



## 2026 Design, Build, Fly Competition Summary



Beechcraft



COLLINS AEROSPACE | PRATT & WHITNEY | RAYTHEON



The 2025-26 AIAA/Textron Aviation/RTX Design, Build, Fly Competition Flyoff was held at the Textron Aviation Employees Flying Club in Wichita, KS on the weekend of April 16-19, 2026. This was the 30<sup>th</sup> year of the competition. Of the 175 proposals submitted and judged, 102 teams were invited to submit a design report for the next phase of the competition. 98 teams submitted design reports and 89 teams attended the flyoff (17 international teams). Over 1200 students, faculty, and guests were present. Of the 89 teams in attendance, 83 successfully completed tech inspection. The weather did not cooperate on Friday afternoon but conditions were great on Saturday and Sunday. Of the 197 official flight attempts, 143 resulted in a successful score with 73 teams achieving at least one successful flight score and 17 teams successfully completing all missions (one ground and three flight missions). The quality of the teams, their readiness to compete, and the execution of the flights was exceptional.

The contest theme this year was a Banner Towing Bush Plane. The first mission was a Test Flight requiring the aircraft to complete three laps within five minutes. The second mission was a Charter Flight with the score based on the number of passengers (rubber ducks) and cargo (hockey pucks) carried plus the number of laps flown and battery capacity. The final mission was a Banner Towing flight with the score dependent upon banner length, the number of laps flown and RAC (wingspan). Teams were also required to complete a ground mission demonstrating the efficiency of loading and unloading passengers and then converting the airplane into a banner towing configuration. The team's final score is the product of the sum of the flight and ground mission scores and total report score plus participation score. More details on the mission requirements and scoring breakdown may be found at the competition website: <http://www.aiaa.org/dbf>.

First Place went to the **University of Ljubljana**, Second Place went to the **University of Washington-Seattle**, and Third Place went to the **University of California, Los Angeles**. A full listing of the results is included below. The Best Paper Award, sponsored by the Design Engineering TC for the highest design report score, went to the **University of Southern California** with a score of 91.98.

For the fifth year, the Stan Powell Memorial Award recognized a team that exhibited the Most Meaningful Lessons Learned during the competition. This year, it was awarded to **Washington University in St. Louis**. After crashing in their first two flight attempts with significant damage, the team maintained a very positive attitude, did not give up, put in many hours of work to rebuild their airplane and completed a successful flight with pride and excitement.

We owe our thanks for the success of the DBF competition to the efforts of many volunteers from Textron Aviation, RTX, and the AIAA sponsoring technical committees: Applied Aerodynamics, Aircraft Design, Flight Test, and Design Engineering. These volunteers collectively set the rules, judge the proposals and reports, and execute the flyoff. Thanks also to the Premier Sponsors: Textron Aviation and RTX, and to the AIAA Foundation for their financial support as well as to our Gold sponsors this year – General Atomics, Mathworks, Anduril and Reliable Robotics. Special thanks go to Textron Aviation for hosting the flyoff this year.

Finally, this event would not be nearly as successful without the hard work and enthusiasm from all the students and advisors. If it weren't for you, we wouldn't keep doing it!!

DBF Organizing Committee

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## 2026 Design/Build/Fly Competition Final Results

