



Keio Univ.

Team Wolve'Z

ARLISS 2008 Student Presentation

Sep 20, 2008
@Bruno's Country Club
PM: Yuta Kobayashi





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Member

We belong to Yoshida and Takahashi Lab of Keio Univ.

ARLISS 2008 : 4members

PM: Yuta Kobayashi

AM: Yohichiroh Kusuda

Other members:

Yoshihiko Mikami (Nice B)

Yuya Kakehashi (Nice C)



Other members (in Japan):

Yuta Nakajima, Syota Tobimatsu, Masataka Tanaka, Seiichiroh Yamamoto,
Naoko Matsubara, Ryoji Kosemura, Ryota Ikeda

11 members



Wolve'Z Cansat

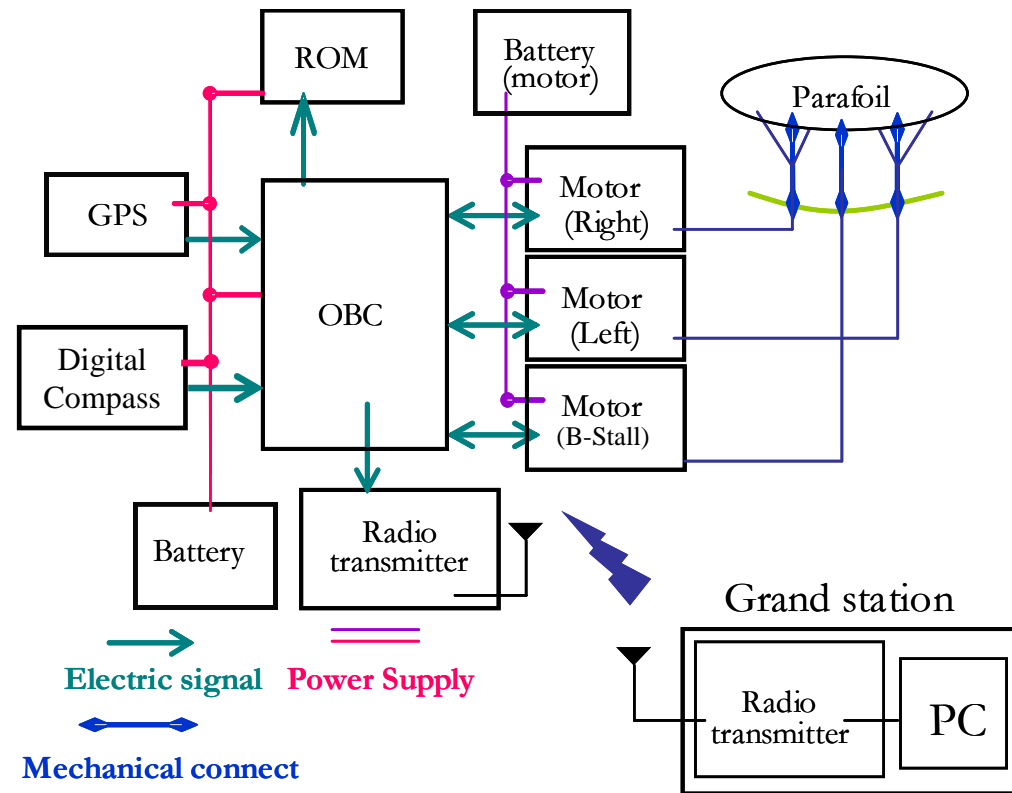
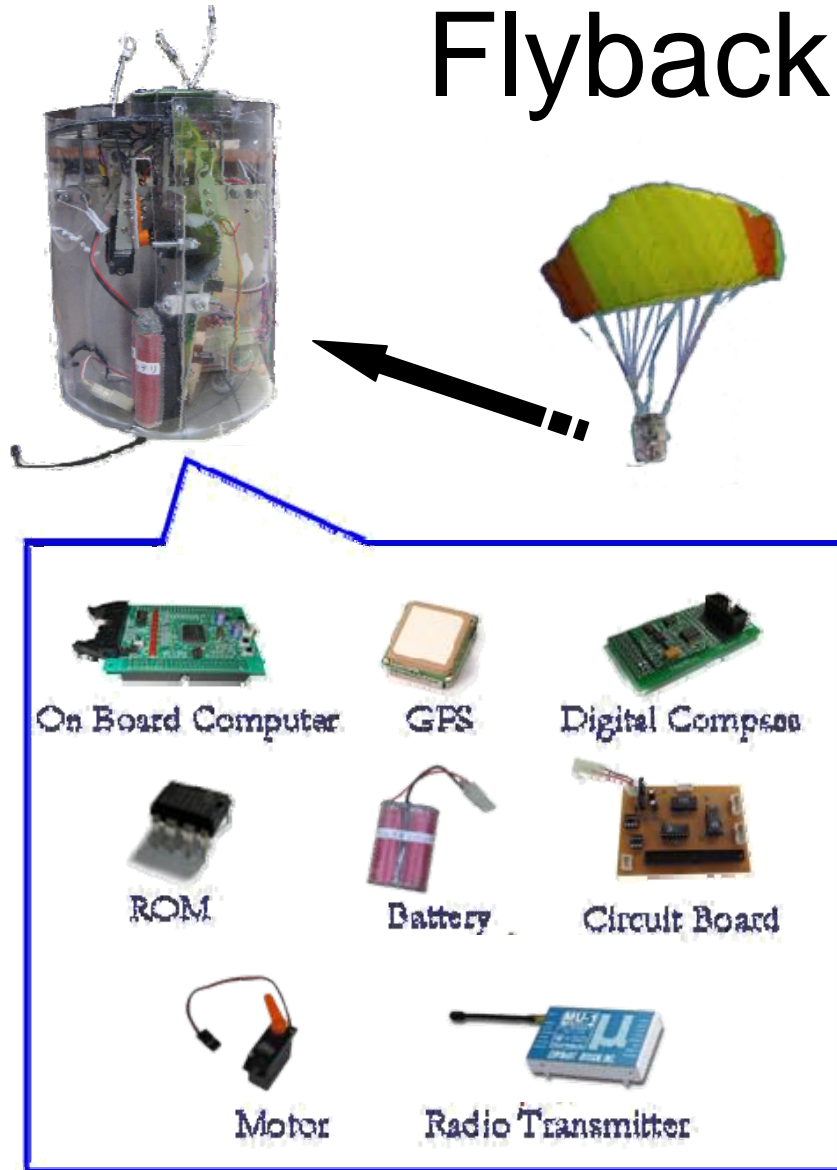


