SDL Payload Challenge Rules and Information

The Space Dynamics Laboratory (SDL) has hundreds of successful space missions, including satellite-based sensor systems, ISS instruments, and shuttle and sounding rocket payloads. SDL is a business unit in the Utah State University Research Foundation with headquarters in Logan, Utah. SDL's mission is to advance scientific and defense objectives by researching, developing and characterizing sensor, electronic, and software systems.

Owned by Utah State University, SDL's mission includes enhancing the education and development of scientists and engineers and employs ~100 college students at any given time.

SDL is excited to be involved with the Spaceport America Cup and the Intercollegiate Rocket Engineering Competition (IREC), focusing on the payload portion of the competition. After all, in reality there's no reason to launch a rocket unless there's a payload! SDL is offering $1,500 in cash prizes to teams that produce meaningful payloads.

Objective: Encourage participants to create payloads that accomplish a relevant function and provide useful learning opportunities.

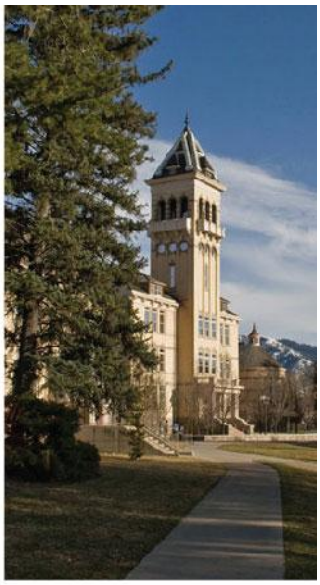
To Enter the SDL Payload Challenge: Submit an SDL Payload Challenge Entry Form to SDL no later than two weeks prior to the start of the event. SDL Payload Challenge Forms are available for download from the SA Cup Documents & Forms page on the ESRA website; email to: **payloadchallenge@sdl.usu.edu**

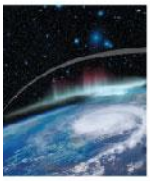
Awards:

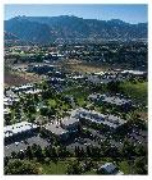
- 1st Place Payload Award: $750
- 2nd Place Payload Award: $500
- 3rd Place Payload Award: $250
- Honorable mentions as warranted (judges discretion)

Judging Criteria (1000 points possible):

- Scientific or Technical Objective(s) (400 points)
    - How relevant and well-designed is your scientific or technical objective?
- Payload Construction and Overall Professionalism (200 points)
    - Includes make/buy decisions, craftsmanship, material usage, poster, handouts, reports, etc.
- Readiness / Turnkey Operation (100 points)
    - Will the payload interfere with launch operations? Will the payload operate after hours of launch preparation, rail time, heat, waiting for other launches, etc?
- Execution of Objective(s) (300 points)
    - How well did it accomplish the objective(s)? Note that rocket failure results in 150 points (half credit – don't know if payload would have worked or not)







Space Dynamics LABORATORY

Utah State University Research Foundation