

UCK-06B Report in 2008



About UCK-06B Rocket

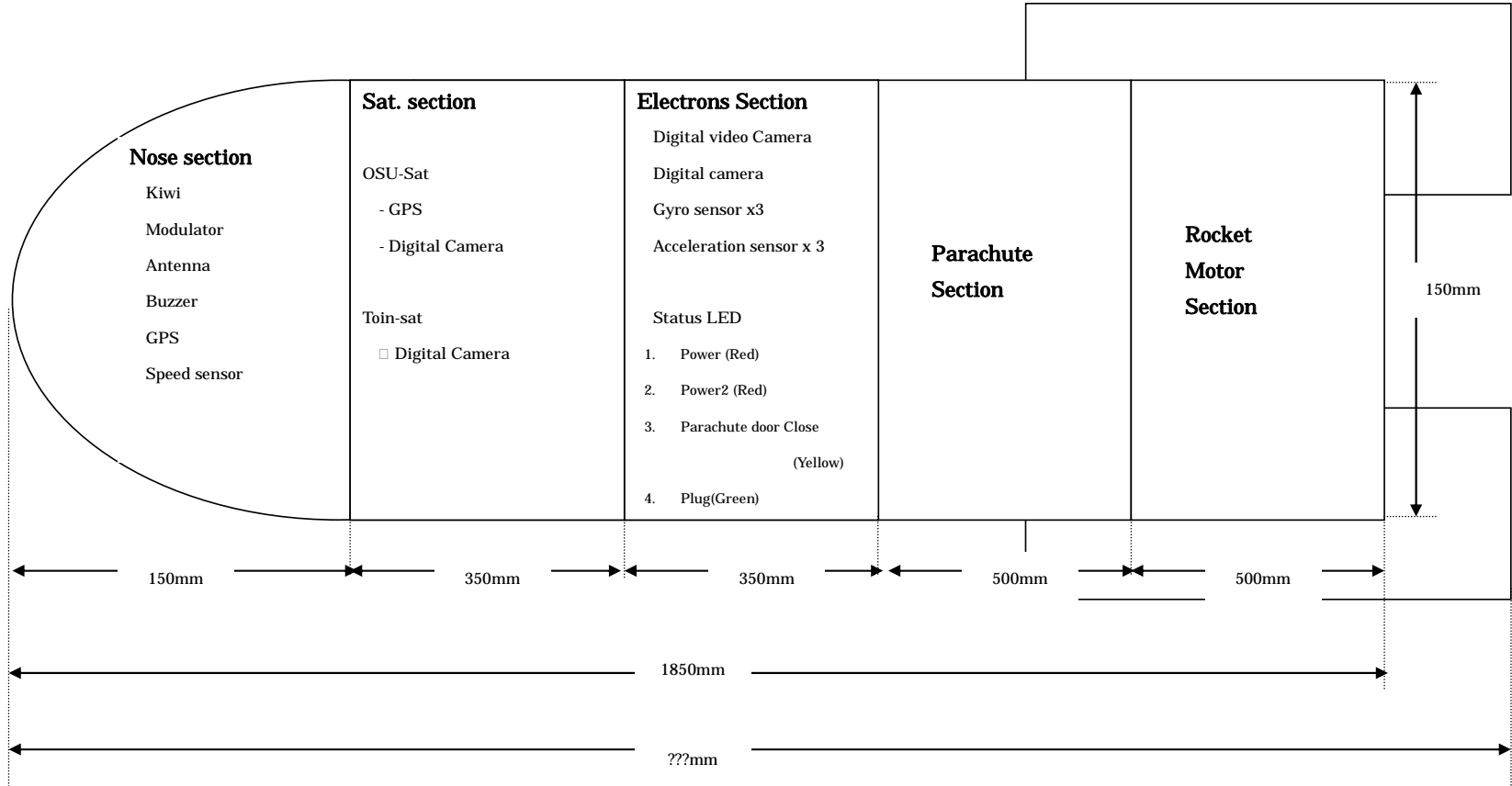


- . Satellite x 2
- . Digital Camera
- . Digital Video Camera
- . GPS

- . Telemetry .Kiwi.
- . Modulator
- . Transmit Antenna
- . Speed Sensor (Differential pressure type)
- . Acceleration Sensor x 3
- . Gyro x 3
- . Buzzer
- . Cross type Parachute
- . Servo motor for eject Satellites x 2
- . Servo motor for open to Parachute door

