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Stellar education

Capt. Stjepan Bedić

CEO and Head of Mission Control, STELLAR

ICAO / UNOOSA Symposium

15–17 March 2016, Abu Dhabi, United Arab Emirates



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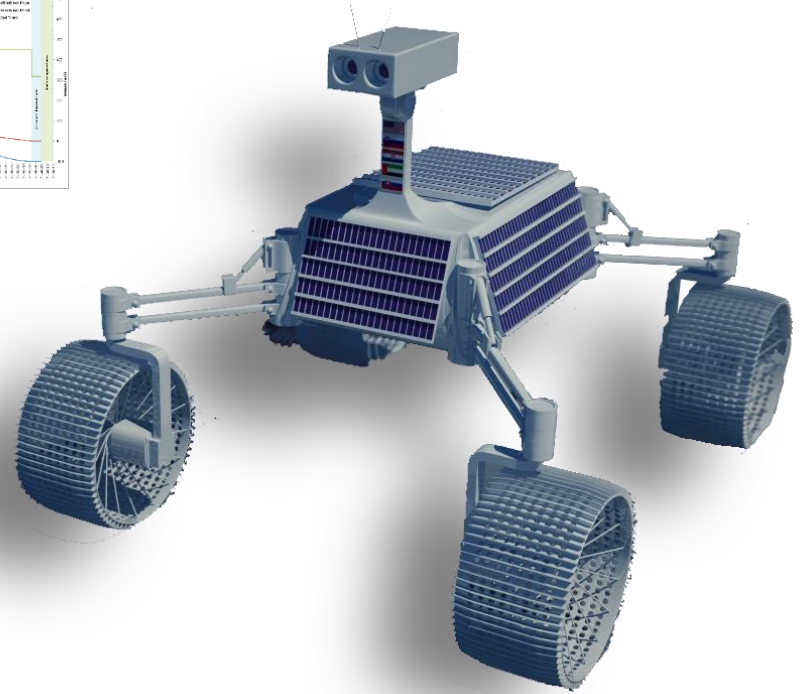
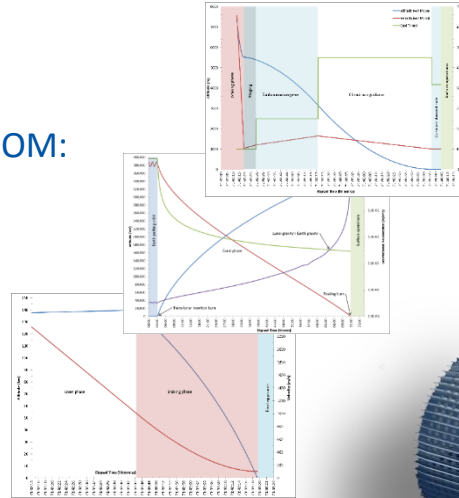
STELLAR:

- **TEAM OF EXPERTS COMPETING IN THE GOOGLE LUNAR XPRIZE, THE SECOND RACE TO THE MOON:**
 - ✓ **LAND ON THE MOON WITH A ROBOT**
 - ✓ **TRAVEL 500m ON THE LUNAR SURFACE**
 - ✓ **SEND PICTURES AND VIDEOS BACK TO EARTH**



STELLAR:

- OUR TEAM MADE OF EXPERTS FROM:
 - ✓ Lockheed Martin
 - ✓ Boeing Satellite Systems
 - ✓ Sierra Nevada Corporation
 - ✓ Orbital Sciences
 - ✓ L-3
 - ✓ General Electric
 - ✓ Apollo 11



