

The 2002 Cessna/ONR Student Design/Build/Fly competition was held at the Cessna flight test center in Wichita Kansas over the weekend of 26-28 April. Twenty eight teams from the United States and three foreign countries; Canada, Italy and Turkey, competed under sometimes challenging weather conditions to see whose aircraft would complete all three sorties over the prescribed course in the minimum time. Of the 28 teams attending the fly-off competition, 27 made at least one scoring flight attempt, with many teams making multiple flights during the two days of competition. Only one team, La Sapienza from Italy, made 5 successful scoring flights (the maximum allowed)

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 second day of the competition a total of 69 multiple sortie flights were flown.

The total score for each team was comprised of their flight performance on their best three 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 University of California at San Diego, University of Southern California, and West Virginia University. In the end, the University of Southern California team was not able to match the top team from their neighbor to the south the University of California at San Diego. The highest score obtained on the written report portion of the competition was from Oklahoma State University, Team Orange with 94 of a possible 100 points awarded.

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

More details on the 2002 competition objectives and rules can be found at the contest web site at http://amber.aae.uiuc.edu/~aiaadbf

School	Team	Paper	RAC	Flight	Score	Position
Univ. of Calif at San Diego #2	TLAR 3	79.0	9.81	16.45	132.52	1
USC	SCrewball	92.5	13.11	16.32	115.17	2
West Virgina Univ. #2	Phastball	86.5	12.49	15.22	105.43	3
Univ. of Illinois, Champain	Illiniwek 1	88.0	13.31	12.99	85.87	4
La Sapienza, Italy	Flying Centurions	65.8	13.52	15.06	73.27	5
San Diego State University	Monty's Revenge	81.0	13.95	8.82	51.22	6
VA Polytechnic and State Univ.	Marooned	82.8	13.07	7.80	49.37	7
Calif. Polytechnic, San Luis Obispo	Third Base	86.3	8.41	4.18	42.84	8
USA Naval Academy #2	USNA Gold	82.3	13.57	4.87	29.54	9
Mississippi State Univ. #1	Fast Pitch	88.5	16.76	4.25	22.46	10

USA Naval Academy #1	USNA Blue (Tango)	79.4 15.49	2.97 15.20	11
Istanbul Technical University	ATA4	69.5 14.52	1.54 7.38	12
University of Arizona #2	AirCat2002	39.3 13.18	2.19 6.52	13
Case Western Reserve Univ.	Learning Curve	41.3 17.09	1.81 4.38	14
West Virgina Univ. #1	Daedalus	18.7 15.65	2.50 2.99	15
Oklahoma State Univ. #1	OSU Black	91.9 9.49	0.25 2.45	16
Oklahoma State Univ. #2	OSU Orange	94.0 10.09	0.11 1.07	17
University of Maryland	Terp Flyer	75.2 12.97	0.18 1.02	18
Georgia Institute of Technology	Buzz Light	87.3 13.33	0.14 0.91	19
Queen's University, Canada	Negative Margin	85.2 13.47	0.12 0.79	20
USA Military Academy #1	Team 1	83.4 16.26	0.11 0.57	21
Univ. of Calif at San Diego #1	TLAR 3.5	77.5 9.32	0.01 0.08	22
Wichita State Univ.	Swallow	92.6 11.31	0.01 0.08	23
University of Arizona #1	Evolution	66.0 12.71	0.01 0.05	24
Clarkson University	Knight Hawk	73.0 14.15	0.01 0.05	25
City College of NY #1	Falcon I	70.7 14.03	0.01 0.05	26
Syracuse University	~(Tilda)	70.3 16.24	0.01 0.04	27
Univ. of Texas at Arlington	Black Magic	70.6 17.15	0.01 0.04	28
Univ. of Texas at Austin	Better is the Enemy of Good	89.1 100.00	0.01 0.01	29
Middle East Technical University	Ruzgar Sultan	86.3 100.00	0.01 0.01	30
Mississippi State Univ. #2	Milk Run	85.9 100.00	0.01 0.01	31
Cleveland State University	The Flying Viking	76.3 100.00	0.01 0.01	32
Turkish Air Force Academy	Conqueror	69.8 100.00	0.01 0.01	33
Miami University, Ohio	It's Close Enough	69.3 100.00	0.01 0.01	34
University of Central Florida	Butter Duck	66.2 100.00	0.01 0.01	35

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, Cessna Aircraft.

Overall the 2002 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 to all the teams who participated for your great enthusiasm and achievement.

See you next year - Greg Page: Contest Director