Activities of Rocket WG
UNISON-Japan
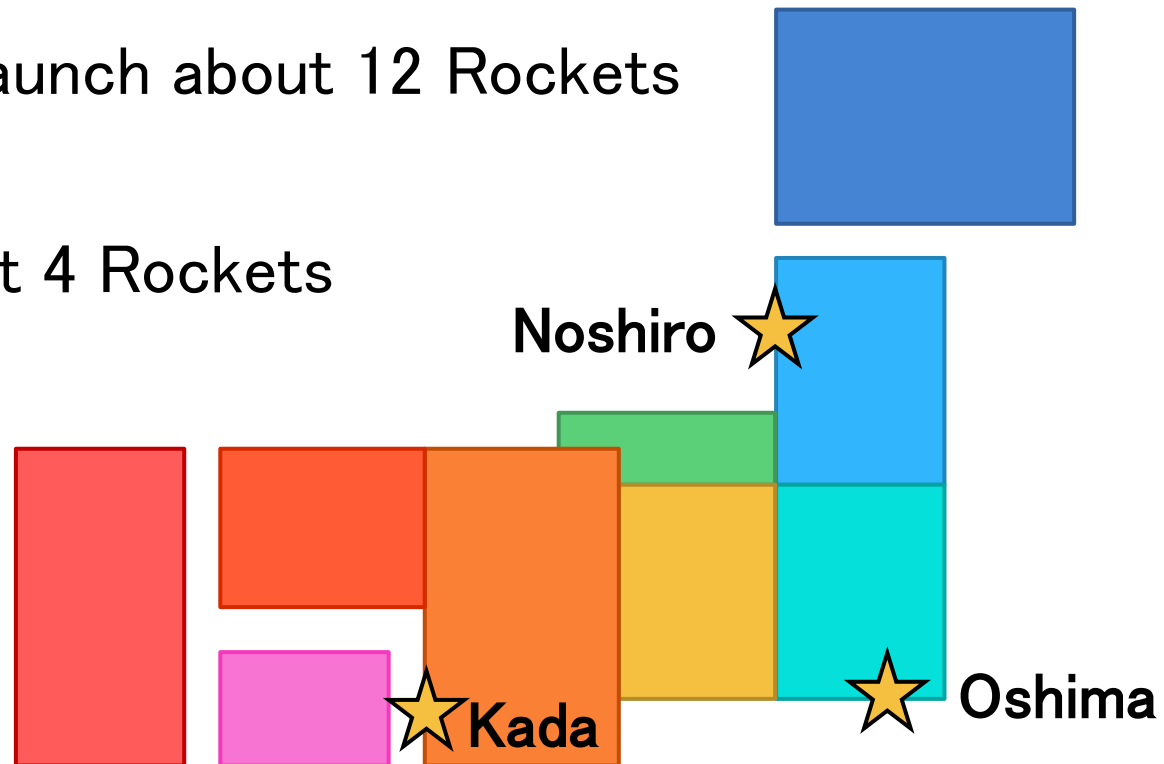
Kyohei Yashima

2016/10/21

Index

▶ Co-operate Launch site

▶ Recently launch & schedule

▶ Four Sub WG

2016/10/21

Co-Operate Launch Site

▸ Noshiro, Akita

August, launch about 15 Rockets

▸ Oshima, Tokyo

November, March launch about 12 Rockets

▸ Kada, Wakayama

March, launch about 4 Rockets

Noshiro

Kada

Oshima

Rocket WG

▸ Numbers of Launch in 2016

2016.03 Oshima

→12 Rockets

2016.03 Kada

→3 Rockets

2016.08 Noshiro

→15 Rockets

▸ Launch schedule

≫12,13th Nov Oshima 4 Rockets

≫2017 March Oshima＆Kada about 12&4 Rockets

Pictures

2016/10/21

Rocket WG

▸ Sub WG (1)

▸ **Safety Management**：We consider about criteria of safety management and the way to evaluate the safety of launching rockets.

▸ **Engine development**：In this sub WG, in addition to the increase of student groups that developing Hybrid rocket engine, we share the date and exchange opinions each others. Also, debate the method to evaluate fright model engine.

Rocket WG

▸ Sub WG (2)

  ▸ **Public relation**：Because of the importance of understanding of stakeholders, we share the information and technique, for example how to manage the homepage of group.

