



# Električna mobilnost po zraku

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Moderator: Denis Oštir, POP TV





*Italijansko*  
**pipistrello** /pipis'trɛllo/ *m.*  
[zool.] netopir



Est. 1987





Virus SW









Taurus Electro G2







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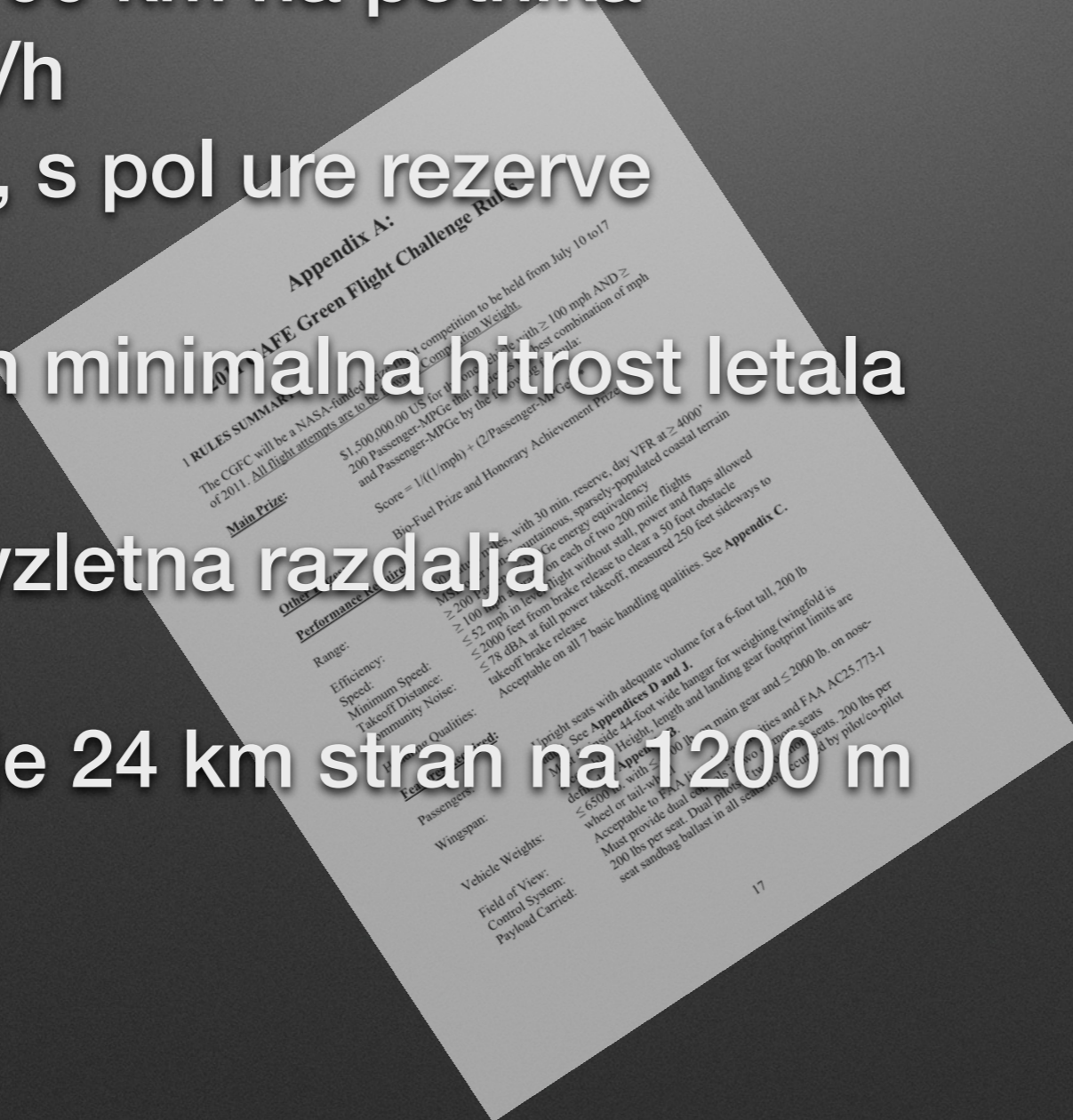
Taurus G4





# Green Flight Challenge

- $< 1.17$  l/100 km na potnika
- $> 160$  km/h
- $> 322$  km, s pol ure rezerve
- $< 83$  km/h minimalna hitrost letala
- $< 600$  m vzletna razdalja
- vzpenjanje 24 km stran na 1200 m