Rank	Team	Part	Mission Scores					Report			2026 DBF Score
	Name		P	GM	M1	M2	M3	Total	Prop	Design	
1	University of Ljubljana	3	0.72	1.00	1.01	2.88	5.61	77	90.92	88.77	501.26
2	University of Washington-Seattle	3	0.52	1.00	1.01	3.00	5.54	82	87.33	86.47	481.62
3	University of California, Los Angeles	3	0.42	1.00	1.01	2.69	5.12	72	87.70	85.35	440.24
4	University of Notre Dame	3	0.02	1.00	1.31	2.61	4.94	84	88.67	87.97	437.56
5	The University of Akron	3	0.67	1.00	1.03	2.65	5.35	82	81.08	81.18	437.36
6	Rensselaer Polytechnic Institute	3	0.19	1.00	1.01	2.78	4.99	78	88.00	86.46	434.05
7	Georgia Institute of Technology	3	0.16	1.00	1.02	2.57	4.76	75	90.00	87.68	420.13
8	Virginia Polytechnic Institute and State University	3	0.05	1.00	1.42	2.32	4.78	79	87.30	86.07	414.65
9	Auburn University at Auburn	3	0.07	1.00	1.15	2.58	4.80	78	86.50	85.24	411.83
10	Instituto Tecnológico de Buenos Aires	3	0.01	1.00	1.71	2.33	5.04	66	82.20	79.78	405.33
11	Purdue University (Main Campus)	3	0.02	1.00	1.34	2.12	4.48	79	85.33	84.39	381.16
12	University of Maryland College Park	3	0.18	1.00	1.01	2.35	4.55	69	81.83	79.93	366.35
13	Santa Clara University	3	0.08	1.00	1.01	2.16	4.26	83	82.67	82.77	355.44
14	The University of Sydney	3	0.01	1.00	1.54	2.52	5.08	70	66.75	67.30	344.67
15	The Hong Kong Polytechnic University	3	0.00	1.00	1.01	2.67	4.68	68	72.88	72.21	340.97
16	Embry-Riddle Aeronautical University - Prescott	3	0.22	1.00	1.01	2.20	4.43	77	75.50	75.77	338.89
17	Johns Hopkins University	3	0.01	1.00	1.12	2.11	4.24	76	76.47	76.45	326.84
18	West Virginia University	3	0.01	1.00	1.21	2.08	4.30	65	73.20	72.02	312.48
19	Embry Riddle Aeronautical University - Daytona Beach	3	0.01	1.00	1.93	0.00	2.94	71	88.07	85.56	254.30
20	University of Michigan - Ann Arbor	3	0.01	1.00	2.00	0.00	3.01	83	83.47	83.39	253.66
21	University of Southern California	3	0.00	1.00	1.74	0.00	2.74	83	91.98	90.60	251.53
22	Royal Melbourne Institute of Technology	3	0.02	1.00	1.60	0.00	2.62	86	88.57	88.22	233.76
23	The University of Texas at Dallas	3	0.00	1.00	1.52	0.00	2.52	78	88.83	87.26	222.76
24	San Jose State University	3	0.44	1.00	1.01	0.00	2.46	83	82.70	82.82	206.33
25	The University of Kansas	3	0.04	1.00	1.23	0.00	2.27	80	88.58	87.32	201.05
26	Universidad de Antioquia	3	0.04	1.00	1.18	0.00	2.23	84	85.50	85.29	192.83
27	University of Illinois Urbana Champaign	3	0.30	1.00	1.01	0.00	2.32	70	80.83	79.13	186.43
28	Universidad Pontificia Bolivariana	3	0.32	1.00	1.01	0.00	2.33	72	78.22	77.35	183.14
29	National Cheng Kung University	3	0.00	1.00	1.38	0.00	2.38	66	77.12	75.48	182.83
30	University of Kentucky - Paducah	3	0.12	1.00	1.04	0.00	2.16	85	82.35	82.73	182.10
31	Texas A&M University - College Station	3	0.02	1.00	1.28	0.00	2.31	73	76.87	76.24	178.78
32	The University of Hong Kong	3	0.13	1.00	1.02	0.00	2.15	74	83.33	81.92	178.77
33	Cornell University	3	0.14	1.00	1.02	0.00	2.15	66	84.00	81.36	178.28
34	Aviation and Aerospace University, Bangladesh	3	0.10	1.00	1.02	0.00	2.12	82	81.58	81.66	175.87
35	Massachusetts Institute of Technology	3	0.14	1.00	1.01	0.00	2.15	72	80.95	79.63	174.34
36	The University of Texas at Austin	3	0.23	1.00	1.01	0.00	2.24	75	76.55	76.30	173.78
37	University of Colorado Colorado Springs	3	0.01	1.00	1.15	0.00	2.17	69	79.27	77.70	171.23
38	University of Oklahoma	3	0.01	1.00	1.11	0.00	2.13	64	81.07	78.51	170.02
39	Indian Institute of Technology Kharagpur	3	0.02	1.00	1.15	0.00	2.16	72	77.67	76.78	169.22
40	University of Arkansas	3	1.00	1.00	0.00	0.00	2.00	85	82.10	82.53	168.06
41	Case Western Reserve University	3	0.01	1.00	1.09	0.00	2.10	73	77.65	76.93	164.29
42	The Ohio State University	3	0.00	1.00	1.01	0.00	2.01	70	80.53	78.90	161.70
43	Missouri University of Science and Technology	3	0.01	1.00	1.25	0.00	2.26	75	68.33	69.39	159.59
44	Old Dominion University	3	0.00	1.00	1.10	0.00	2.10	65	76.08	74.36	159.26
45	University of South Alabama	3	0.01	1.00	1.12	0.00	2.12	73	72.42	72.49	157.02
46	San Diego State University	3	0.05	1.00	1.02	0.00	2.07	71	72.20	72.07	152.15
47	Rutgers, The State University of New Jersey - New Brunswick	3	0.00	1.00	1.06	0.00	2.06	74	63.33	64.87	136.89
48	The University of Texas at El Paso	3	0.12	1.00	1.01	0.00	2.14	77	58.78	61.49	134.30
49	University of Tennessee Knoxville	3	0.02	1.00	1.17	0.00	2.19	72	56.42	58.77	131.72

