

TOHOKU UAV TECH. ACTIVITY REPORT

KOHEI MATSUMOTO
RYOICHI TAKEZOE

COMMENCEMENT OF DEVELOPMENT: FEB. 2021
FOUNDATION OF TOHOKU UAV TECH.: SEP. 2021

IN EARLIER 2021...

PLANNED TO TAKE PART IN
INDOOR FLYING ROBOT CONTEST

NO EXPERIENCE IN RC PLANES



MADE OUR MIND TO BUILD
A “FLYABLE” PLANE



IN OVER 3 MONTHS.....

COMPLETED BUILDING FLYABLE PLANE WITH
ADEQUATE STABILITY AND MANUEUVREABILITY

BUT...

OVERWEIGHT (240g) TO MEET THE REGULATION (200g)

DIVISIONS

- GENERAL DIVISION ← 2021, 2022
- AUTONOMOUS FLIGHT DIVISION
- MULTI-COPTER DIVISION
- UNIQUE DESIGN DIVISION

IN GENERAL DIVISION...

YOU CAN GET POINTS
BY PERFORMING CERTAIN
MANOEUVRES.



AMATSUKAMI

WEIGHT≈170g

MOBILITY TO PERFORM ALL MANOEUVRES

ex) LOOP, GLIDING, TIME TRIAL, ETC.

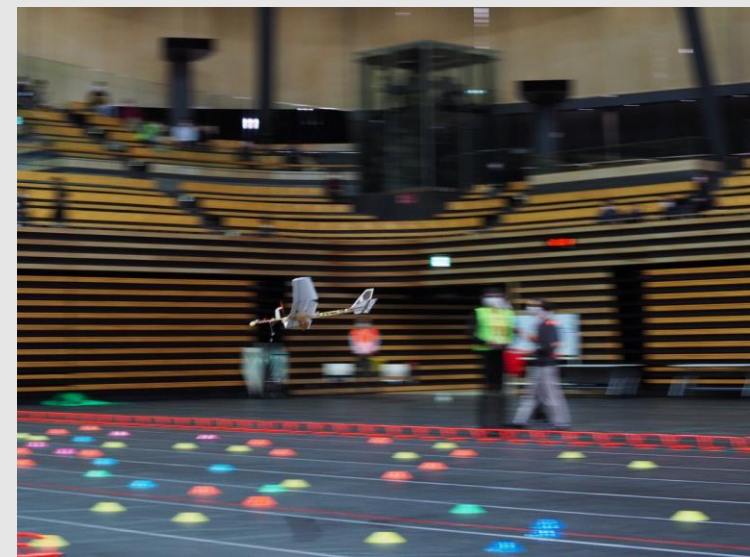
RESULT:

1st PLASE IN QUALIFICATION

BOTTOM IN FINALS

**DUE TO
TRANSMITTER FAILURE**

DECIDED TO TAKE ON
THE CHALLENGE AGAIN...



MZ-II

DESIGNED BY KOHEI MATSUMOTO (B4)

FLOWN BY RYOICHI TAKEZOE (B4)

CONCEPT: —

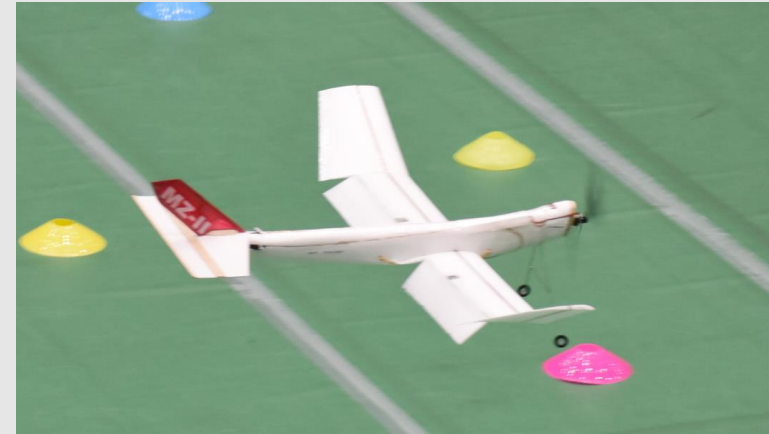
LIGHTWEIGHT

HIGHER POWER

LOWER DRAG (HIGHER GLIDING RATIO)

