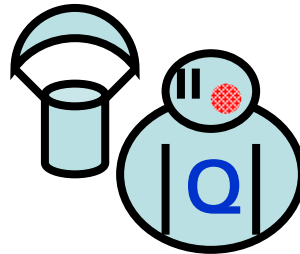


ARLISS 2005 Reporting

Team SHY-Q



Members

S*ahara, Hironori*

Measurement Instruments

H*atsutori, Yoichi*

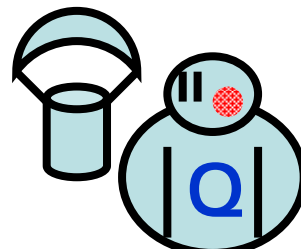
Navigation & Controller

Y*oo Il-Yun*

Communication & System Development

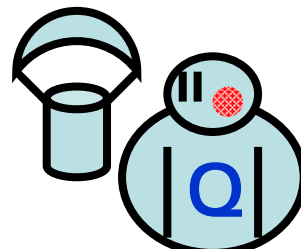
Ryu Funa **Q**

Adviser, with the edge of experience

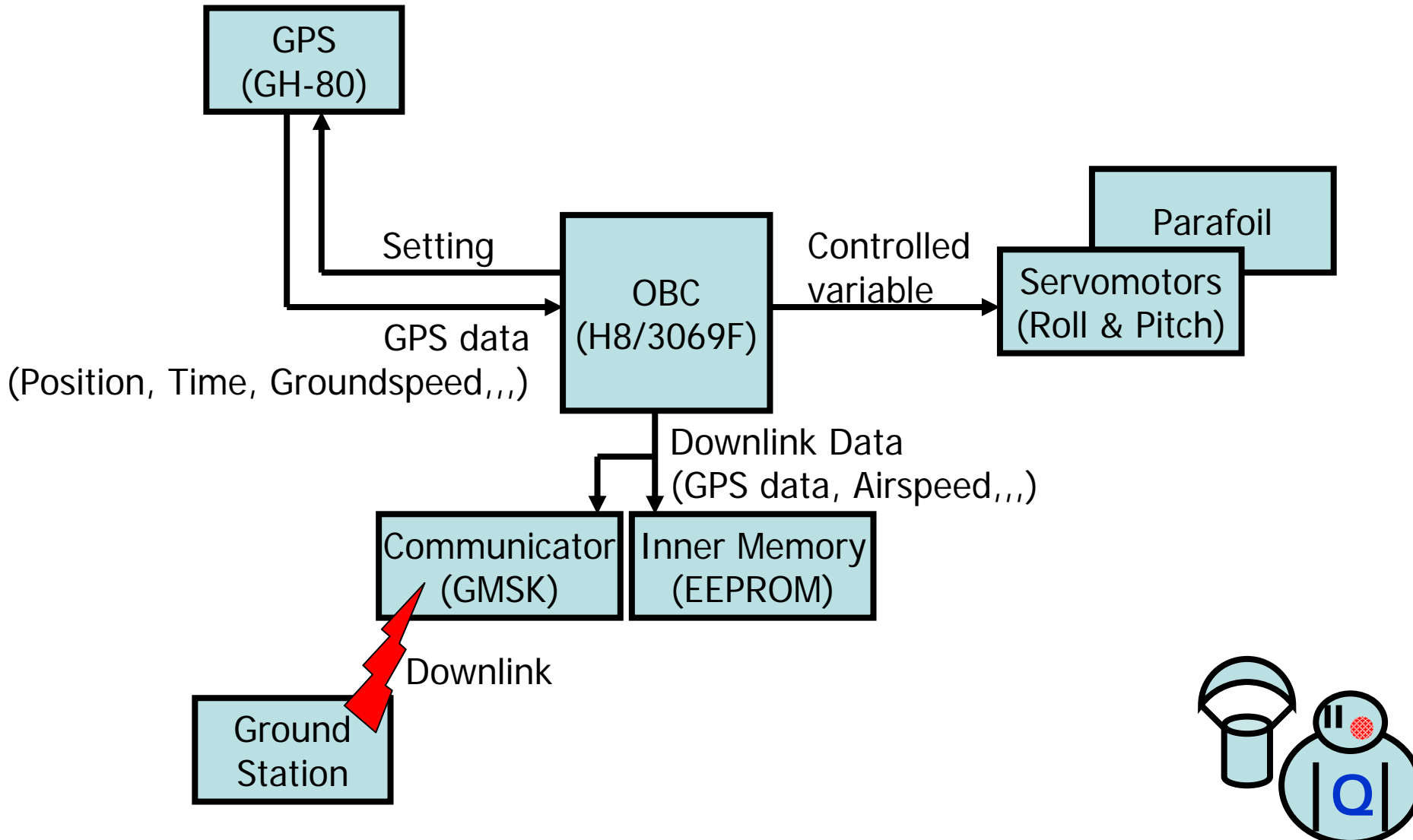


Mission Objectives

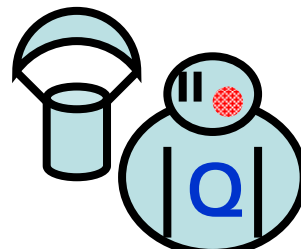
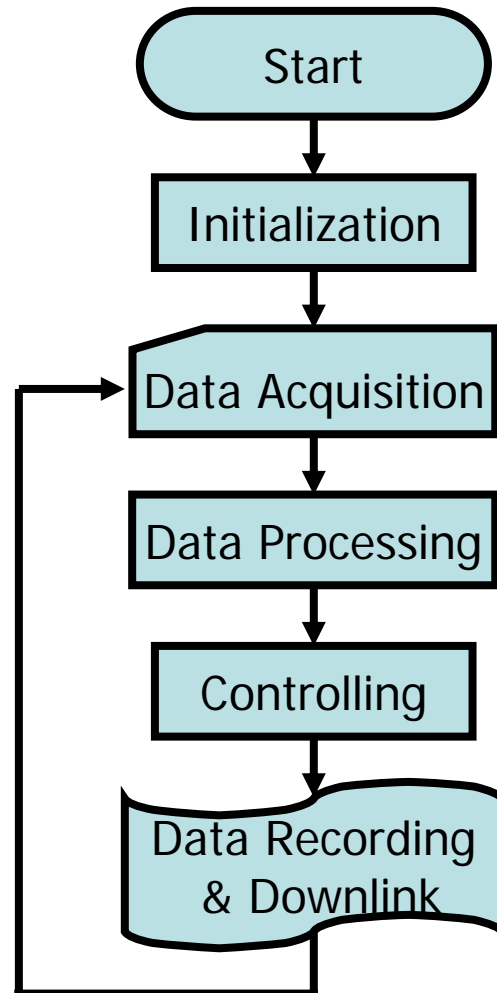
- Comeback Competition in Open-Class
- Communication through GMSK after separation



