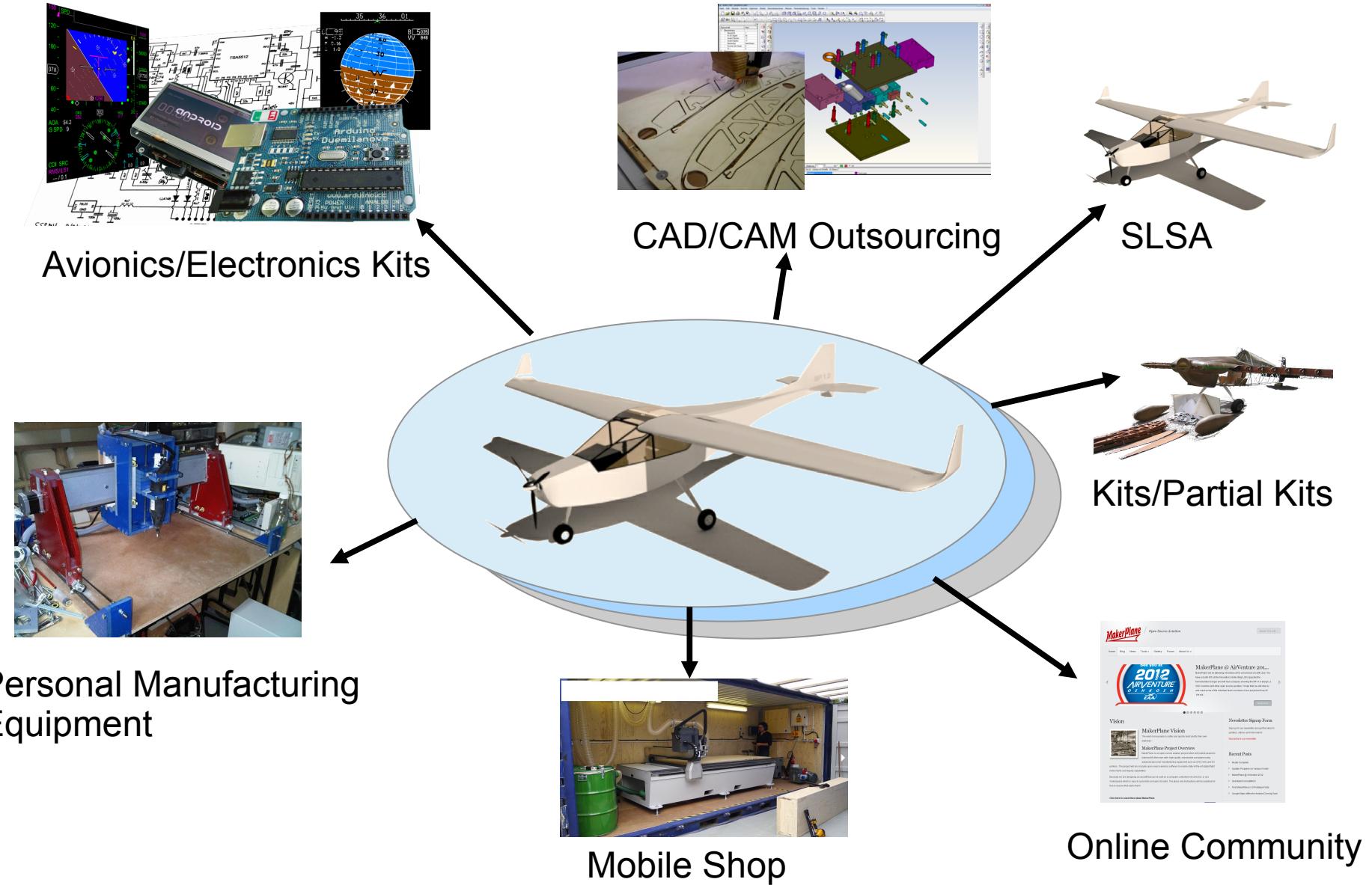
- Create plans, methodologies to build using personal home-based digital manufacturing equipment.
- A collaborative online environment

Traditional Way: 3 hours per rib



CNC: 3 minutes per rib



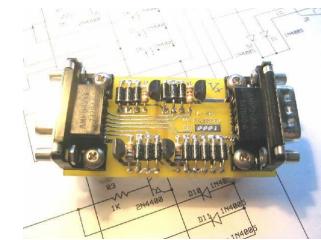


Team



Progress and Milestones

- Now: Avionics available
- Oct 12: Kickstarter Campaign
- 2013: MP v1.0 Prototype
- 2014: MP v1.0 Flying



KICKSTARTER



Issues

- ☒ Perception and education
- ☒ Safety
- ☒ Liability
- ☒ Certification Standards
- ☒ Licensing

Perception & Education

- ☒ Experimental aircraft past-time
- ☒ 3D printing
- ☒ Makerspaces and capabilities



Safety

- ☒ FAA Rules
- ☒ Licensing and Training
- ☒ Built-in systems



Liability

- ☒ Waivers
- ☒ Supply kits only
- ☒ Builder is manufacturer



Certification Standards

- ☒ Design and build to recognized standards
 - ☒ FAA
 - ☒ ASTM



Licensing

- ☒ Four OSH licenses listed on our website
- ☒ TAPR NCL is our current option





Open Source Aviation

www.makerplane.org