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# Tekmovanje

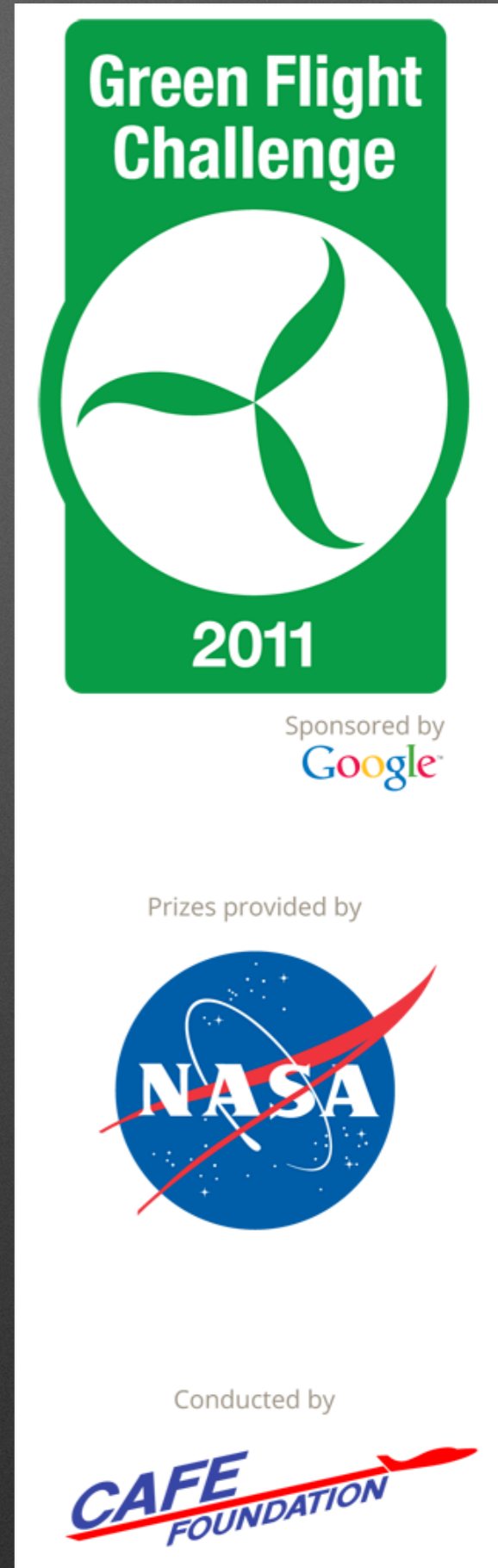
September 2011

- Let s čim večjo učinkovitostjo
- Let s čim večjo hitrostjo

Oba pri  $< 1.17$  l/100 km na potnika,  $> 160$  km/h,  $> 322$  km, s pol ure rezerve