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## 2026 Design/Build Fly Competition Final Results (cont)

Rank	Team Name	Part	Mission Scores				Total	Report		2026 DBF Score	
			GM	M1	M2	M3		Prop	Design		Total
50	University of North Carolina at Charlotte	3	0.00	1.00	1.08	0.00	2.08	74	58.73	60.95	129.52
51	University of Alabama at Birmingham	3	0.01	1.00	1.07	0.00	2.07	67	57.00	58.45	124.18
52	University of Georgia	3	0.00	1.00	1.25	0.00	2.26	64	50.85	52.86	122.26
53	Saint Louis University	3	0.03	1.00	1.06	0.00	2.08	71	49.88	53.00	113.45
54	Vellore Institute of Technology- Vellore	3	0.11	1.00	0.00	0.00	1.11	83	84.25	84.02	95.99
55	California State University, Long Beach	3	0.14	1.00	0.00	0.00	1.14	81	74.80	75.77	89.66
56	Worcester Polytechnic Institute	3	0.17	1.00	0.00	0.00	1.17	74	74.00	73.95	89.52
57	University of Missouri - Columbia	3	0.03	1.00	0.00	0.00	1.03	70	86.17	83.79	89.17
58	Military Institute of Science and Technology	3	0.01	1.00	0.00	0.00	1.01	80	85.12	84.39	88.41
59	University at Buffalo	3	0.02	1.00	0.00	0.00	1.02	64	86.45	83.12	87.60
60	Washington University in St. Louis	3	0.03	1.00	0.00	0.00	1.03	68	84.10	81.69	86.94
61	University of Massachusetts Amherst	3	0.12	1.00	0.00	0.00	1.12	73	74.90	74.64	86.65
62	University of California, Irvine	3	0.00	1.00	0.00	0.00	1.00	76	84.42	83.15	86.15
63	University of California, San Diego	3	0.02	1.00	0.00	0.00	1.02	86	80.72	81.50	85.80
64	University of Central Florida	3	0.01	1.00	0.00	0.00	1.01	81	75.25	76.09	79.89
65	James Madison University	3	0.02	1.00	0.00	0.00	1.02	73	68.25	68.96	73.14
66	University of Nebraska - Lincoln	3	0.02	1.00	0.00	0.00	1.02	77	60.33	62.79	67.08
67	The University of Alabama in Huntsville	3	0.00	1.00	0.00	0.00	1.00	67	62.55	63.14	66.14
68	California State Polytechnic University, Pomona	3	0.03	1.00	0.00	0.00	1.03	74	57.92	60.34	65.39
69	The Pennsylvania State University	3	0.01	1.00	0.00	0.00	1.01	70	56.00	58.05	61.89
70	University of Houston	3	0.01	1.00	0.00	0.00	1.01	80	52.77	56.91	60.22
71	University of Missouri - Kansas City	3	0.00	1.00	0.00	0.00	1.00	75	52.53	55.96	58.96
72	University of Maine	3	0.02	1.00	0.00	0.00	1.02	70	51.58	54.40	58.60
73	Arizona State University	3	0.01	1.00	0.00	0.00	1.01	74	45.56	49.86	53.15
74	Columbia University	2	0.10	0.00	0.00	0.00	0.10	64	74.40	72.90	9.01
75	The Hong Kong University of Science and Technology	2	0.03	0.00	0.00	0.00	0.03	67	84.08	81.49	4.65
76	Western Michigan University	3	0.02	0.00	0.00	0.00	0.02	70	46.30	49.78	4.13
77	University of New South Wales	2	0.01	0.00	0.00	0.00	0.01	69	82.50	80.54	3.19
78	University of Arizona	2	0.03	0.00	0.00	0.00	0.03	72	35.83	41.31	3.13
79	Rochester Institute of Technology	2	0.01	0.00	0.00	0.00	0.01	74	80.15	79.21	2.68
80	Alexandria University	2	0.01	0.00	0.00	0.00	0.01	72	57.40	59.61	2.59
81	The George Washington University	2	0.00	0.00	0.00	0.00	0.00	65	69.90	69.15	2.00
82	University of Vermont	2	0.00	0.00	0.00	0.00	0.00	78	35.68	41.99	2.00
83	University Of Maryland, Baltimore County	2	0.00	0.00	0.00	0.00	0.00	70	34.33	39.67	2.00
84	North Carolina State University	0	0.00	0.00	0.00	0.00	0.00	77	88.52	86.75	0.00
85	Khalifa University	0	0.00	0.00	0.00	0.00	0.00	77	84.93	83.81	0.00
86	HM Hochschule München University of Applied Sciences	0	0.00	0.00	0.00	0.00	0.00	65	75.43	73.89	0.00
87	Queen's University	0	0.00	0.00	0.00	0.00	0.00	69	66.83	67.11	0.00
88	Mukesh Patel School of Technology Management & Engineering, Mumbai	0	0.00	0.00	0.00	0.00	0.00	79	60.52	63.35	0.00
89	Tribhuvan University	0	0.00	0.00	0.00	0.00	0.00	75	56.07	58.86	0.00
90	Wentworth Institute of Technology	0	0.00	0.00	0.00	0.00	0.00	74	55.33	58.17	0.00
91	Middle East Technical University	0	0.00	0.00	0.00	0.00	0.00	64	55.30	56.61	0.00
92	University of Alaska Fairbanks	0	0.00	0.00	0.00	0.00	0.00	65	54.28	55.93	0.00
93	King Abdulaziz University	0	0.00	0.00	0.00	0.00	0.00	64	53.58	55.18	0.00
94	University of Idaho	0	0.00	0.00	0.00	0.00	0.00	65	45.75	48.65	0.00
95	Wichita State University	0	0.00	0.00	0.00	0.00	0.00	70	34.17	39.61	0.00
96	Washington and Lee University	0	0.00	0.00	0.00	0.00	0.00	72	30.95	37.09	0.00
97	Michigan Technological University	0	0.00	0.00	0.00	0.00	0.00	68	28.67	34.60	0.00
98	Kent State University	0	0.00	0.00	0.00	0.00	0.00	64	0.00	9.67	0.00