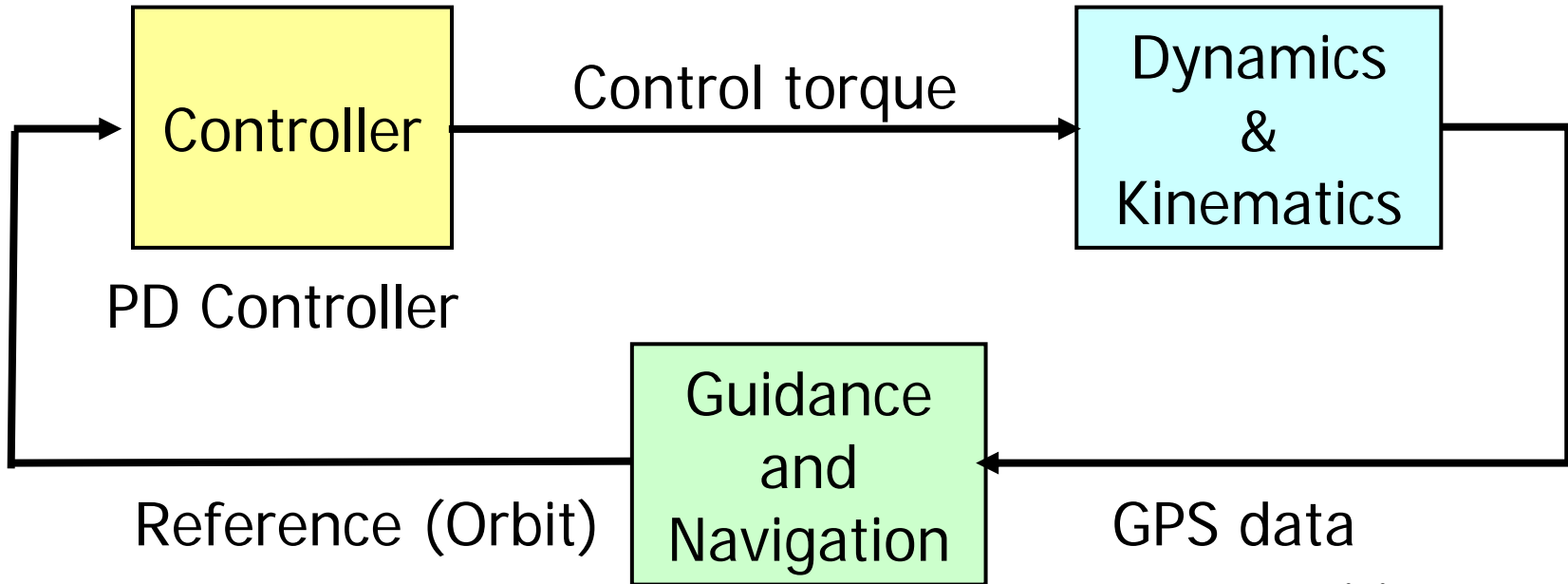
System Block Diagram



Process Flowchart



Navigation & Controller



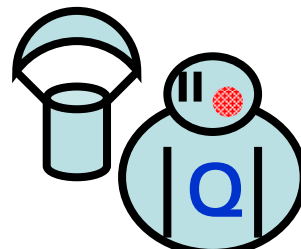
Strategy (Switching Method)