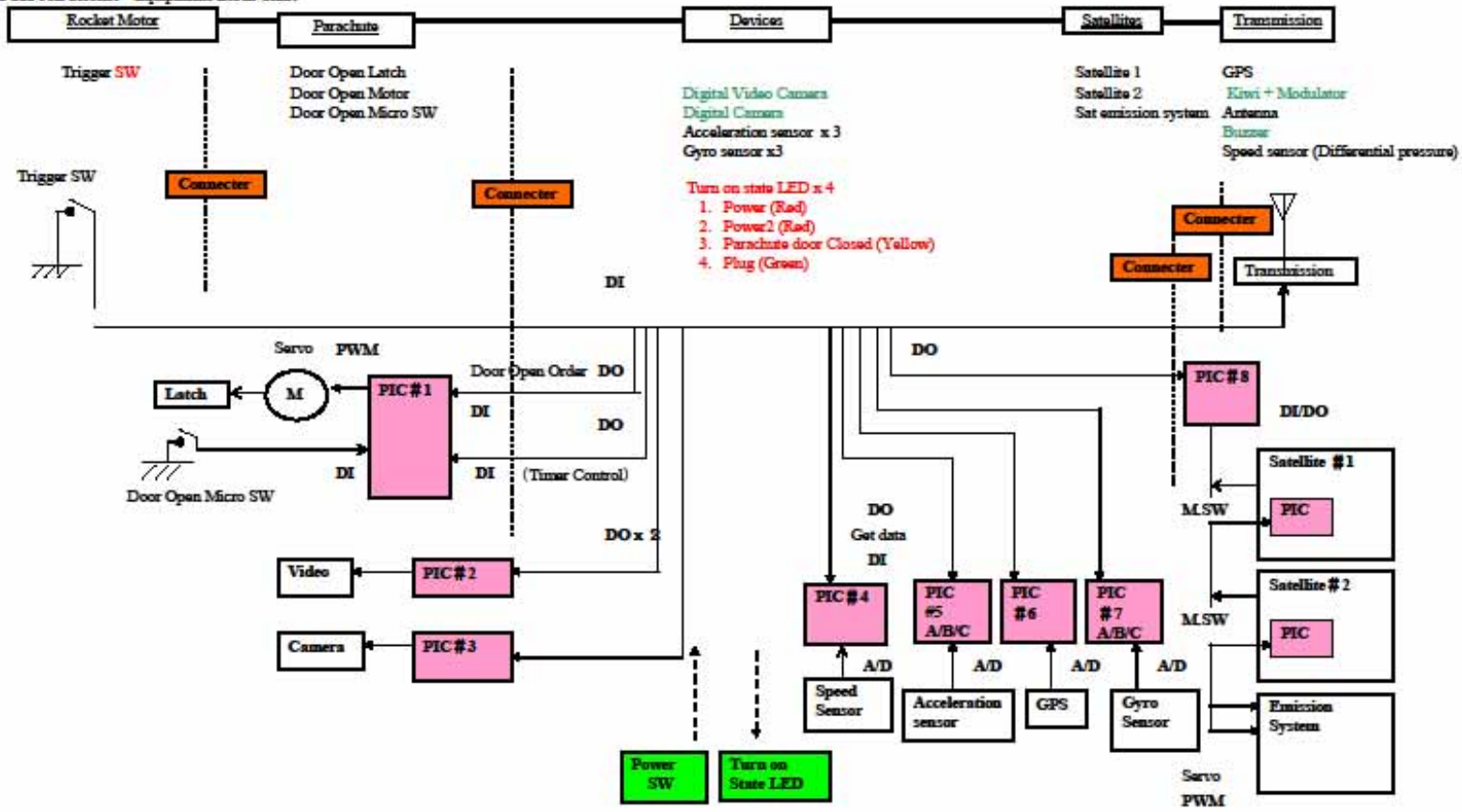
Arrangement

UCK-06B Rocket Arrangement chart

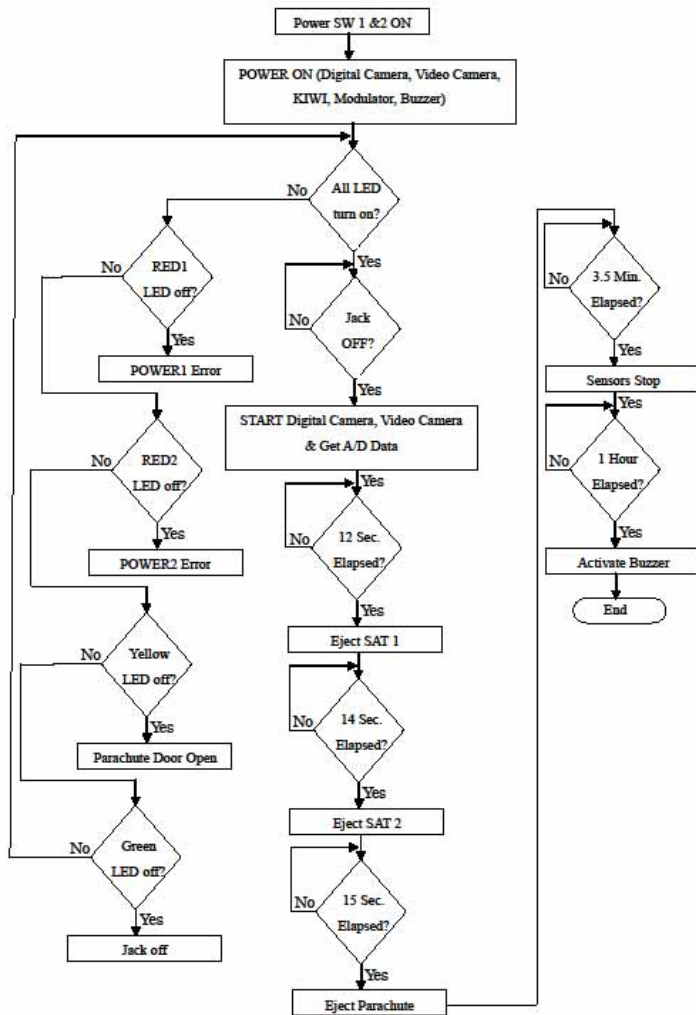


Block Chart

UCEK-06B Rocket Equipments Block Chart



Action Flow Chart



Power Switch1 & 2 ON

3LEDs Condition check.All LED On is OK.

Rocket ignition.Trigger Switch out.

All of electronics and sensor start

After 12 seconds OSU-SAT eject

After 14 seconds Toin-SAT eject

After 15 seconds Parachute door open

About 3.5 minutes sensor stop

About 1 hour after Buzzer ON

Satellites



OSU-SAT .upper side.

- . Digital Camera.for take pictures.
- . GPS (Data is accumulated in PIC)
- . Wireless LAN Access point
(The electric wave of wireless LAN is obtained with the personal computer and the fall place is specified)
- . Buzzer
- . Parachute

TOIN-SAT .lower side.

- . Digital Camera.for take movies.
- . Parachute

Members of UCK team



Work member in Japan

Leader . Kaori Naito

Structural calculation . Tsuyoshi Yamashita

Design . Tsuyoshi Yamashita

Mechanic . Akio Naemura / Masanori Shimoda
Yoshitsugu Ikata

Electrical equipment . Kaori Naito
Tsuyoshi Yamashita

Report to France . Julien Bourdon / Kaori Naito

Adviser. Julien Bourdon

OSU-Sat . Osaka Sangyou Univ.(OSU)

Rocket Project

Toin-Sat . Osaka Toin Rocket Club

Work member in France