Australia, Croatia, Serbia, Slovenia, UAE, UK, USA



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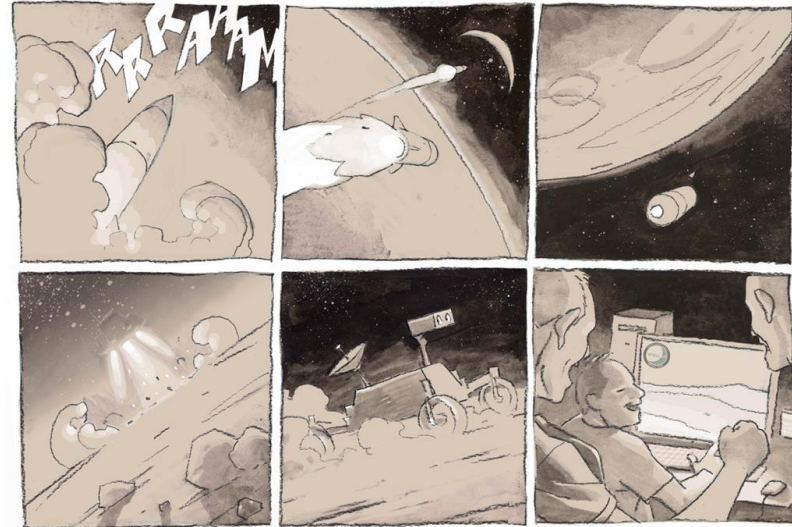
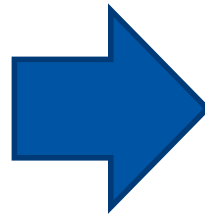
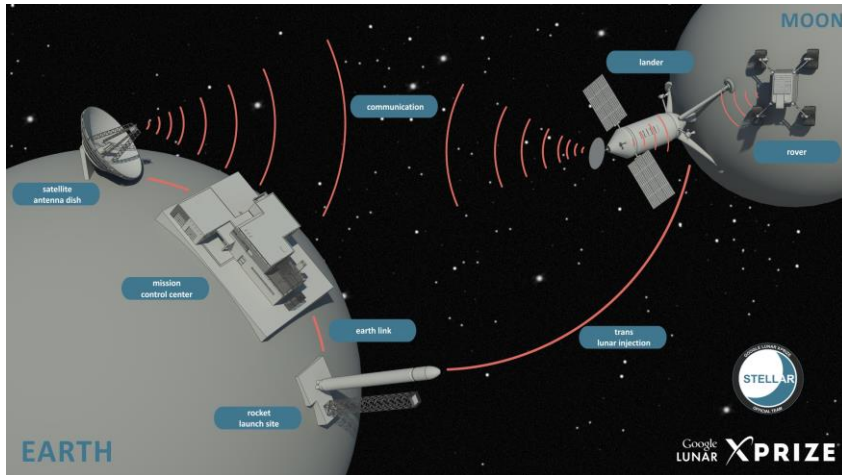


Our education and outreach goals:

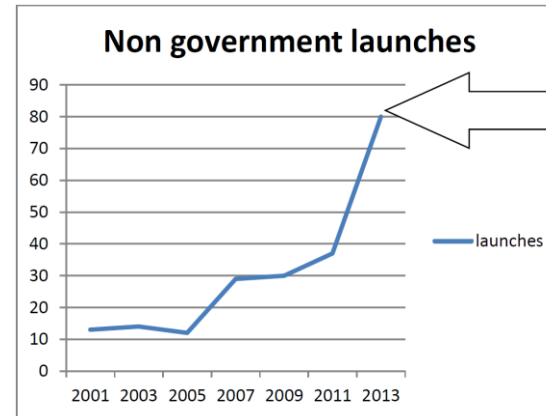
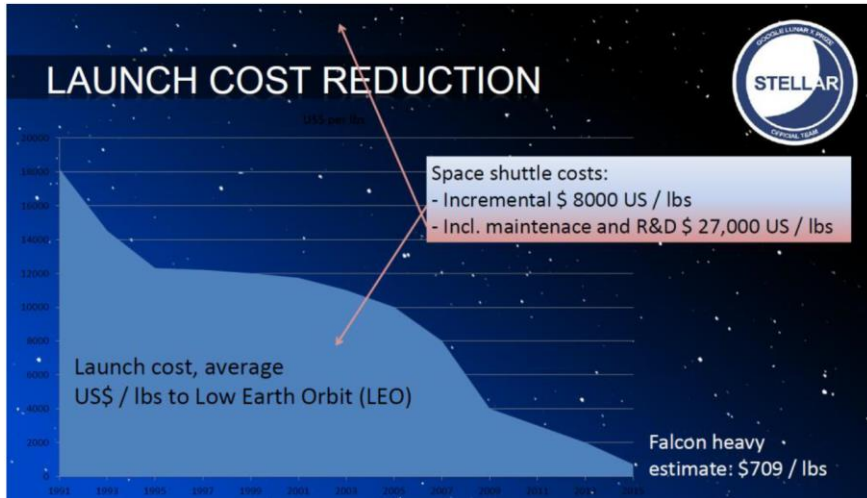
- To make space interesting, accessible and fun
- To give unique opportunity to students to participate in actual aerospace projects alongside proven experts
- To make sure we create solid foundations for future space exploration