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BY TEXTRON AVIATION



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## First Place – University of Ljubljana



## Second Place – University of Washington-Seattle





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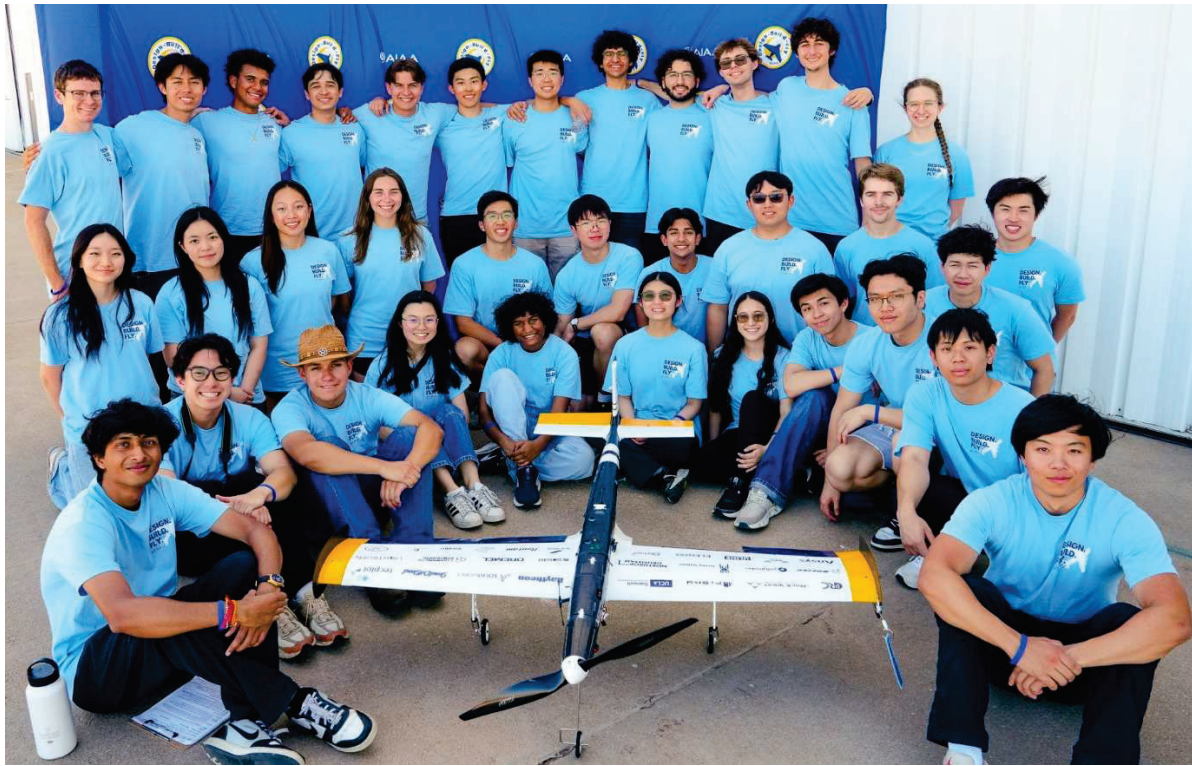
BY TEXTRON AVIATION