For ARLISS 2008

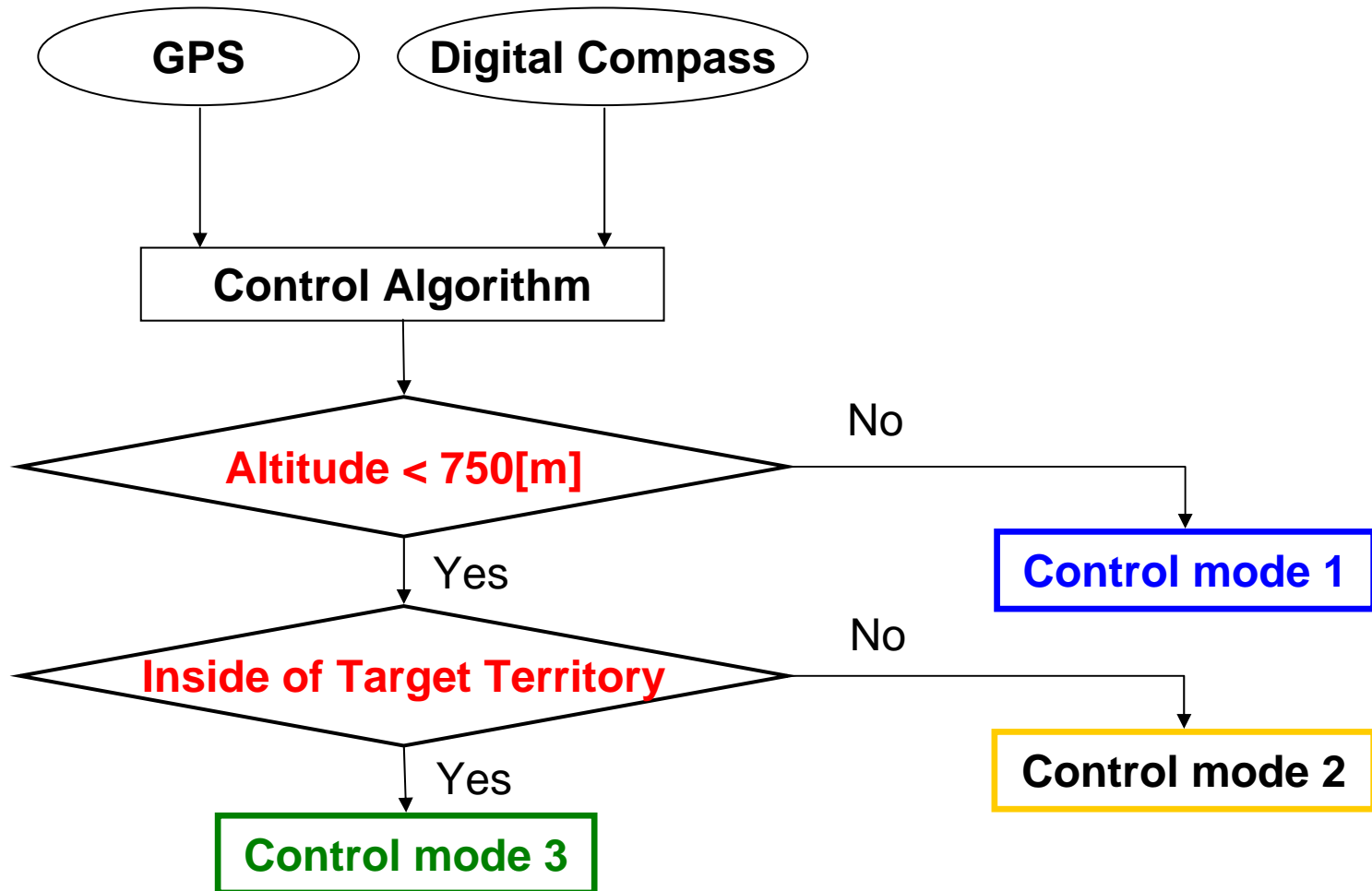
1st Flight was launched by Mr. Steve
2nd Flight was launched by Mr. Dave