IMPROVEMENT FROM 2021... —

- LIGHTER BUT STRONGER FUSELAGE
(BALSA LADDER FRAME → SHAVING-OUT FOAM)
- MORE THRUST FOR MORE CLIMB RATE
(240gF → 297gF)
- EMBEDDED ACTUATOR AND ELECTRIC WIRE
(FOR LOW DRAG)



SHUGETSU (萩月)

DESIGNED BY TAKUMI FURUSAWA (B2)

FLOWN BY AKITO IKUSHIMA (B2)

CONCEPT :

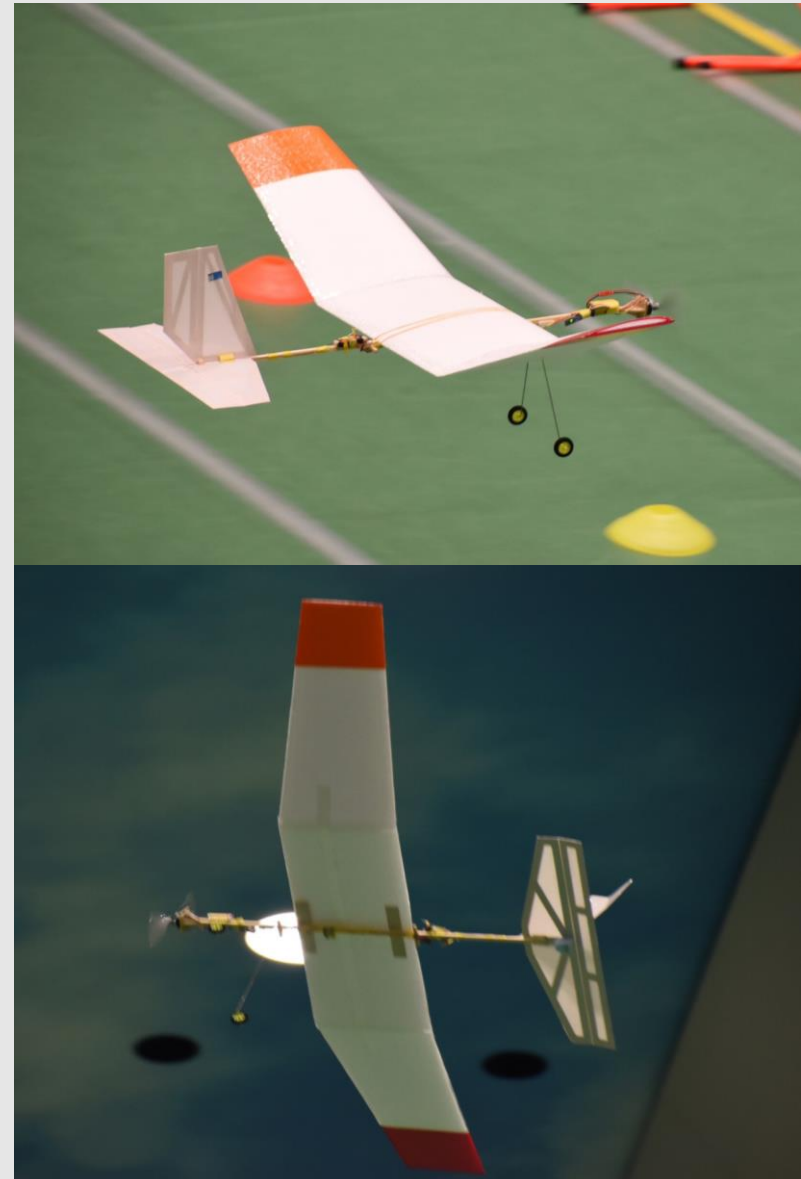
EASY TO REPAIR

→ WOODEN STICK FUSELAGE

EASY TO FLY

→ SLOW FLYING PLANE

LARGE WING FOR SLOW FLIGHT



MZ-II

PARTICIPATED IN GENERAL DIVISION.

RESULT:

1st PLASE IN QUALIFICATION

2nd IN FINALS

BEST PILOT AWARD



SHUGETSU (萩月)

PARTICIPATED IN GENERAL DIVISION.

RESULT:

1st PLASE IN FINAL

TOHOKU UNIVERSITY TEAM
COMPLETED ONE-TWO FINISH
IN INDOOR FLYING ROBOT CONTEST IN 2022!



PLANNING TO...

PARTICIPATE IN
AUTONOMOUS FLIGHT DIVISION

PARTICIPATE IN
MULTICOPTER DIVISION



END
THANK YOU FOR LISTENING

16. FEB. 2023 TOHOKU UAV