Leader . Kaori Naito.UCK.

OSU Leader . Dr. Kazuo Ohmi

Mechanic . Masanori Shimoda.UCK.

Achyut / Sanjeeb Prasad

Daisuke Inada.OSU.

Electrical equipment . Kaori Naito

interpreter . Dr. Kazuo Ohmi / Achyut

About schedule



In Japan

March to April . Decision of specification

Procurement of material

First of May: Study meeting of assembler for PIC

Middle of May . Work beginning

First of June . Mr. Christophe Scicluna came to Japan

Middle of July . Finish

In France

7/26 .Departure and arrive Paris

7/27 . Go to the camp

7/28 . Begin to Work and Test

8/ 1 . Launch and Recovery

8/ 2 . Rocket Recovery

OSU members departure the camp

8/ 3 . UCK members departure the camp

. OSU members departure France

8/ 4 . UCK members go to Ariane5 and departure France

. OSU members come back to Japan

8/ 5 . UCK members come back to Japan

Launch



8/1 PM12 .15
(Japanese Time 8/1 PM 7 .15)

PERSEUS / FH- ϕ 2	leo	② Rocket	31/0
PERSEUS / FH- ϕ 3	leo	OK	OK
PERSEUS / FH- ϕ 4	leo	OK	OK
Planète Sciences/Brittekon	Nico	OK	OK
REBEL ROCKETRY/Huskie	Nico	Rocket	31/07 No
SPACIETA / Sky Breaker	Nico BS	Balistique	
TROLL / ROY	Nico BS		
UCC / FLYING TIGER		ROCKET & CANISAT	NO
UCC / CALIFORNIA	Roll	NOMINAL	

Rocket and Satellites Recovery



Rocket

We couldn't find out.

We could catch the GPS data for KIWI.

