

Matt Ames
E-4 Mousetrap
Post Race Report

Concourse Infinity

AIRCRAFT CREW:

ENGINEER: Matt Ames
PILOT: Matt Ames
FUNDING: Matt Ames

VEHICLE STATISTICS:

DISTANCE: 3FT OF RUNWAY AND ONE FOOT DURING FALL



POINTS EARNED:

- Realistic Looking
- Prop. Powered Taxi
- Multi Plane Power Plant
(clever)
- Dihedral Wing (neat)

NEEDED CHANGES:

The pull lines were being pulled around a shaft-type pulley system. There should have been an actual pulley at these locations in order to reduce friction. After the duration of the power from the mousetraps was over the prop



should have sprung back due to air resistance. The wing had about 30 degrees of dihedral. It should have been about 10 degrees. Reducing the weight of the aircraft should have been a priority instead of hindsight! Bushings should have been made for where the prop shaft is supported in the wood. The prop shaft should have a solid section between the 'Z' plane traps so as not to bind during rotation. A rear wheel was added during the contest and should have been part of the original design. The leading edge of the wing needs a smaller approach angle. Finally, more test flights should have been tried in order to work all the bugs out.

PRICE SHEET:

ITEM	COST
FRONT WHEELS	\$1.97
GEAR WIRE	\$1.00
ALL BALSA	\$11.00
TAIL HARDWOOD	\$0.54
MOUSETRAP-4	\$1.27
PROP SHAFT	\$0.99
FISHING LINE	FREE
MONOKOTE	\$3.00
FOAM	\$0.15
TOTAL	\$19.92

CHANGES TO CONTEST:

- 1) The rules should state that the vehicle must leave the front of the table in order to receive points.
- 2) The due date should be about two weeks before the competition so that people will have their aircraft ready.
- 3) Mode of travel should be specified (powered wheels or prop).
- 4) In order to compete vehicle must actually be an aircraft type vehicle (no dragster).