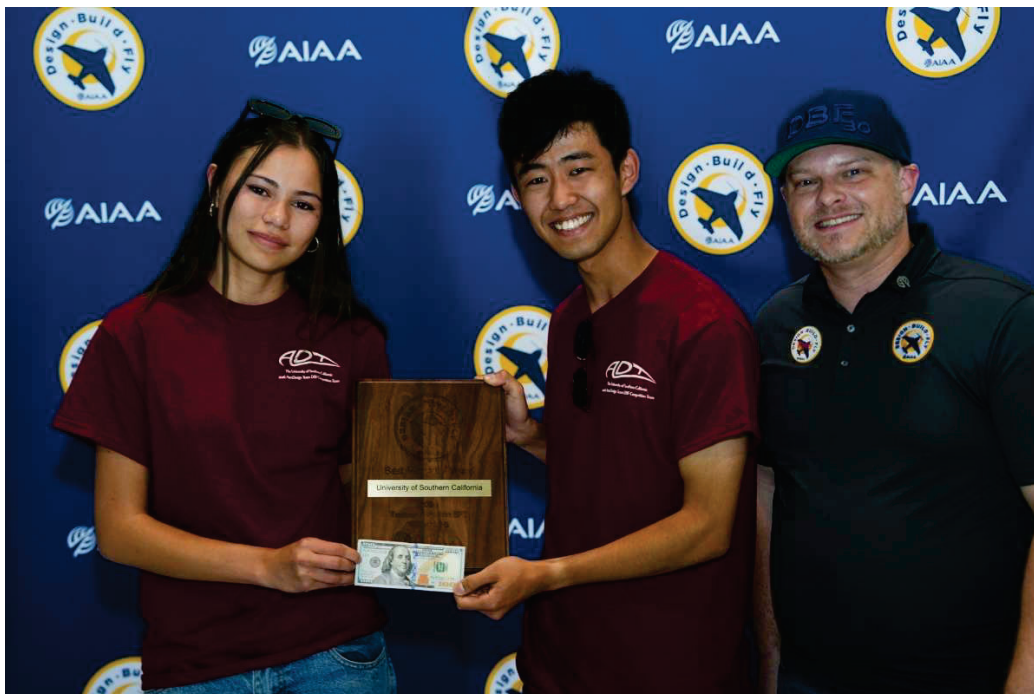
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## Third Place – University of California, Los Angeles



## Best Paper Award – University of Southern California



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## Stan Powell Award - Washington University in St. Louis





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## Past Winners

Year	Team
2026	University of Ljubljana
2025	FH JOANNEUM
2024	Embry-Riddle Aeronautical University Daytona Beach
2023	RWTH Aachen University
2022	Georgia Institute of Technology
2021	Dayananda Sagar College of Engineering
2020	University of Southern California
2019	University of Ljubljana
2018	Clarkson University
2017	University of Southern California
2016	San Jose State University
2015	University of Ljubljana
2014	University of Southern California
2013	University of California, Irvine
2012	San Jose State University
2011	Georgia Institute of Technology
2010	Oklahoma State University Team Orange
2009	Oklahoma State University Team Black
2008	Oklahoma State University Team Black
2007	Massachusetts Institute of Technology
2006	Oklahoma State University Team Black
2005	Oklahoma State University Team Black
2004	Oklahoma State University Team Black
2003	San Diego State University
2002	University of California San Diego
2001	Oklahoma State University Team Orange
2000	Utah State University
1999	Utah State University
1998	University of Southern California
1997	University of Illinois at Urbana-Champaign

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## Team Locations