Simply, we want to do this:



All indicators predict expansion



Our children **MUST BE READY** for the upcoming growth if we want to establish our countries as the **LEADERS** of the private space industry.



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Workshops and presentations:





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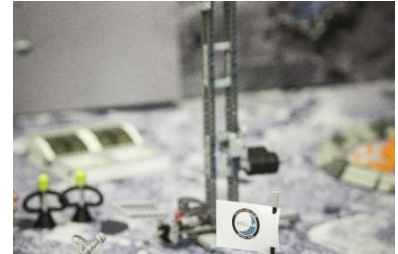
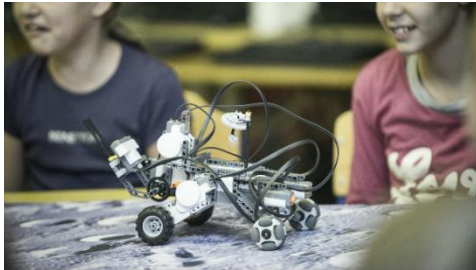


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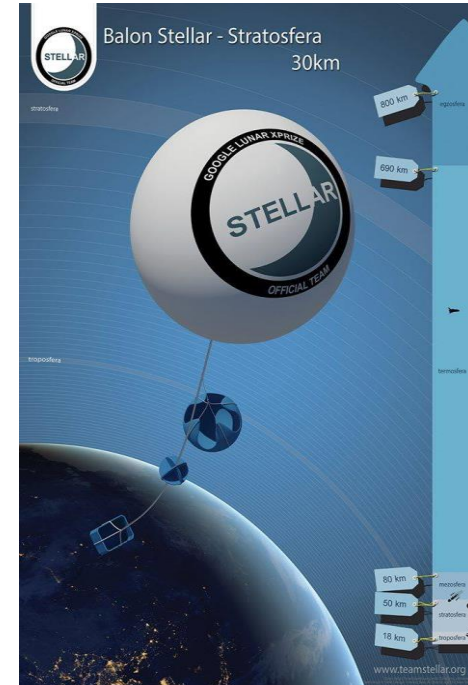
Moonbots:





Stratosphere competition:

- Each school team: 4 students + 2 mentors
 - Create an experiment for high altitude research
 - Prepare a scientific paper
 - Cover the story - blogs, videos and social media





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Stratosphere competition awards:

- Top three teams win financial awards:
 - 1st place: US\$ 5000 + laptops
 - 2nd place US\$ 3000
 - 3rd place US\$ 2000



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Stratosphere competition awards:

- Many other students also deserved and got awards:
 - Flights in cockpit with Croatia Airlines pilots
 - Flights in small aircraft ECOS, Delic Air, Air Pannonia
 - Free Internet
 - Shirts
 - Equipment donated by private sponsors



