



The 2001 Cessna/ONR Student Design/Build/Fly competition was held at the Webster Field Annex of the Patuxent River Naval Air Station over the weekend of 21-22 April. Twenty seven teams from the United States and three foreign countries; Canada, Italy and Turkey, competed under near perfect weather conditions to see whose aircraft could transport the greatest total payload over the prescribed course within a 10 minute period. Of the 27 teams attending the fly-off competition, 22 made at least one successful scoring flight, with many teams making multiple flights during the two days of competition.

The goal of this year competition was to complete as many sorties as possible within a 10 minute period. Each sortie required a different payload, either as many pounds of steel or as many tennis balls as the aircraft could carry. Aircraft had to carry a minimum payload of either 5 lbs. of steel or 10 tennis balls on each sortie, and were allowed to carry up to 100 tennis balls.

The competition spanned two days of flying, with the flight queue filled with aircraft waiting for their turn to make a competition flight. During the competition there were a total of 105 multiple sortie flights periods.

The total score for each team was comprised of their flight performance on their best three flight, their score on a written report documenting their aircraft design and selection, and a "Rated Aircraft Cost" representing the complexity and manufacturing costs of their design.

The final results showed a close battle between the two teams from Oklahoma State University and the team from California Polytechnic State University at San Luis Obispo. In the end, the California team was not able to match the top team from Oklahoma State, Team Orange, better known by its aircraft's nickname of "Shamu". There were many close scoring battles for the remaining positions also; including the very close competition between the two entries from the United States Military Academy at West Point. The final positions and scores for all of the competing teams are listed in the table below.

School	Team	Score	Position
Oklahoma State University #2	OSU Orange/shamu	4976.86	1
California Polytechnic State University-SLO	Steel & Balls	4864.68	2
Oklahoma State University #1	OSU Black	4243.73	3
University of California-San Diego	TLAR II	3927.10	4
Utah State University	A	2880.90	5
Miami University	mU2	1988.80	6
University of Illinois	University of Illinois	1819.22	7
University of Southern California	Scorpion	1691.31	8
Mississippi State University	Carbon Goose	1411.02	9
La Sapienza	Flying Centurions	984.61	10
West Virginia University #1	Almost Heaven	837.69	11
Middle East Technical University	Anatolian-Craft	754.07	12
University of Arizona	Aircat 2001 CR2	719.26	13
United States Military Academy #1	Black Knight	698.54	14
United States Military Academy #2	TTF Technologies	611.49	15
Georgia Institute of Technology	"Georgia Tech" -or-	585.77	16
University of Central Florida #1	Knightmare	308.42	17
East Stroudsburg University	Double Trouble	296.52	18
Clarkson University	Knight Hawk	132.48	19
SDSU	Full Monty	56.29	20
West Virginia University #2	Lothworks	26.61	21
University at Buffalo	Undecided	18.75	22
Queen's University	Absolute Toque	1.26	23
University of Texas at Austin	The GPA killer	1.09	24
Virginia Polytechnic Institute & State Univer	Hokie Bird 5	1.03	25
United States Naval Academy	NAVY	0.93	26
ISTANBUL TECHNICAL UNIVERSITY	The Bosphorus Blue	0.08	27
Wichita State University	No Excuse	0.08	28
Syracuse	Der Gabelschwanz Te	0.08	29
City College of New York #1	CityHawk	0.06	30
City College of New York #2	CityViper	Withdraw	31
City College of New York #3	CityEagle	Withdraw	32
MIT	Great Balls of Fire	Withdraw	33
Tennessee Tech University	Golden Eagle	Withdraw	34
UCLA	Grand Master B II	Withdraw	35
University of Central Florida #2	Fly By Knight II	Withdraw	36
UT Arlington	No Payne No Gaines	Withdraw	37

The success of the competition required the efforts of many individuals. A special thanks goes to the judges who assisted in the operation, technical inspections and scoring of the flight competition; and to the many judges who evaluated and scored the teams written proposal reports. Thanks also go to the Applied Aerodynamics, Aircraft Design, Design Engineering, and Flight Test Technical committees of the AIAA who organized and manage the competition, and the AIAA Foundation for their administrative support. Special thanks is due to the competitions corporate supporters, the Cessna Aircraft Company and the Office of Naval Research. And the final and biggest thank you must go to our hosts for the weekend, the personnel of Webster Field, VC-6, and the Patuxent Naval Air Station under the command of Captain P. J. Hovatter.

Overall the 2001 Cessna/ONR Student Design/Build/Fly competition marked another very successful event, allowing the participating students to mix a highly enlightening educational experience with a good dose of fun.

See you next year - Greg Page: Contest Director