

Tohoku University FROM THE EARTH Annual report

The department of mechanical and aerospace engineering 3rd grade

Jidai Tomihira



Annual schedule

Tournament

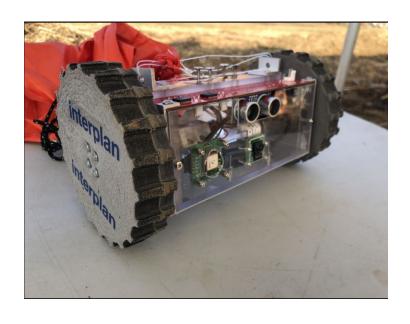
month	11	12	1	2	3	4	5	6	7	8	9	10	11
rocket	Design and Manufacturing				Canceled due to COVID19								
								Des lanu	_				Noshiro
CANSAT			Design and Manufacturing							Noshiro			
volunteer													School festival



Noshiro space event (at AKITA)







- AKITA prefecture Nosiro city
- ·11/2~7
- •6 teams of rocket
- about 10 teams of CanSat

Hybrid rocket 「Tukasa」 launched toward sea

CanSat are dropped by drone from 50~80m height



Hybrid engine rocket "Tukasa"

Second grader make Hybrid engine rocket at the first time

Diameter 142mm
Length 1657mm
Expected altitude 900m

Success Criterion

Minimum	Manufacturing completed						
Middle	Launched completed						
Full	Recovery completed						
Advanced	Confirm mechanism which release the parachute operates normally						















CanSat

CanSat is Imitation of satellites

<Some rules>

Weight is under 1050g

Size limit ϕ 100 × 200 mm

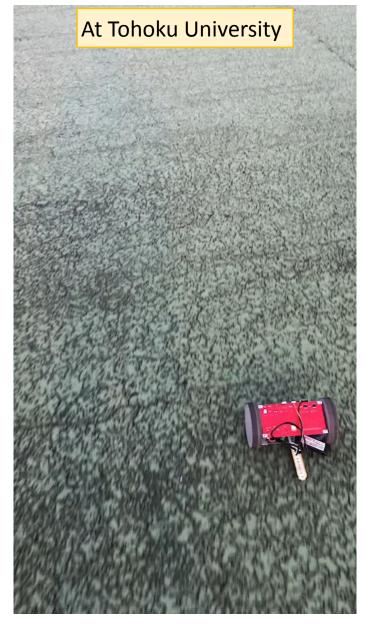
Human cannot operate them once they dropped from the drone

Our Mission

To reach the goal(Red cone) by one selves

Result

Cannot separate parachute because of the sensor failure







At Noshiro



School Festival

"Give everyone Dreams and impressions"

- Volunteer for University
 Student on the ground in
 Kawauchi Campus
- Model Rocket (Type A ~ C)
 reached the 50~100m height
- Designed and Manufacture in a day

20 people participate4 rocket can launch and recovery







