Hypersonic ReEntry Deployable Glider Experiment (HEDGE) (Technical Report)

For the Fans or Financial Gain: How FIFA Lost the Trust of the World's Football Community

(Sociotechnical Research Paper)

An Undergraduate Thesis Portfolio
Presented to the Faculty of the
School of Engineering and Applied Science
In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science in Aerospace Engineering

by

Troy Daigneau May 1, 2024

Contents

Preface

Hypersonic ReEntry Deployable Glider Experiment

For the Fans or Financial Gain: How FIFA Lost the Trust of the

World's Football Community

Prospectus

Preface

How do opportunities for financial gain distort the missions of nonprofit enterprises?

Opportunities for profit have sometimes diverted nonprofits from their founding missions. U.S.

Department of Defense expenditures on hypersonics are controversial. Nanosatellites may serve as a far more cost-effective method of hypersonic glider research.

The design and launch of a CubeSat as a means of evaluating the feasibility of nanosatellites as an affordable platform for such research was proposed. At reentry, when the CubeSat will exceed Mach 5, pressure, temperature, and material performance data will be collected.

Since 2007 FIFA has lost much of world football fans' trust. After Brazil was awarded the hosting rights for the 2014 World Cup, corruption and misconduct in FIFA were revealed. Rioters in Brazil, the families of migrant workers who died in Qatar, and NGOs drew attention to FIFA's abuses. FIFA claims its mission is to "contribute to a harmonized way forward in the overall interests of football" (FIFA, n.d.). Yet mercenary misconduct, corruption in host countries, and abuse of workers indicate that opportunities for profit diverted FIFA far from its stated purpose.