But GPS Unit couldn't catch the GPS waves.

OSU-SAT

It was discovered by another team.



TOIN-SAT

We couldn't find out.

UCK-06A Rocket

It was unexpected to have discovered it.



Discovered Result



OSU-SAT

We don't know in detail the circumstance when it was found, since the other team found it.

Consequentially, It didn't work at all. The reason is, we guess, that the switch turned off when the sat was ejecting because the switch pin was touched by the guide and rubbed. (There was no picture data in camera after the ejection and the battery was almost full.)

Moreover the lid had opened because the fins of servomotor is broken and GPS was lost.



UCK-06A

It was found like the picture left. It stuck in the ground.

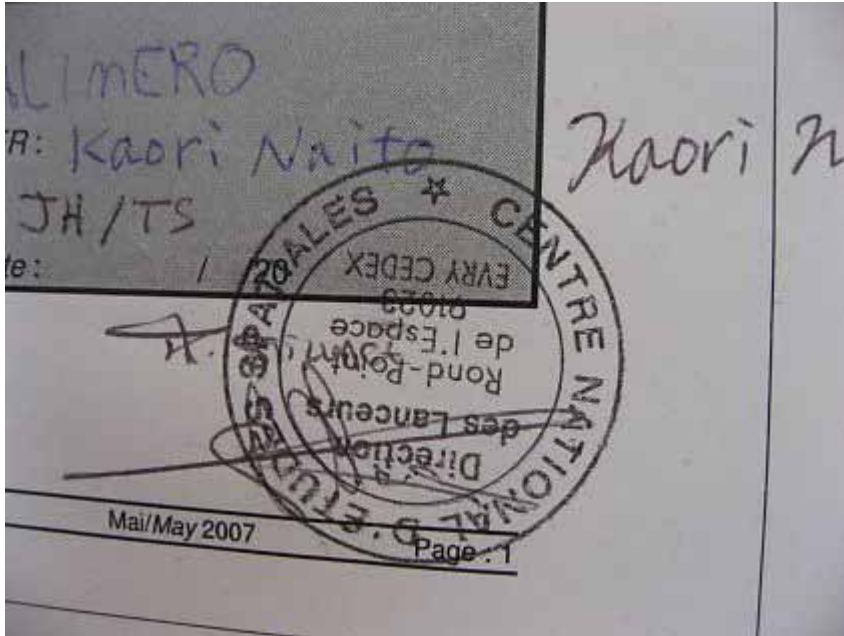
Before launching the length was about 200(cm),but it became 40(cm) because of a shock when it collided. The Electric instrument is almost all crushed.

SD memory card in the video camera is only saved and we tried to read data, but failed.

Next mission

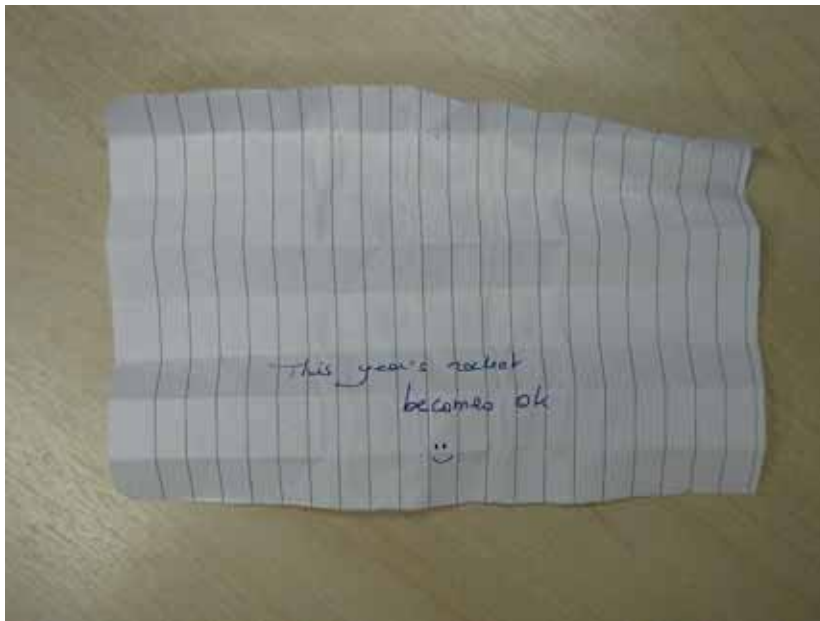
1.

2.



aa

At last...



Special Thanks!!

People in Kansai of Japan that assisted in us.
And Chris, Julien, Dyane etc.....
We were helped from French people.

Thanks for kindness!!