



The 2003 Cessna/ONR Student Design/Build/Fly competition was held at the Ridgely Airpark in Ridgely Maryland over the weekend of 25-27 April. In all, 33 teams from the United States, Canada, Italy and Turkey attended the fly-off portion of the contest. Of the 33 teams attending the fly-off competition, 19 made at least one successful scoring flight attempt, with many teams completing the maximum allowed 5 flights during the two days of competition.

The contest was moved from its traditional east coast home, Webster Field, due to the increased security at military installations resulting from the Iraq war. Mr. Tracy Coleman volunteered the use of Ridgely Airpark so that the contest could continue its 7-year history without interruption. The facilities at Ridgely provided an excellent contest site with ample setup and flying area. The managers, sponsors, and teams of the DBF competition would like to express their thanks to Mr. Coleman for his generosity.

The competition spanned two days of flying, with the flight queue filled with aircraft waiting for their turn to make a competition flight. A number of the flights on Saturday had to dodge the rain drops, while Sunday provided near perfect flying weather.

The design objective for this year's competition was to create an airplane that could be rapidly assembled from a 2 x 4 x 1 foot shipping container and then complete two of the three specified simulated UAV missions: Missile EW Decoy; Sensor Deployment; or Communications Repeater. Each mission was assigned its own Degree of Difficulty multiplier factor.

The total score for each team was comprised of their flight performance on their best two flights, 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 teams from the San Diego State University and California Polytechnic State University at San Luis Obispo. One of the Italian teams from Università degli studi "La Sapienza" di Roma placed a close third. The highest score obtained on the written report portion of the competition was from Utah State University with 96.5 of a possible 100 points awarded. The fastest assembly time was for Mississippi State at 9 seconds.

The final positions and scores for all of the competing teams are listed in the table below.

More details on the 2003 competition objectives and rules can be found at the contest web site at <http://www.aae.uiuc.edu/aiaadbf>

Position	School	Team	Paper	RAC	Flight	Score
1	San Diego State University	Spirit of Monty	84.5	8.28	1.16	11894.80
2	Calif Poly State Univ SLO	Bareback	85.5	7.91	1.09	11736.63

3	La Sapienza	Galileo IV	89.5	7.99	0.95	10609.09
4	Univ of Southern California	SCyRaider	93.5	10.90	0.97	8365.98
5	Oklahoma State University	OSU Black	91.6	9.86	0.89	8228.28
6	Oklahoma State University	OSU Orange	90.5	10.24	0.83	7331.55
7	USNA	Severn Discomfort	86.0	13.04	1.03	6775.88
8	Mississippi State University	SWAG	90.0	12.09	0.89	6605.70
9	USNA	Yeager Chasers	89.7	12.25	0.86	6263.12
10	Middle East Technical University	Anatolian-Craft	87.0	12.21	0.80	5699.88
11	Univ of California San Diego	Aerodrone F8273	80.5	9.15	0.61	5380.84
12	Istanbul Technical University	Ucakcilar	74.8	11.24	0.80	5301.99
13	University of Illinois UC	Gas Guzzler	72.0	9.35	0.65	5009.39
14	Washington State University	CAT	46.0	10.01	0.59	2692.87
15	Utah State University	Nyx	96.5	13.34	0.35	2563.83
16	Univ of Texas Austin	7700	93.4	8.70	0.23	2490.02
17	Univ of California San Diego	Furious Flier	74.0	9.22	0.31	2473.78
18	University of Colorado	Bellwether	68.4	8.41	0.28	2279.43
19	La Sapienza	Leonardo	79.5	6.69	0.19	2264.63
20	Georgia Tech	Buzzweiser	89.0	7.30	0.01	121.95
21	University of Maryland	The Stop and Go	89.5	9.71	0.01	92.17
22	Ohio Northern University	It's Supposed to Fly	59.0	8.08	0.01	73.05
23	Case Western Reserve	Marsupial Falcon X	61.3	8.92	0.01	68.69
24	Virginia Polytechnic University	Draggin Fly	77.3	11.81	0.01	65.40
25	W. Virginia University	Lock-N-Load	79.0	12.65	0.01	62.46
26	University at Buffalo	Bull Ship	71.0	11.86	0.01	59.87
27	Queen's University	Some Assembly Required	79.2	13.28	0.01	59.61
28	Wichita State University	WU Flyer	74.3	12.79	0.01	58.05

29	Univ California LA	Bruin Bud-E	58.9	10.58	0.01	55.62
30	Calif Poly State Univ Pomona	Pegasus	47.5	8.78	0.01	54.13
31	Western Michigan University	Western Flyer	59.3	11.83	0.01	50.17
32	University of Arizona	AirCat 2003	47.9	10.08	0.01	47.51
33	Univ of Texas Arlington	Spirit of Arlington	65.0	13.70	0.01	47.45
34	Turkish Air Force Academy	Haberci	90.0	100.00	0.01	9.00
35	Syracuse University	The Judge Chaser	73.8	100.00	0.01	7.38
36	Clarkson University	Knight Riders	73.3	100.00	0.01	7.33
37	University of Central Florida	K-03 Pegasus	69.9	100.00	0.01	6.99
38	University at Buffalo	Frier Fly	66.5	100.00	0.01	6.65

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.

Overall the 2003 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. Congratulations goes to all the teams for their great enthusiasm and achievement.

See you next year - Greg Page: Contest Director

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