

Keio University Wolve'Z

ARLISS 2009 Student Presentation

Sep. 18 2009 (Fri.)

@Bruno's Country Club Motel Restaurant

Project Manager : Kakehashi Yuya



Table of Contents

1. About Our Team
2. About Our CanSat
3. Flight Result
4. Conclusion and Future Plans



Team Member

We belong to Takahashi Lab of Keio Univ.

- Project Manager
- Student Representative
- Engineer



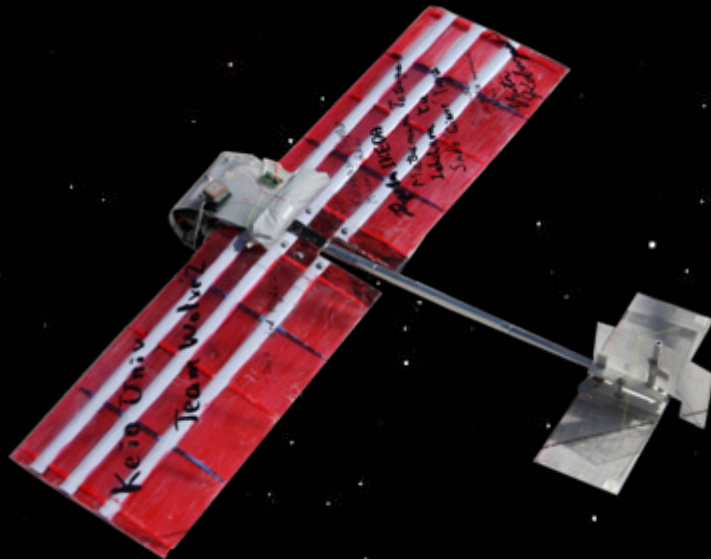
Kakehashi Yuya
Kobayashi Yuta
Mikami Yoshihiko
Ikeda Ryota
Ishihara Yu
Sudo Yuya
Matsumura Tetsuya