  ▸ **Launch site management**：Recently in Japan, There are a lot of groups that launch rockets. But, the window of launch is limited. Because of this problems, we consider the way to use the resource(launch window) efficiently.
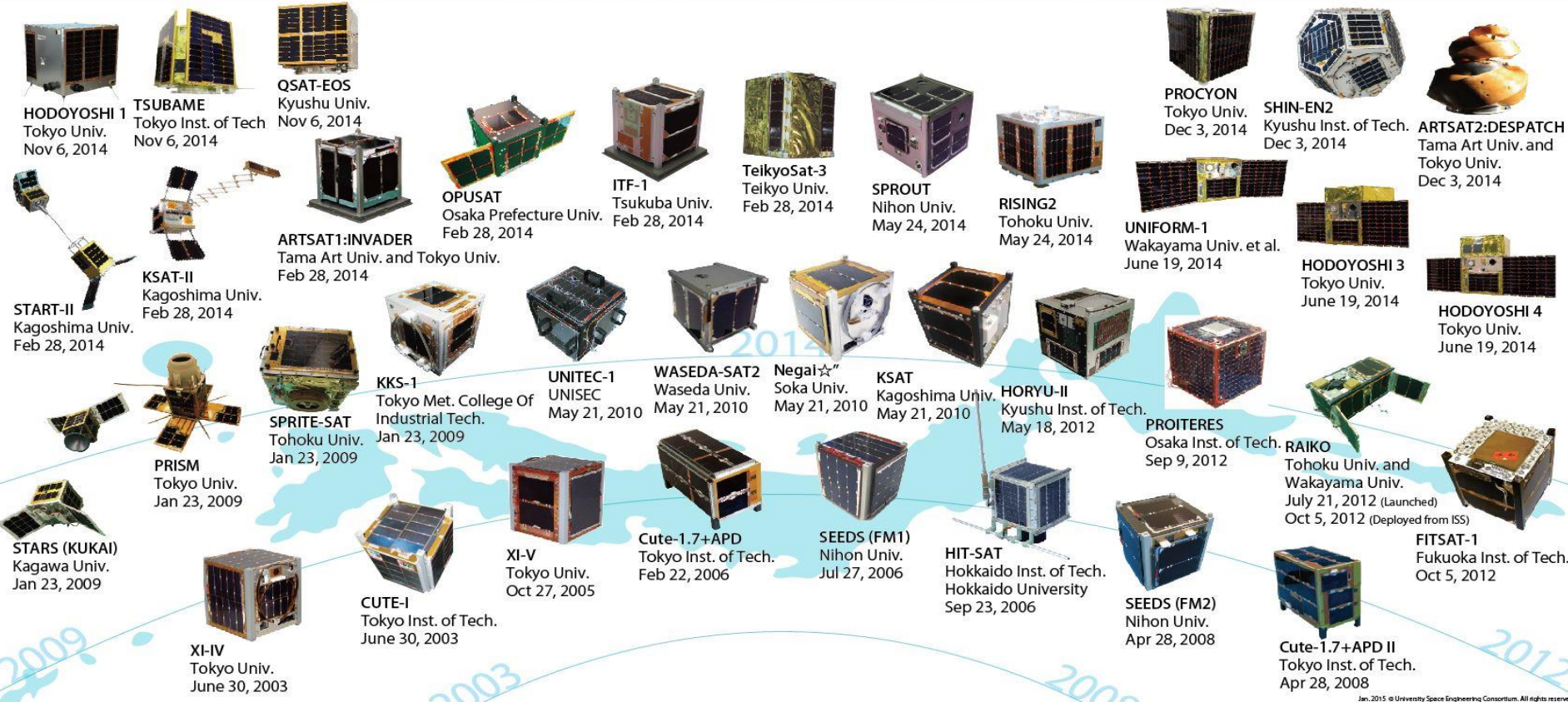
2016/10/21

Activities of SatelliteWG Unison-Japan

Masahiro Kaku

UNISON
unisec student organizaion

衛星WG
情報共有のための取り組み

Satellites development in UNISEC

Satellites Born From UNISEC Activities

Sharing the information (2011~)

background

A lot of groups belong to WG

\>> Connection between each groups become thin

Basic concept

GIVE and TAKE the information

\>> Get the information unilateral is not good

\>> Every group provide the information

Goal

Improve the success rate of develop & operate satellite

Activities

Session

Held

10 times

in the past

Discussion

Held

5 times

in the past

We hold session & discussion 2,3times in a year

WIKI

Upload the information that we get at the events on the Date base (WIKI)

Participants can access anytime (need PW)

Activities in this year

×   Discussion & session for date base

○   To get the information that their group need

> Importance "Provide the chance to interact"