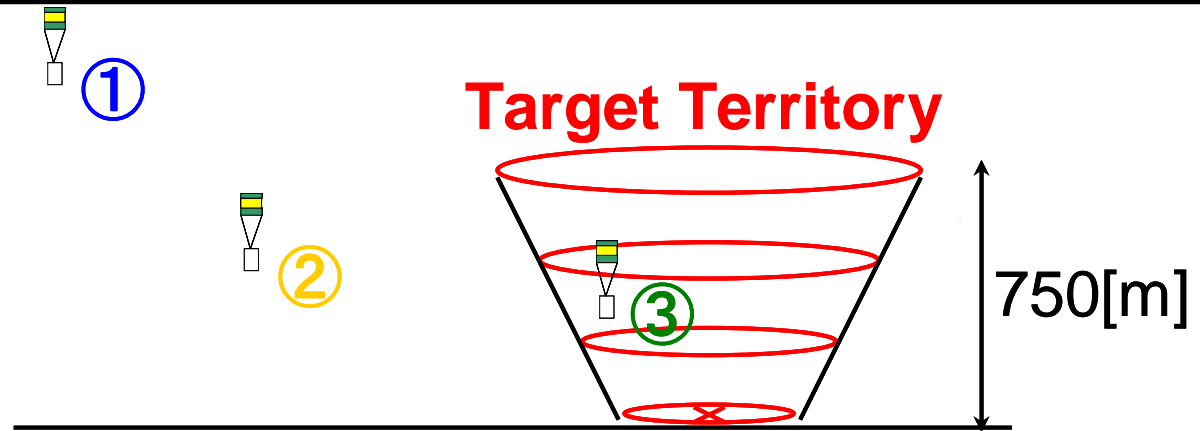
Flyback Architecture



Control Algorithm

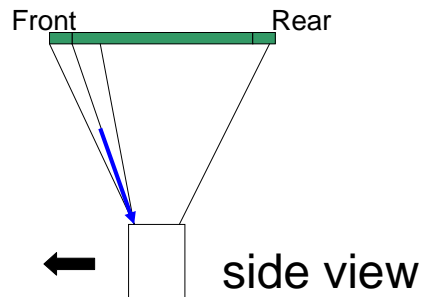


Control Algorithm



Control mode 1

B-Stall mode
in order to dive down rapidly

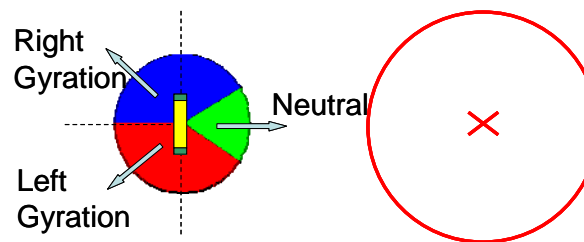


Control mode 2

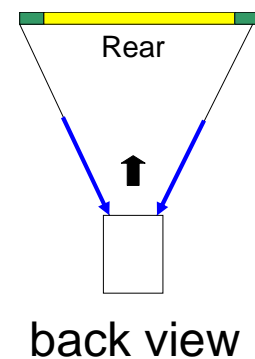
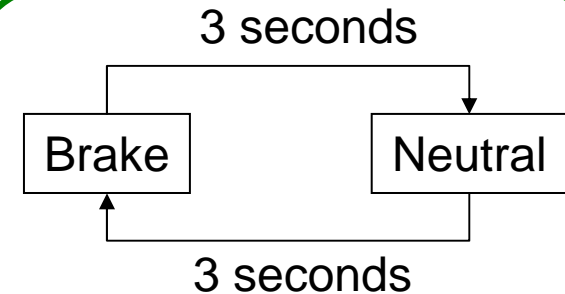
If Cansat go backward.