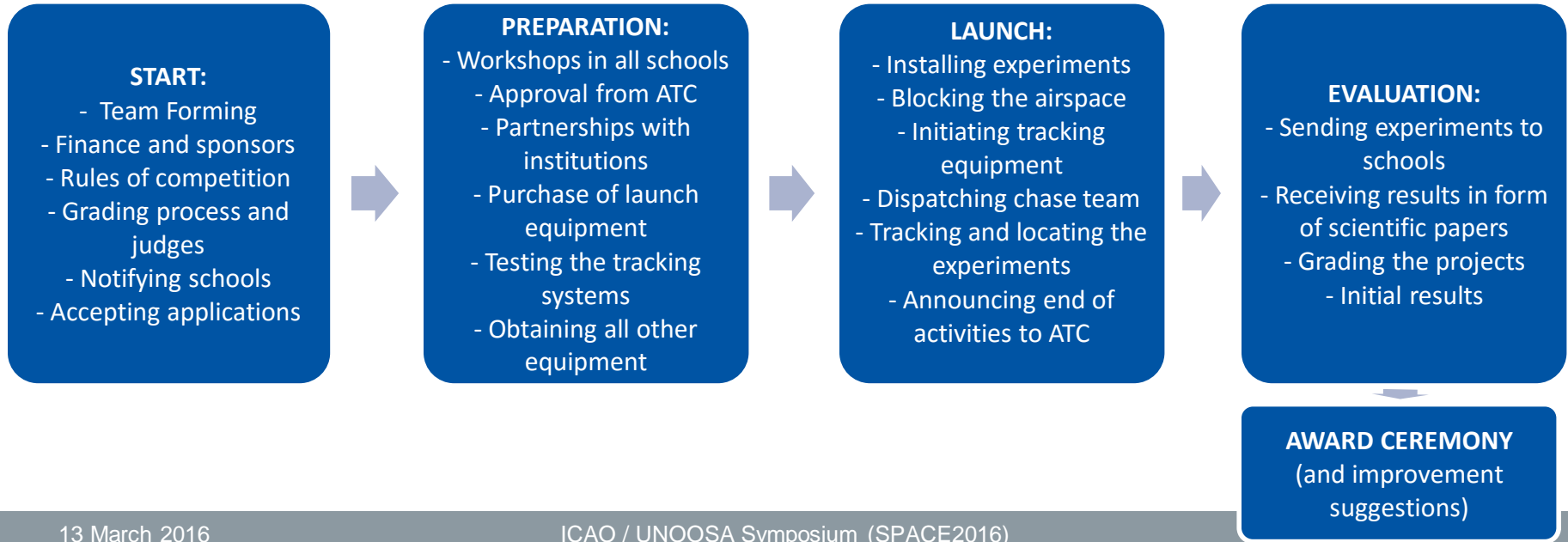
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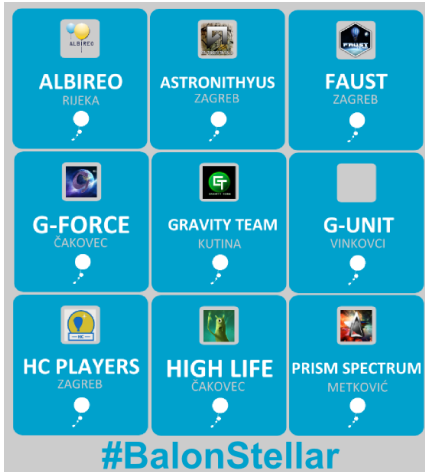
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Stratosphere competition process:





Announce the competition:





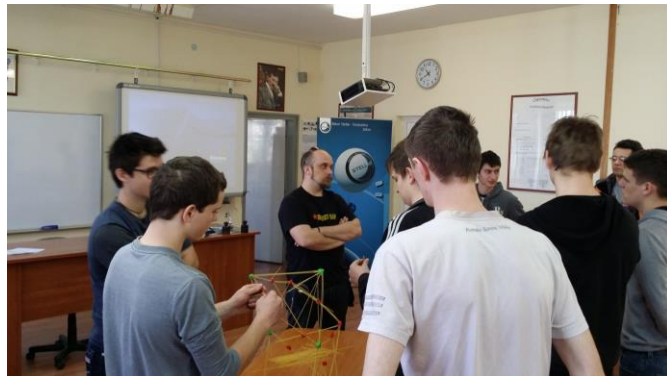
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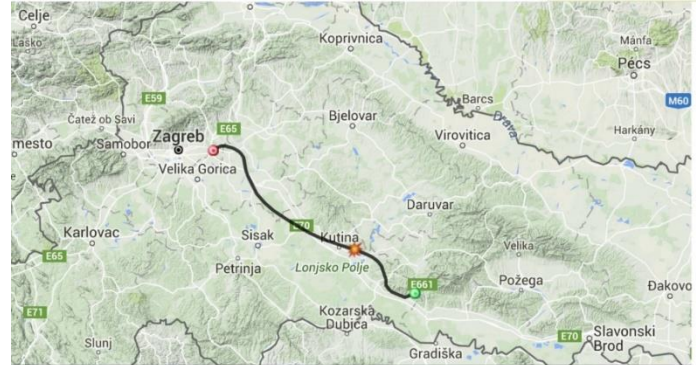
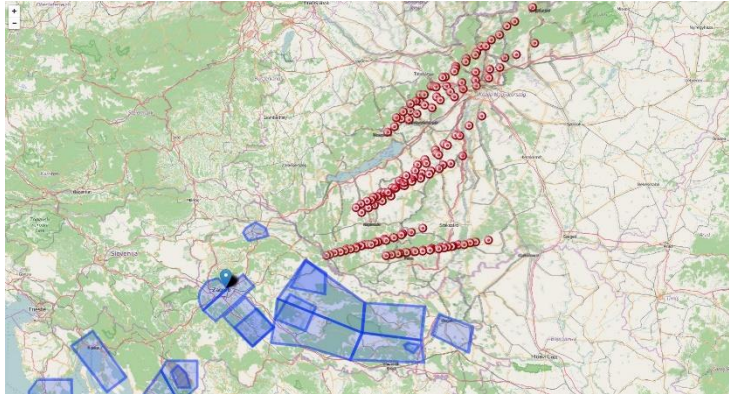
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Workshops:





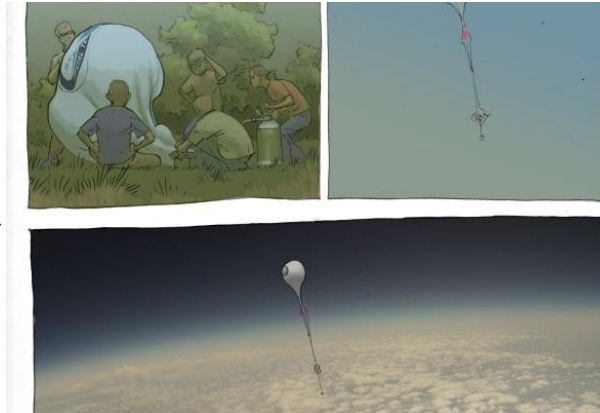
NOTAM, winds, mines...



B0086/14
 Q) LDZO/QWLLW/BO/AW/IV/004/999/454800N/0155900E/0027
 A) LDZL
 B) 1404200700 C) 1404201100
 E) ASCENT OF LIGHT UNMANNED FREE BALLOON WILL TAKE PLACE FROM 454748N 0155839E (ZAGREB) .
 FOR INFO ABOUT ACTUAL ACT CTC RELEVANT ATC UNIT
 F) GND G) UNL

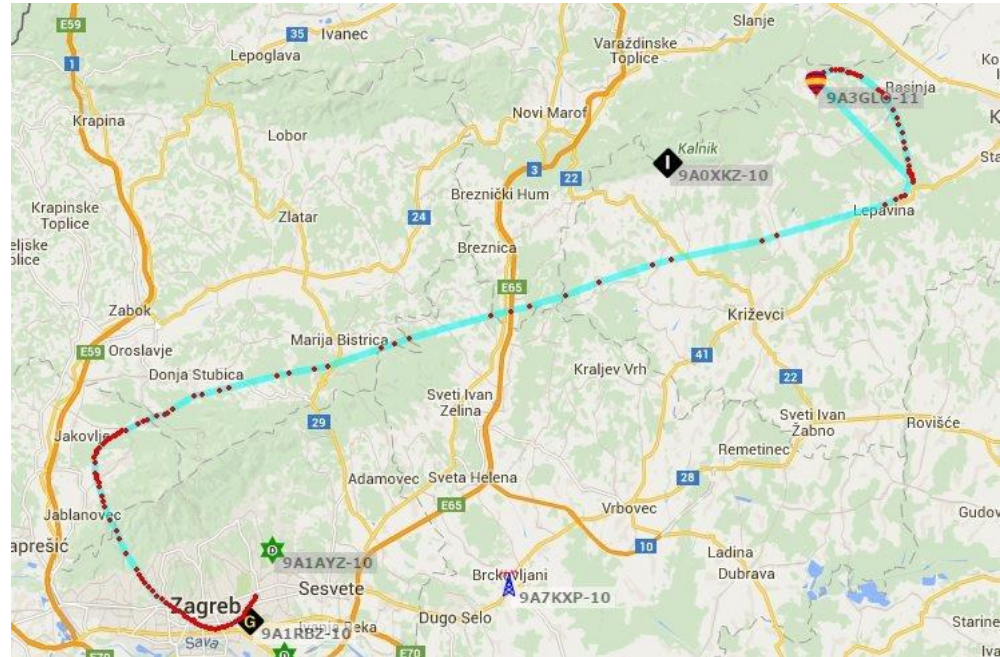


Make it HAPPEN!