Kusuda Yohichiroh
Hiraoka Shoichi
Ikeda Tatsuhiko

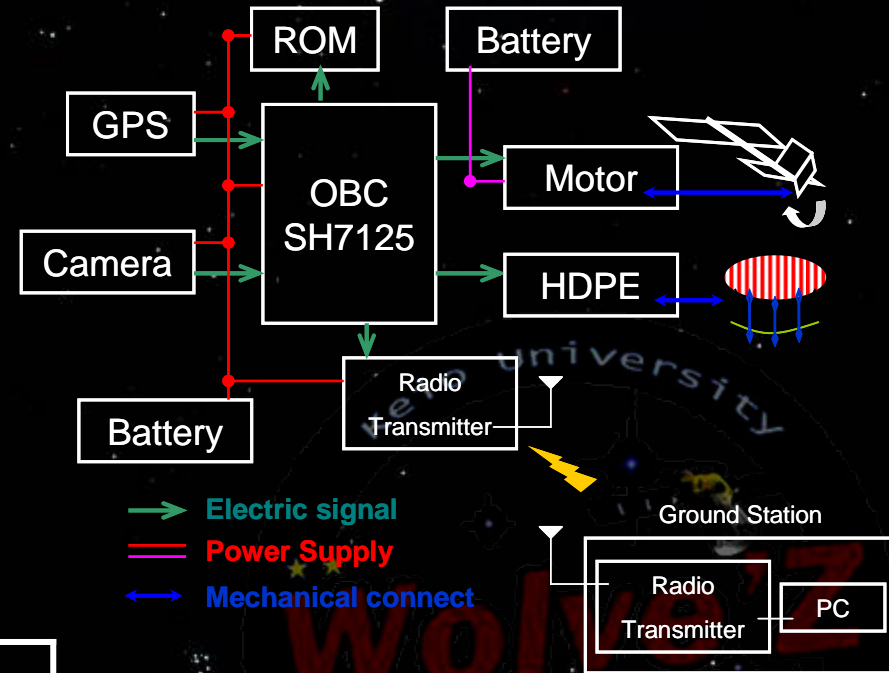


Wolve'Z CanSat

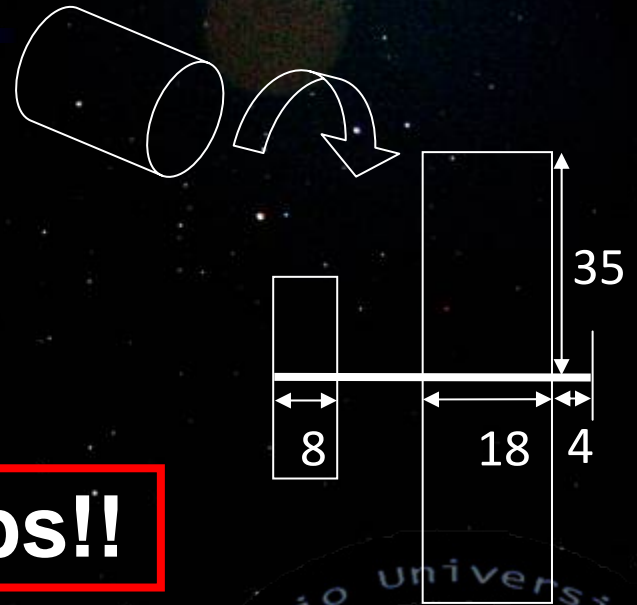
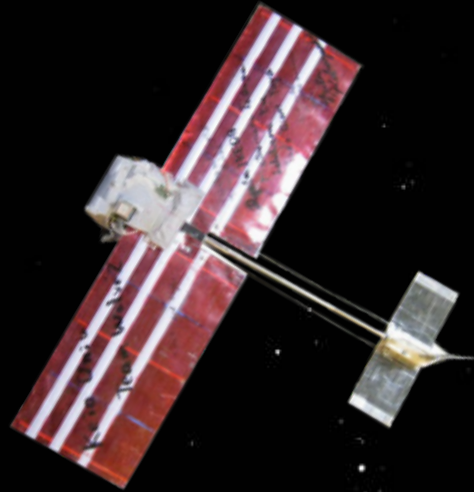
WOLVE'Z 09



Weight	600g
Folding Size	100mm × 130mm × 230mm
Opened Size	length 530mm × width 700mm
Wing Span	$700 \times 180 = 126000\text{mm}^2$

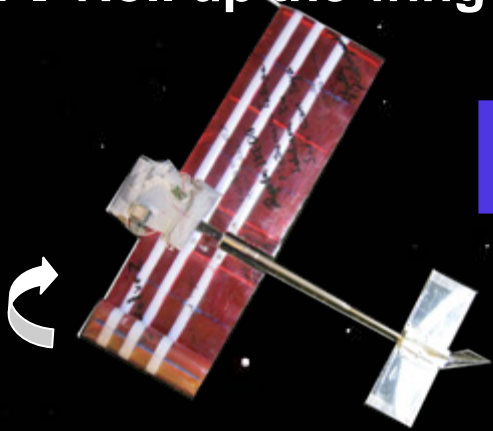


How to fold the CanSat

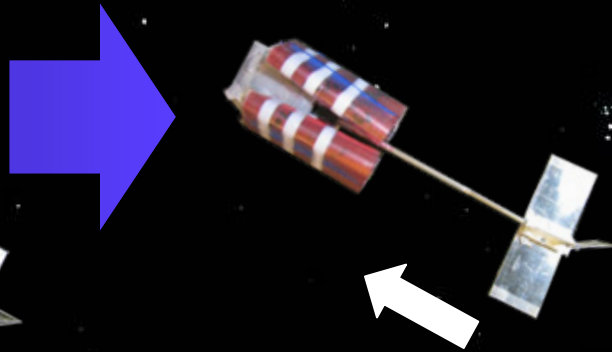


Only 3 steps!!