B-Stall mode

else

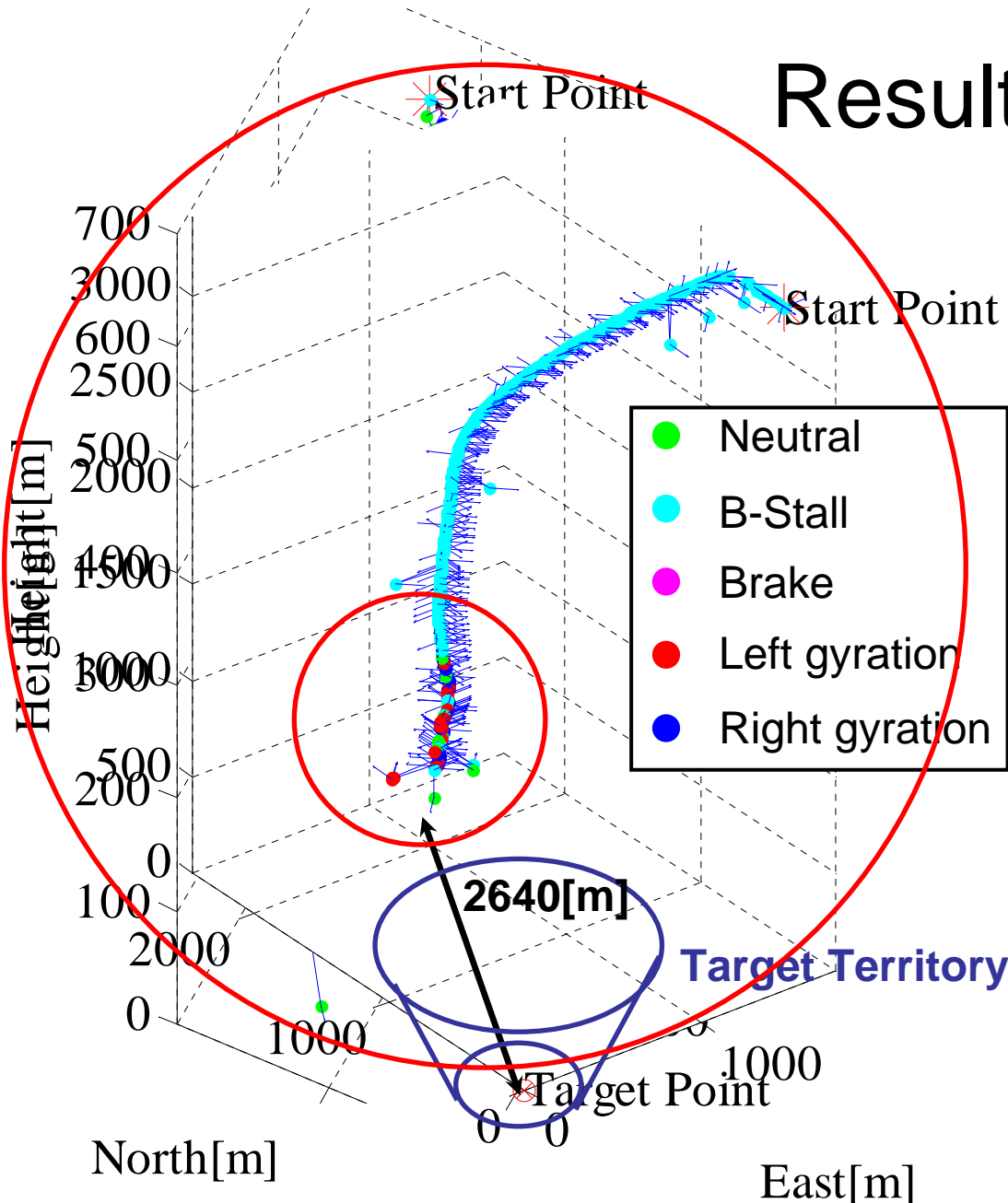


Control mode 3





Result(2nd Flight)



Distance:2640[m]

Altitude ≥ 750 [m]

Control mode1 was applied

Altitude < 750 [m]

Outside of Target Territory

Control mode2 was applied

All system is alive
after the two flights.

Summary and Future plans

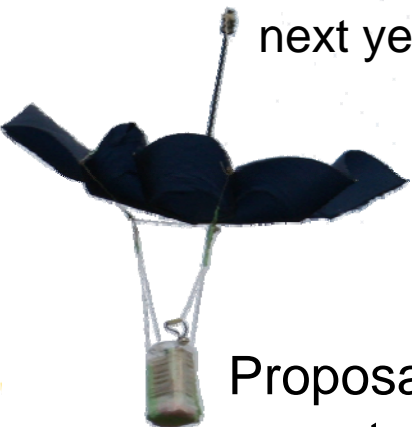


□ The result of this year's ARLISS flight

- We launched parafoil style cansat twice in this year ARLISS event. First flight's record is 4450[m] and second is 2640[m].
- We could get control record from on-board ROM and Radio Transmitter, so we could make sure that system could run certainly.

□ Future plans

- We had a chance to test the new structure on Cansat in this year ARLISS event.(3rd Flight)
- We could get a lot of knowledge and we will make improved one in the next year's ARLISS.



Proposal of
new structure on Cansat

3rd Flight
was
launched
by Mr. Jeff



Special Thanks to ...



Mr. Steve and Mr. Dave and Mr. Jeff