Phase 1 : Approach

Phase 2 : Circling

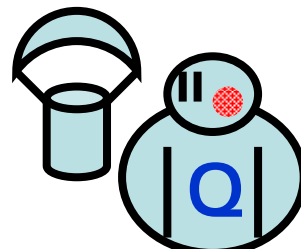
Phase 3 : Landing

■ Position
■ Velocity

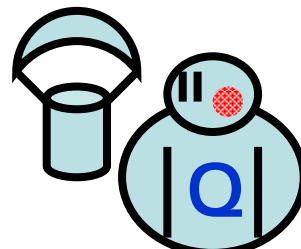
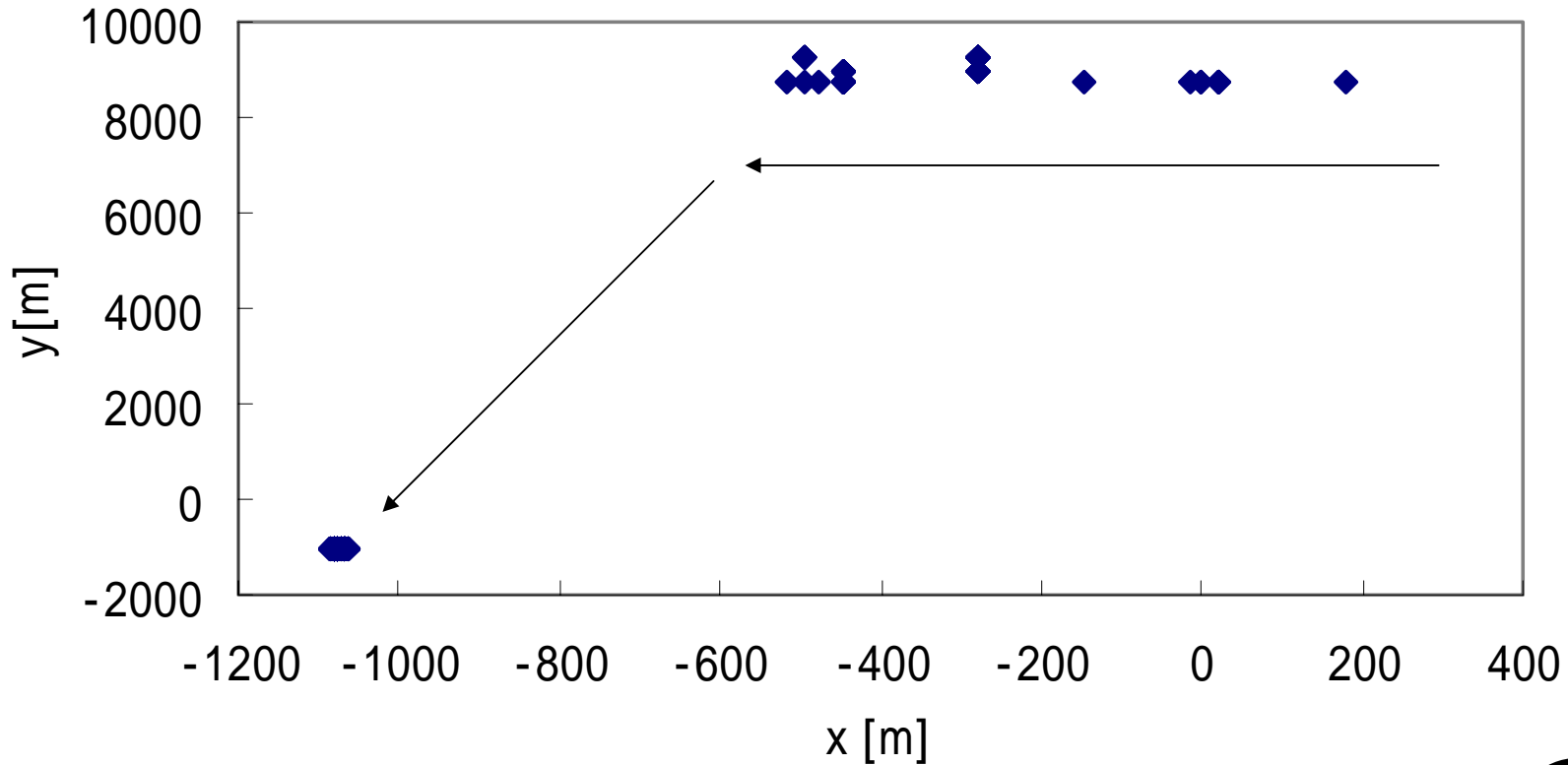


Result

- 1,499 m from target (not controlled)
- Uncertain to acquire GPS data while descending
- Fail to decode the signal of GMSK mode
- Servo motor operated according to program

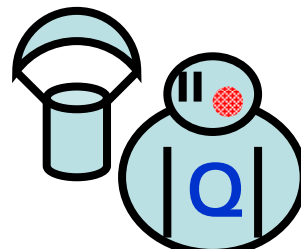


GPS data acquired



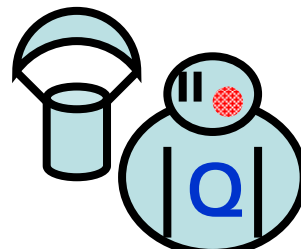
Causes of Problems

- GPS, too small antenna gain with attitude perturbation, and conflict with OBC frequency
- GMSK, under investigation



Reflection

- Need to increase antenna gain of GPS
- Solving frequency conflict between GPS and OBC



Acknowledgment

We highly appreciate
all members of ARLISS 2005.



We will be back !!