1. Roll up the wing



2. Compress the tail



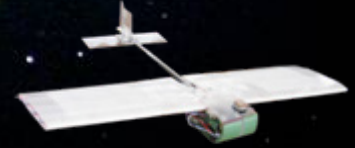
3. Ready to flight !!



Our Missions

- Fly Back Mission

- aiming at the target point by autonomous flight.



- Camera Mission

- taking a moving picture in the sky.



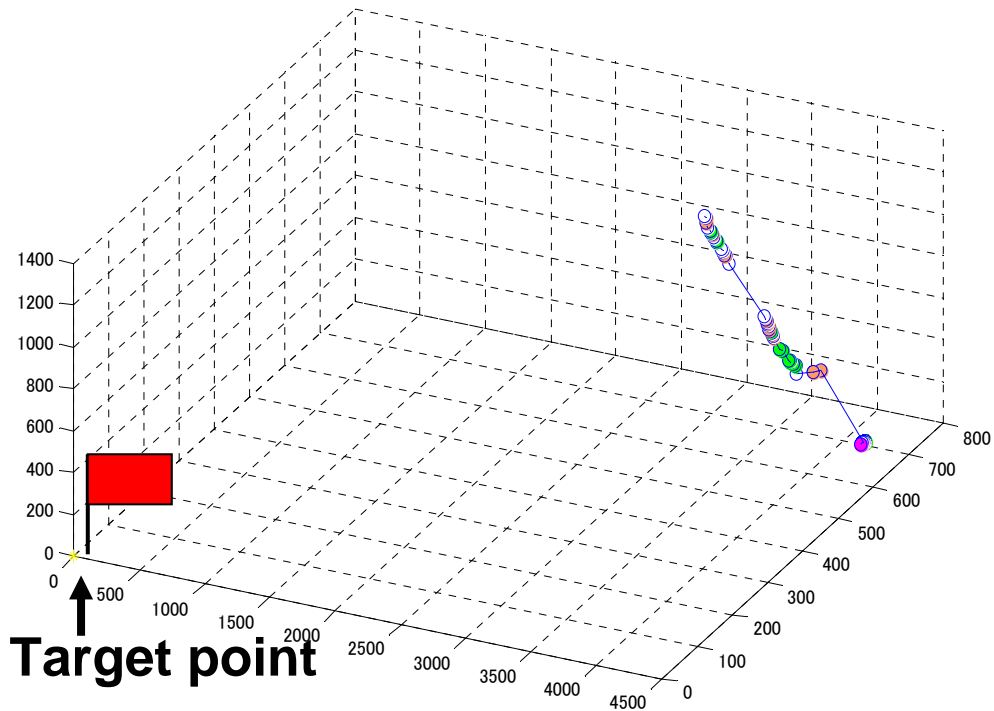
- Soft-landing Mission

- Decrease speed by the parachute when landing.



Result -1st Flight-

4187m



○ : Straight

● : Right (small)

● : Right (middle)

● : Right (big)

● : Left (small)

● : Left (middle)

● : Left (big)

■ Fly Back Mission
with Control !!

■ Camera Mission

failure

■ Soft-landing Mission

failure

Result -2nd Flight-

301m!!!



- Fly Back Mission
with Control !!??
- Camera Mission
failure
- Soft-landing Mission
failure



Result -3rd Flight-

Free Fall



- Fly Back Mission
free fall
- Camera Mission
success !!
- Soft-landing Mission
failure



Conclusion and Future Plans

- **The result of this year's ARLISS flight**
 - We launched airplane style CanSat in this year. First flight's record is **4187m** and second is **301m**.
 - In third flight, we got a **moving picture** in the sky.
 - We couldn't get control record from radio transmitter.
- **Future plans**
 - We must develop a **new radio transmission system** so as to get the downlink data from CanSat more certainly.



A lot of Thanks



Night Flight is so cool !!

Mr. Seth , Mr. James , Mr. Steve
& all other members of Aeropack

Thank you very much !!!



And more...

- For Mr.Kobayashi, Mr.Nagamine and Mr.Yusa.



Thanks for your nice coordination!!

Thank you for your kind attention