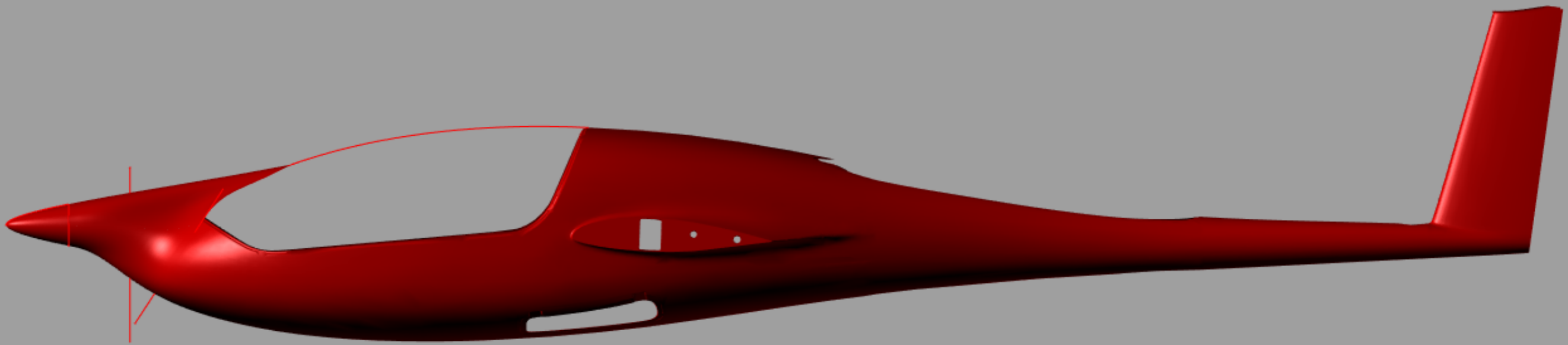
Oba z isto konfiguracijo baterij

$$\text{Score} = \frac{1}{\frac{1}{\text{Speed}} + \frac{2}{\text{Mileage}}}$$

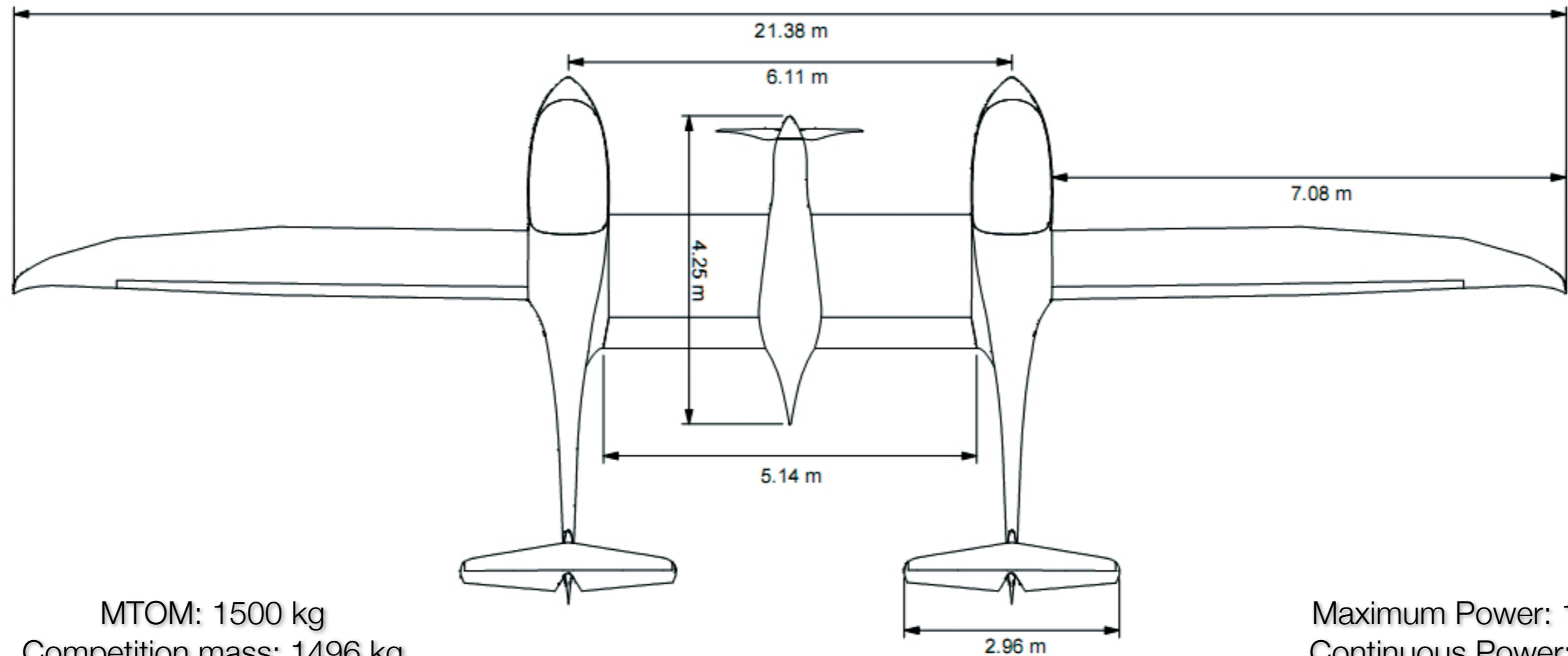
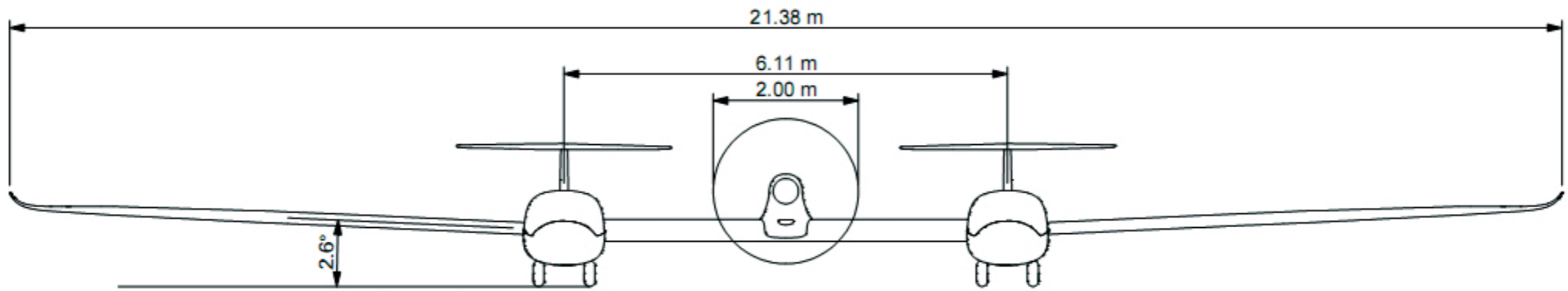