Discussion event so far …

+ The theme is subsystem or component

> Lack of Understanding about whole project or background
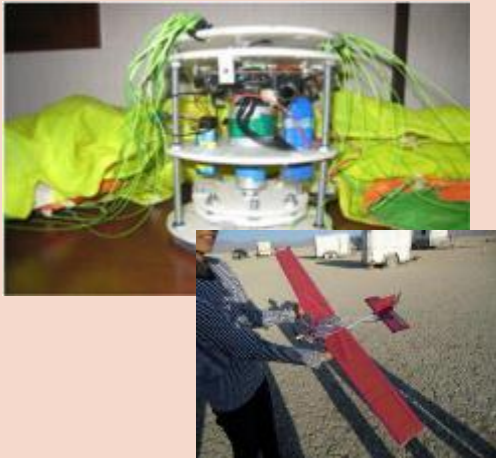
> Determine the theme that focus on whole system

ex: Extract the risk about past project

衛星WG
情報共有のための取り組み

CanSatWG

- Creating CanSat

- Sharing results of experiment & knowledge

- Participating & Managing Competition
  - Noshiro Space Event
  - ARLISS

Creating CanSat

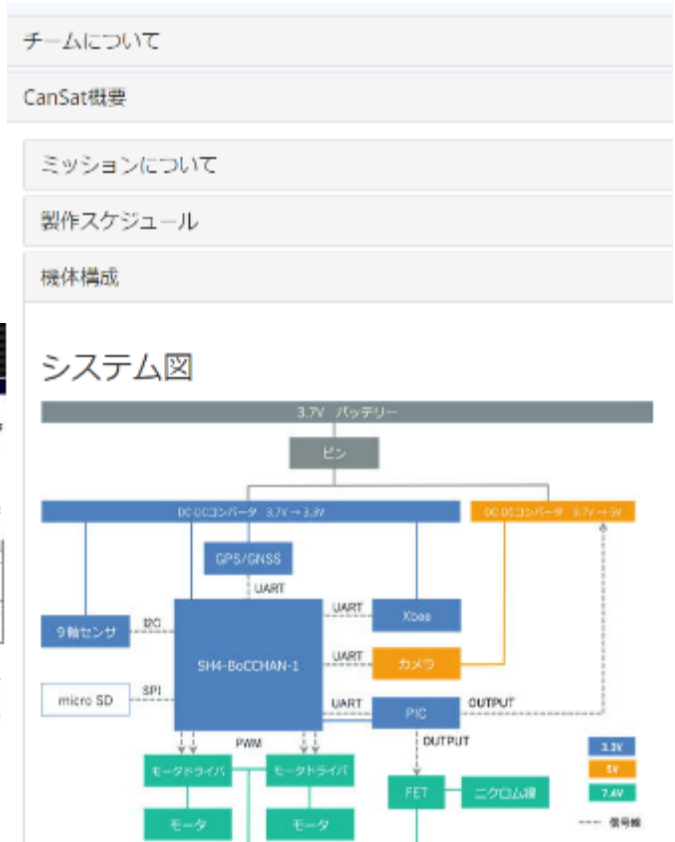| Flyer Type	Rover Type	Mission Type
	Go to the target point autonomously.	Create original mission by themselves (like observation, polling, etc) and make CanSat to achieve it.

Sharing results of experiment & knowledge

CanSat_UNISEC
https://www.facebook.com/ARLISS.CanSat/

Participating & Managing Competition

Not only deciding rules or awards of competition.

But also….

-Recruit CanSat teams and staff.

-Think about schedule of preparation and the event.

-Gathering & Manage facilities or tools

-Setup & tune facilities through entire the event

Students take part in these article

Noshiro Space Event

The Largest CanSat Event in Japan(36 teams participated this year)

CanSats are dropped from balloon

0m goal rover team

https://www.youtube.com/playlist?list=PLYWl7BIjyAdOOym7FEqK7fEZ8JVovoHEB

ARLISS
(A Rocket Launch for International Student Satellites)

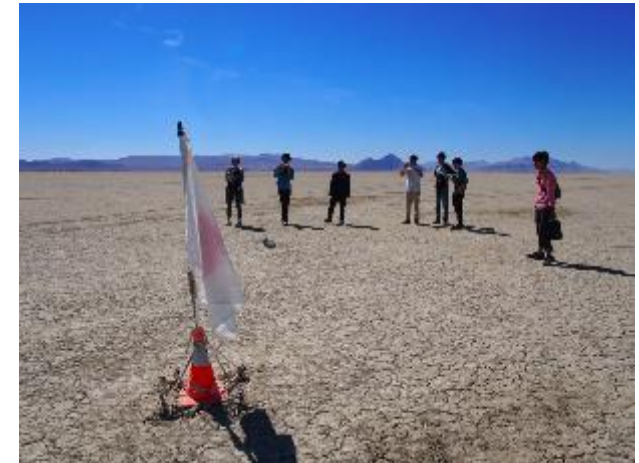@Black Rock Desert, NV, U.S
Teams from Japan(13), South Korea(2) ,U.S(2), Egypt(1) and Peru(1)

Prepare

Launch(3-4km)

Mission or comeback

We want to make it **more international** for 20ᵗʰ anniversary(2018)

https://www.youtube.com/playlist?list=PLja-vqMgswHJGVQtX4IlItopfC6AWse02