Chase it!



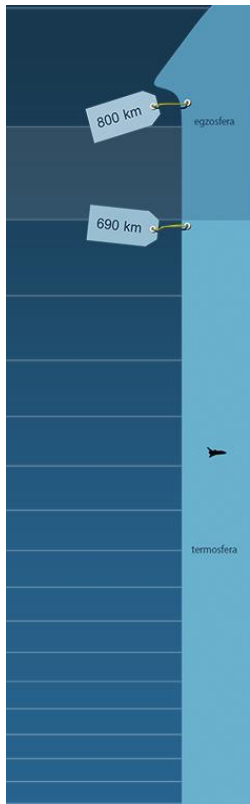


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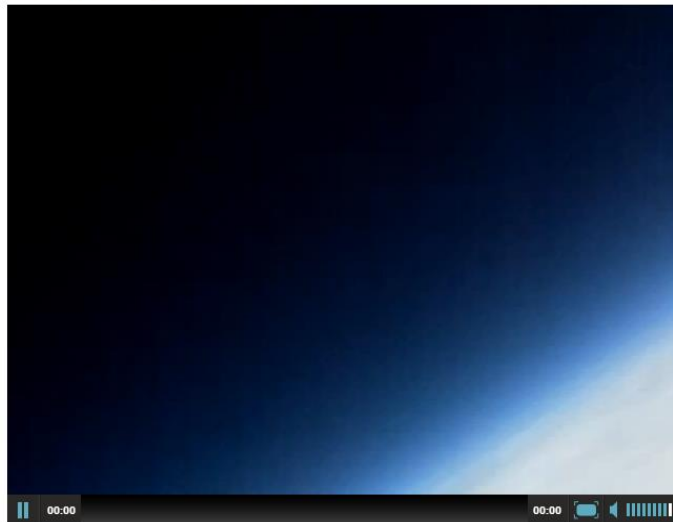
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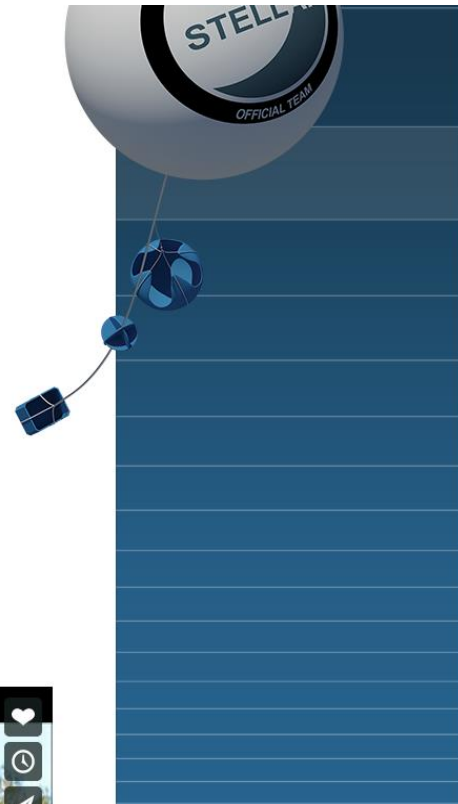


VIDEO

Live From Stratosphere / Uživo iz stratosfere



DHMZ weather balloon launch





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NOT BAD FOR HIGH SCHOOL KIDS!