# Študija dvosedežnega letala

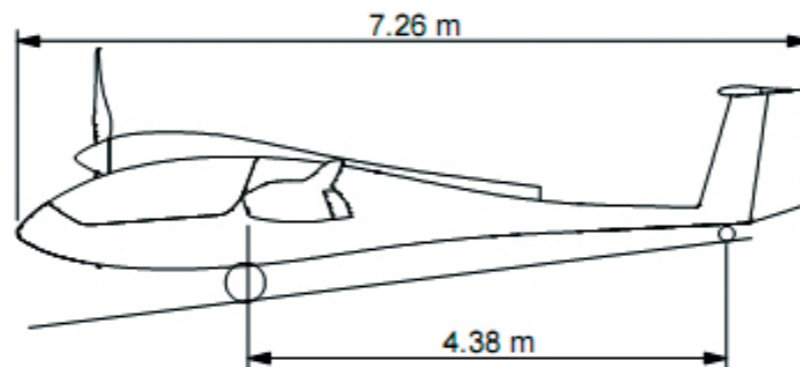






MTOM: 1500 kg  
 Competition mass: 1496 kg

empty: 632 kg (42.2%)  
 batteries: 500 kg (33.5%)  
 passengers (4): 364 kg (24.3%)

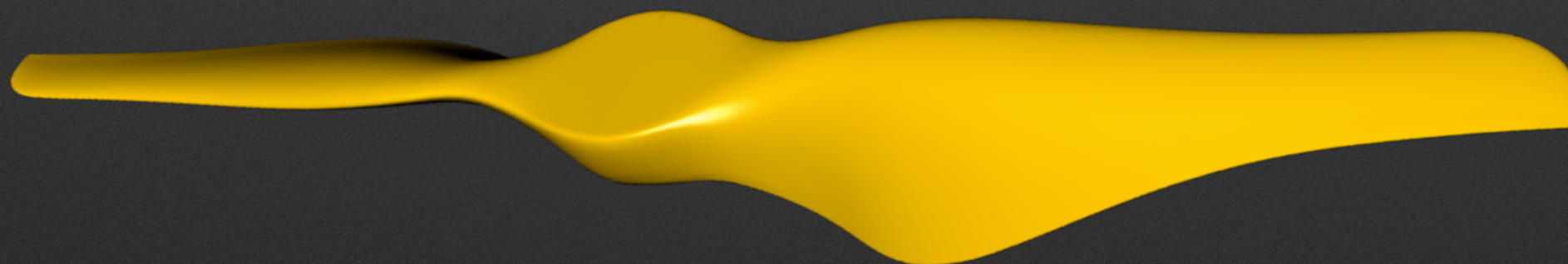
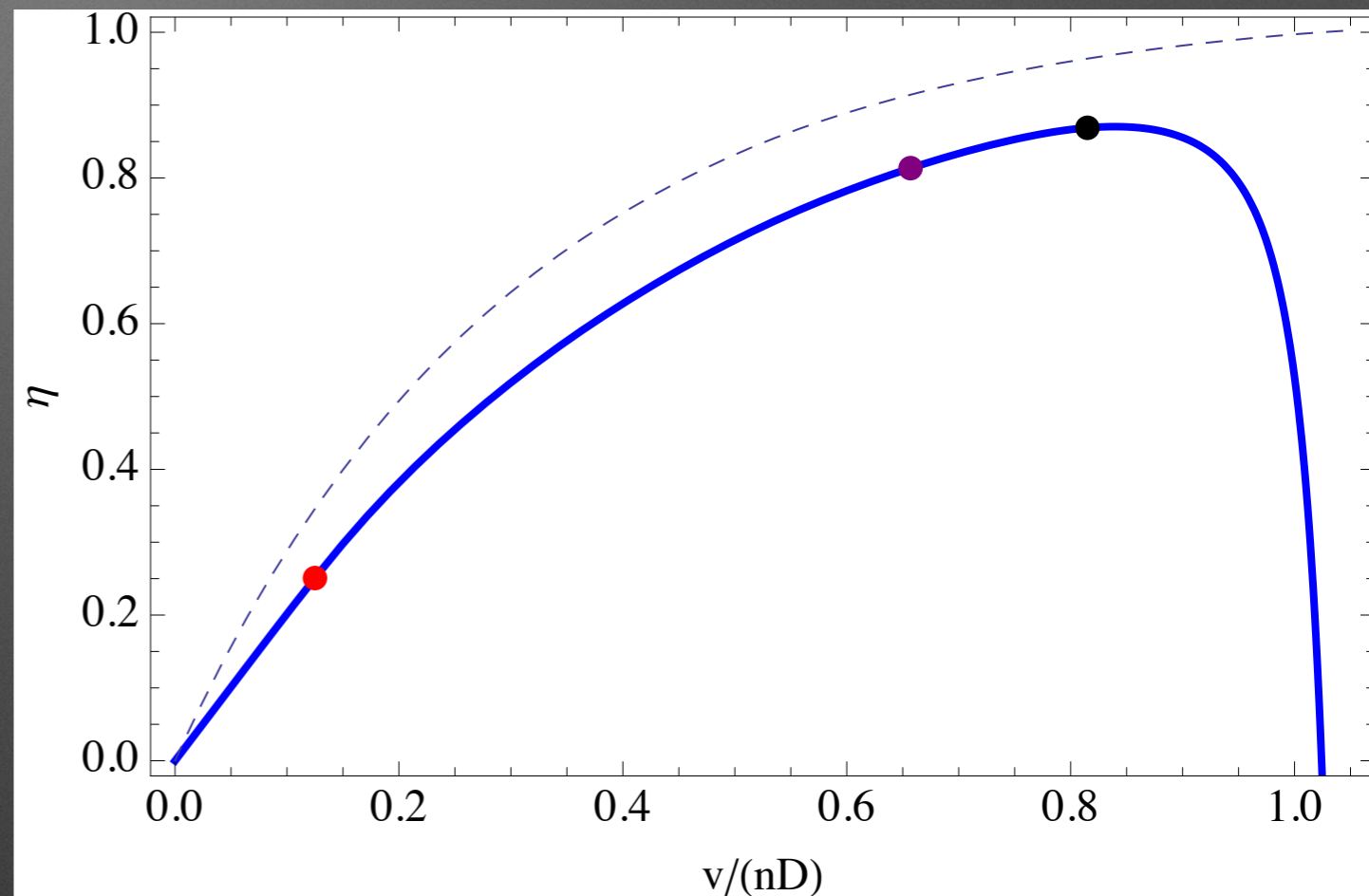
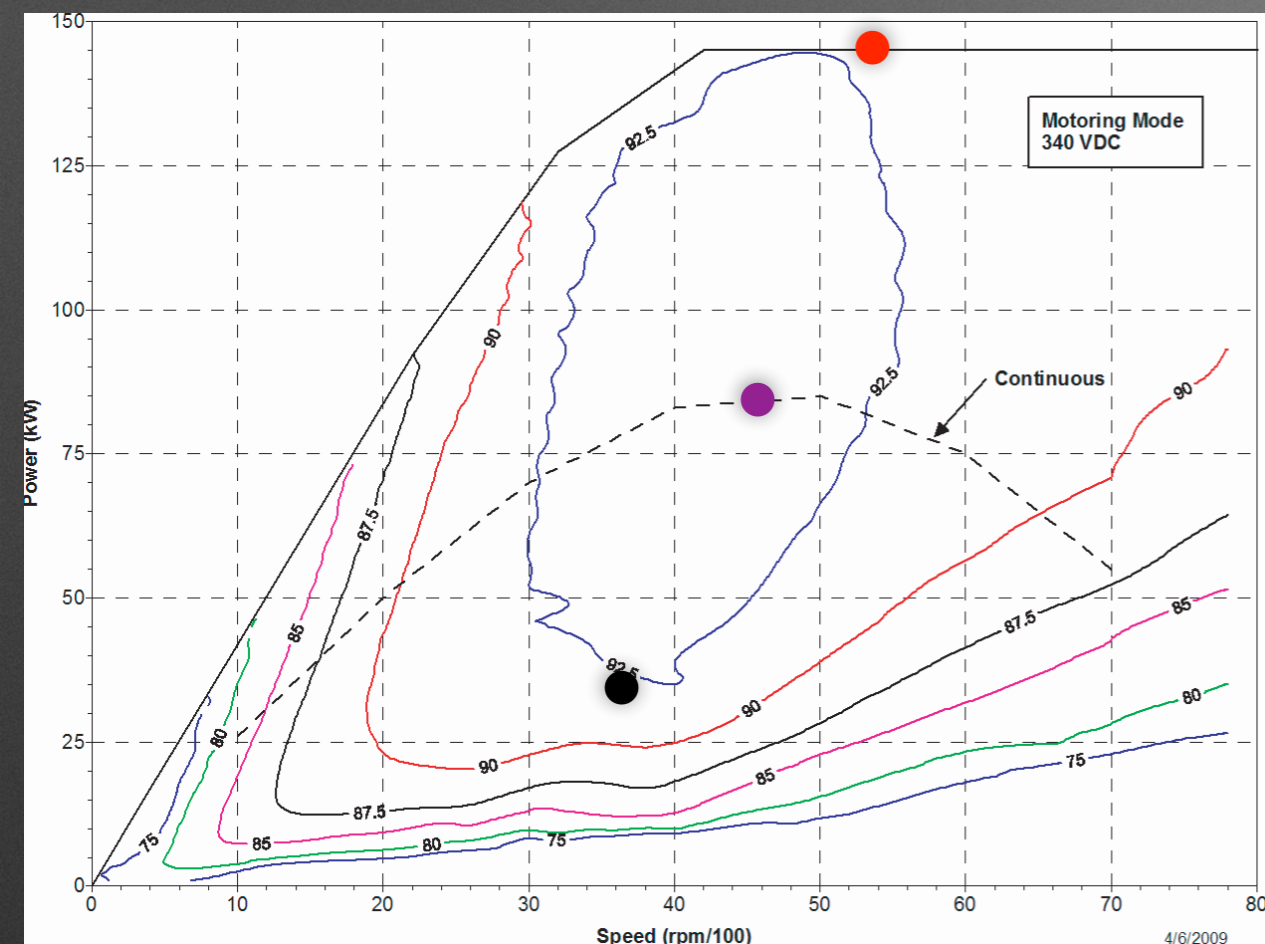


