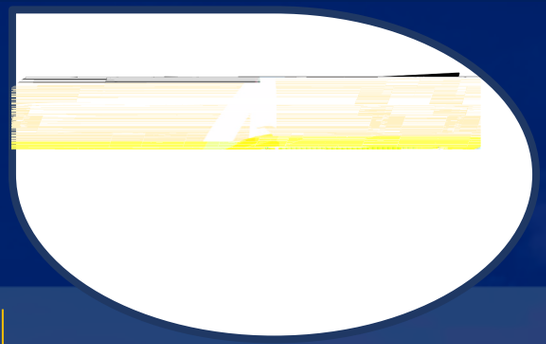
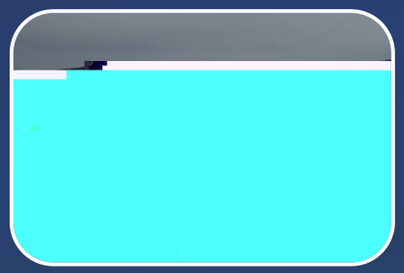
# Competition Guidelines

UAF College of Engineering & Mines



The University of Alaska, Fairbanks, Aero Club has been invited to compete in the 27th annual Design, Build, Fly competition. DBF is a contest hosted by the American Institute for Aeronautics and Astronautics (AIAA) that challenges student teams to design, fabricate, and demonstrate the flight capabilities of an unmanned, electric powered, radio controlled aircraft that can best meet the specified mission profile. The DBF fly-off will be held April 13-16, 2023 in Tucson, Arizona.



# Design Process

**Preliminary Design:**
Figures of merit, a sensitivity analysis, and a feasibility study were used to select an optimal design based on the competition guidelines and restrictions.

**Solidworks Modeling:**
The chosen design was m fe d by ) to select an