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Experiments:

- Measuring the speed of sound vs. altitude
- Measuring the radiation by self-created sensors
- Measuring the fuel viscosity
- Monitoring the impact of environment on bacteria
- Measuring material resonance
- And MANY more

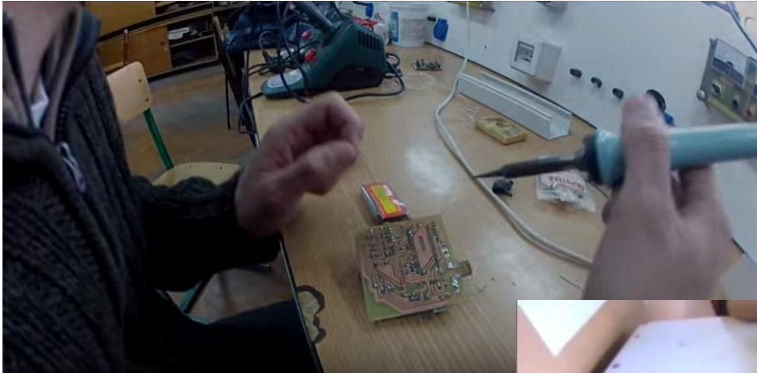


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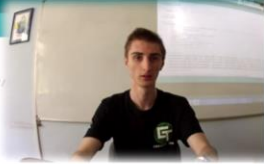
glavni_program_2_4_29
byte iz;
byte petlja_prosjek;

//unjet//
if (ajezni_mod==0) { //ako je 0 onda je uzlet

//ocitavna senzore
ds1820_pt100_tlak();
vrij

//dogi)avanje
if (celsiusC2) {
while((celsiusC2)<=((minis())/1000)-vrijeme)<20) { //postavi teap na 10 i 12, misla da je time 20 ok
digitalWrite(rele3_gl_qr, HIGH);
Serial.println();
Serial.print("dogi)avanje, gl. grijac upaljen");
ds1820(); }
Serial.println();
Serial.print("dogi)avanje, gasiv gl. grijac");
digitalWrite(rele3_gl_qr, LOW);
} //end digitalWrite

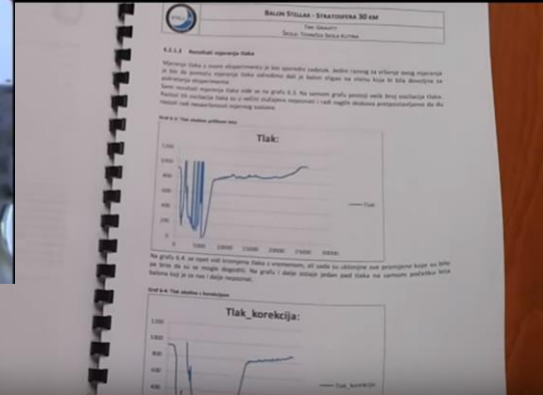
```



```

ajezni_mod=1; trigger_vrijeme_1=1; Serial.println(); Serial.print("Otvoren uvjet za trigger_vr
ajezni_mod=1; trigger_vrijeme_2=1; Serial.println(); Serial.print("Otvoren uvjet za trigger_vr
ajezni_mod=1; trigger_tlak_1=1; Serial.println(); Serial.print("Otvoren uvjet za trig
ajezni_mod=1; trigger_tlak_2=1; Serial.println(); Serial.print("Otvoren uvjet za trig

```





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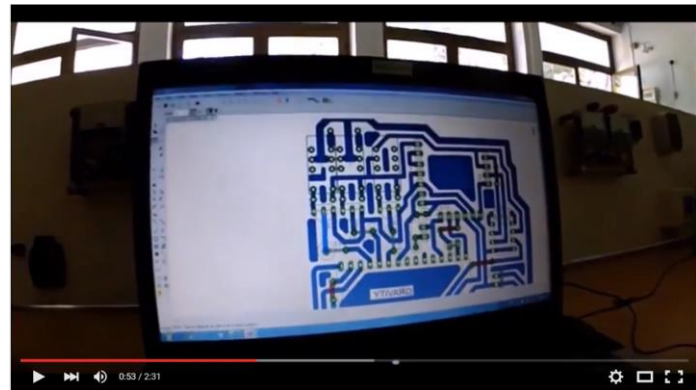
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Hours of
video
materials

13 pages of
links to blogs





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CAMILLUS d.o.o.



KONČAR





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THANK YOU

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