Maximum Power: 150 kW  
 Continuous Power: 85 kW  
 Cruise Power: 32 kW  
 L/D (100 mph): ~30

Energy capacity: ~100 kWh

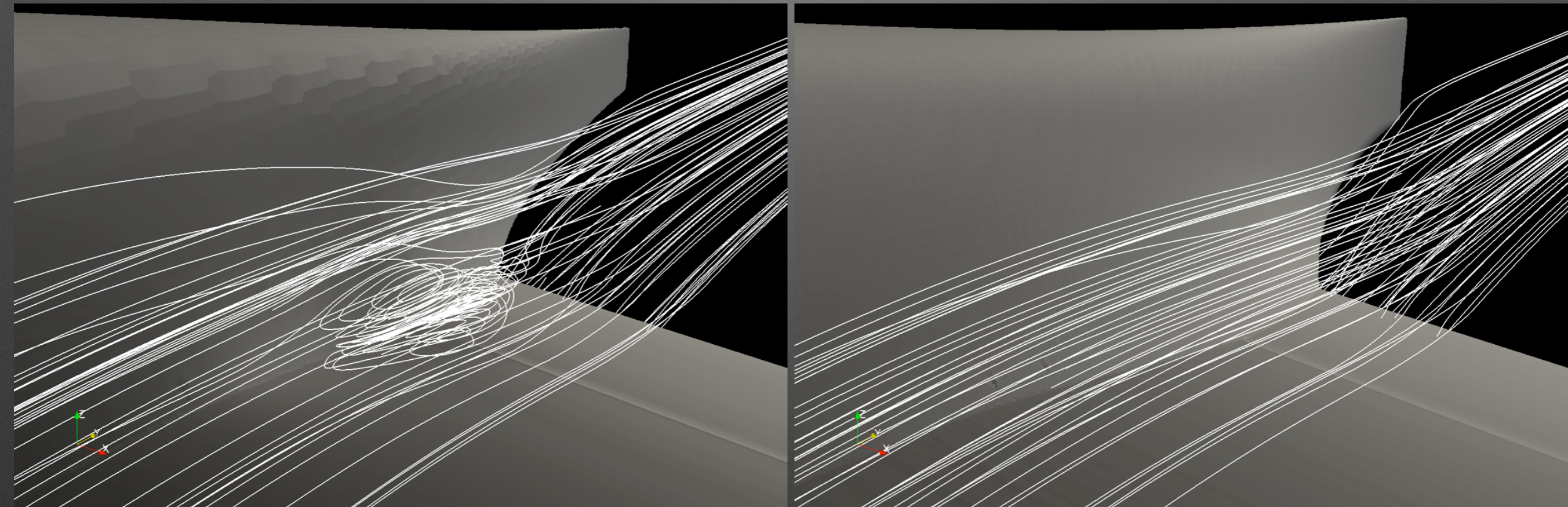


# Zasnova propelerja





# CFD analiza in spremembe



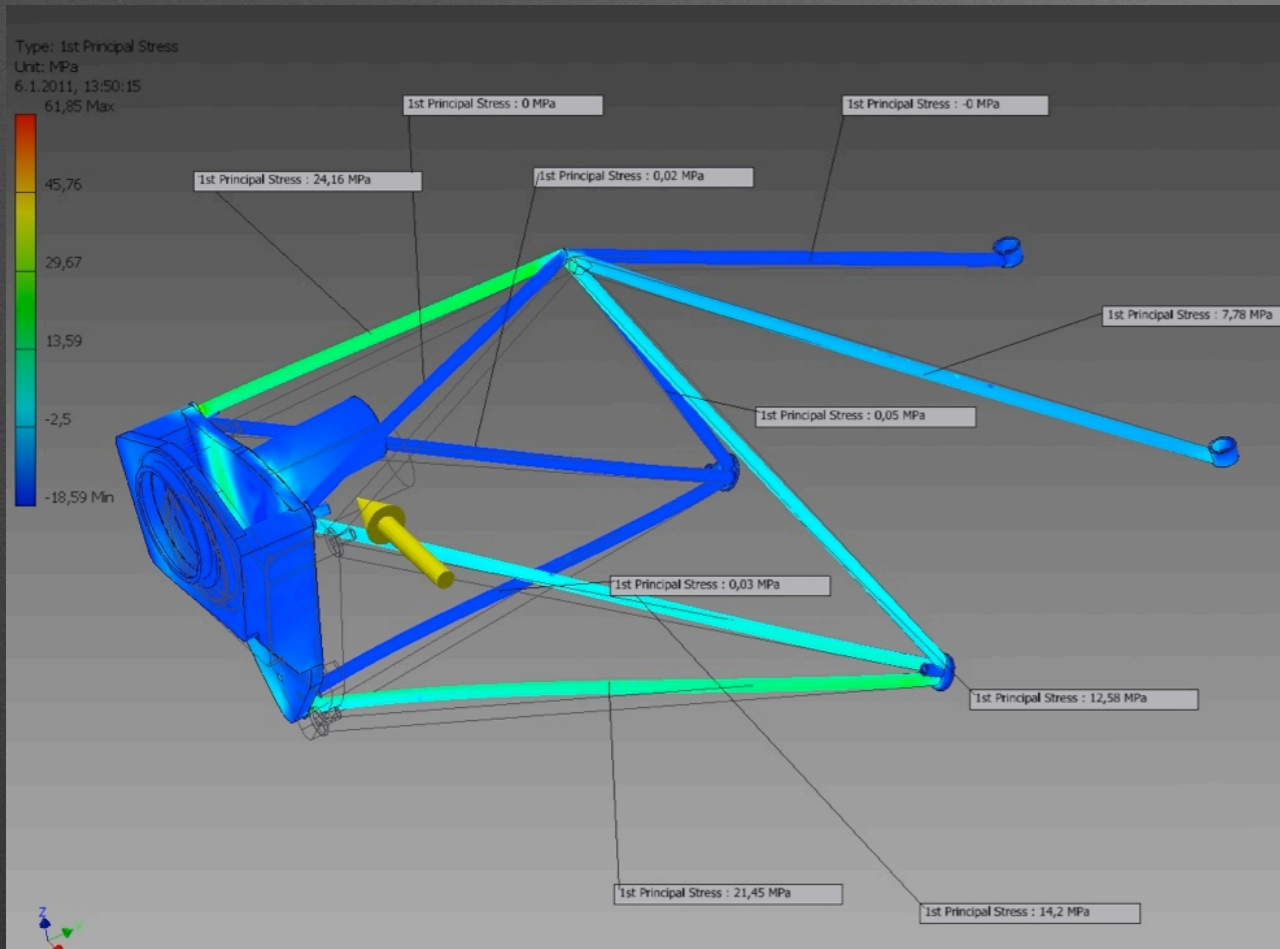
























Oshkosh, 12. avgust 2011





Zunanja zakrilca- $5^{\circ}$ , notranja zakrilca  $40^{\circ}$   
obrnjen potisk propelerja ob pristanku

















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NASA Awards Historic Green Aviation Prize

NASA has awarded the largest prize in aviation history, created to spark the start of a new electric airplane industry. First prize of \$1.35 million in the CAFE Green Flight Challenge, sponsored by Google, was awarded to team Pipistrel-USA.com.

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## Awards

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#### 2011 COLLIER TROPHY NOMINEES AND SELECTION COMMITTEE ANNOUNCED

Arlington, Virginia, February 2, 2012 – The National Aeronautic Association (NAA) announced that former Collier Trophy recipients Dick Rutan, Joe Lombardo, Bobby Sturzel), and Jeff Pino will be among the aviation leaders who will participate in the Selection Committee for the 2011 Robert J. Collier Trophy. In addition, NAA released the list of nominees as well as the entire Selection Committee.

The nominees are:

- Boeing 787 Dreamliner
- C-5M Super Galaxy
- The Gamera Human-Powered Helicopter
- Taurus G-4 Electric-Powered Aircraft

The Collier Trophy, the "Greatest Award in Aviation," has been the benchmark of aviation and aerospace achievement for over 100 years. Awarded annually "...for the greatest achievement in aeronautics or astronautics in America," it has been bestowed upon some of the most important projects, programs, individuals, and accomplishments in our nation's history.

Past winners include the crews of Apollo 11 and Apollo 8, the Mercury 7, Scott Crossfield, Elmer Sperry and Howard Hughes. Projects and programs which have been the recipient of the Collier include the B-52, the Polaris Missile, the Surveyor Moon Landing Program, the Boeing 747, the Cessna Citation, the Gulfstream V, the F-22, and the International Space Station. The 2010 Collier was awarded to the Sikorsky X2 Technology™

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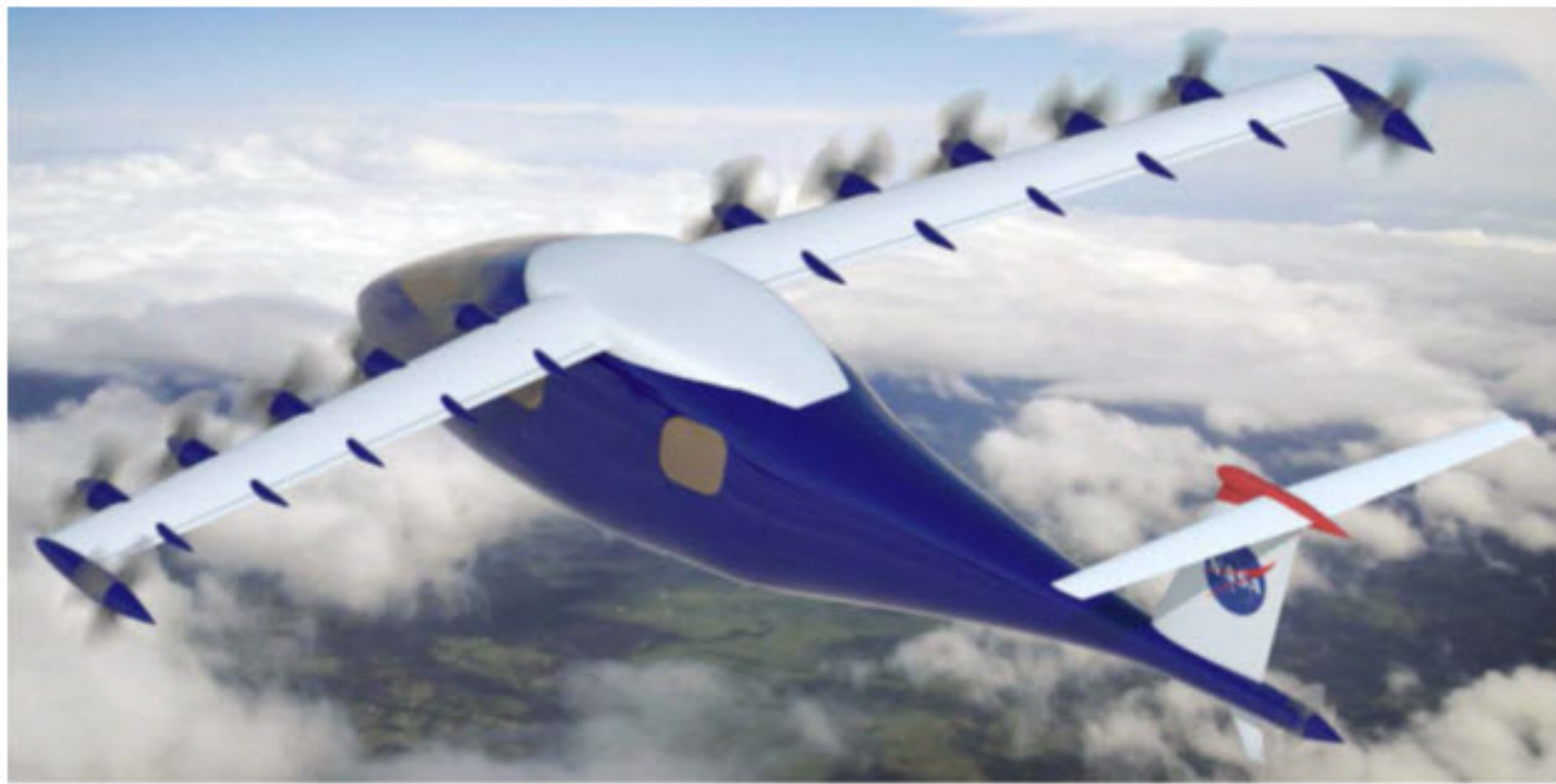
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## NAA THANKS:

- o Aurora Flight Sciences









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NASA Dryden Flight Research Center Photo Collection  
<http://www.dfrc.nasa.gov/gallery/photo/index.html>  
NASA Photo: ED02-0161-2 Date: June 24, 2002 Photo by: Nick Galante

Pathfinder-Plus flight in Hawaii













**Električno trenažno letalo**



