School Name:	TEAM

Regular (000 - 199)

Advanced (200 - 299) Team Name:\_\_\_\_\_

Micro (300 - 399)

DISCUSSION			Exc	elle	nt		(	300	d			Αv	<mark>era</mark>	ge				Fai	r		Comments	
	1	Vehicle Sizing	20	19	18	17 16	5 15	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	2	Configuration Selection	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	3	Stability & Control	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	4	Weight Buildup	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
þ	5	Propulsion	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
CONTENT	6	Performance Analyses	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
N.	7	Stress Analysis	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
ŭ	8	Use of Materials	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	9	Trade Studies	20	19	18	17 16	5 15	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	10	Empirical Results	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	11	Requirement Decomposition	20	19	18	17 16	5 15	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	12	Project Planning	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	13	Style (Natural & Comforable)	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	14	Move (Eye, Posture, Gesture)	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	15	Clear and Distinct	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	16	Appropriate Rate and Pitch	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
>	17	Volume	20	19	18	17 16	5 15	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
ER	18	Fluency	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
DELIVERY	19	Topic Introduction	20	19	18	17 16	5 15	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
DE	20	Well-Stuctured Presentation														6			3			
	21	Logically Topic Transition															5	4	3	2	1	
	22	Summary	20	19	18	17 16	5 1	5 14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	23	Clear																	3			
	24	Sufficient (Approciate Level)																				
<u> </u>	25	Relevant	20	19	18	17 16	+-							8	7	6	5	4	3	2	1	
REQUIREMENTS	26	3.																				
₹EM	27	Static Display		YES		NO							•	)								
QUE.	28	Reg. Class 1 minute Loading Demo		Pass	F	ailed			_				_ (	_				_				
RE	29	Reg. Class 1 minute Unloading Demo		Pass	F	ailed			•	N	linute	es			Sei	cond	S					Additional Comments On Back

Judge Name (Optional)

Room #/Name \_\_\_\_\_

			2016 Judging Criteria									
		Topic	Basis of Judgement									
	1	Vehicle Sizing	Discussed methodologies and assumptions used to derive aircraft size									
	2	Configuration Selection	Discussed methodologies and assumptions used to develop aircraft configuration									
	3	Stability & Control	Discussed drivers that influenced control surface sizing, servo motor sizing, and installation. (Should talk about static stability and dynamics of flight)									
	4	Weight Buildup	Discussed how the team manage weight and approach to reduce weight.									
Ļ	5	Propulsion	Discussed approach and techniques used to down-select the engine and propeller.									
CONTENT	6	Performance Analyses	Discussed analysis and techniques used to achieve desired aircraft performance. (Should touch on min. weight, max thrust, stability, controllability, etc.)									
S	7	Stress Analysis	Explained how stress analysis impacted the overall air vehicle level design.									
	8	Use of Materials	Discussed how material was selected. Where was it used? Why was it needed? (Availability, Fabrication, Assemble Issues)									
	9	Trade Studies	Did the team perform adequate trade studies and "what-if" analysis?									
	10	Empirical Results	Empirical testing should be used, as appropriate, in support of aircraft design and performance estimates.									
	11	Requirement Decomposition	Demonstrate knowledge of design constraints and mission requirements. Have solid understanding of the scoring criteria									
	12	Project Planning	Discuss project management and planning (Engineering, Manufacturing, Design, Flight Test, and Cost)									

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			2016 Judging Criteria										
		Topic	Basis of Judgement										
	13	Style	Observe delivery style; how natural and comfortable was the presentation delivery										
	14	Move	Observe delivery for proper eye contact, poster and Gestures. Was the movement too distracting?										
	15	Clear and Distinct	Speaker was clear and distinct. Easy to understand.										
	16	Appropriate Rate and Pitch	Speaker use of rate and pitch throughout presentation. Too Fast/Slow? Use pause in appropriate places										
_	17	Volume	Speaker was audible and not over bearing										
DELIVERY	18	Fluency	Speaker presented with good flow using appropriate sounds, words and phrases to convey main point										
DEL	20	Well-Structured Presentation	Presentation was organized at the appropriate level for a 10 minute presentation										
	21	Logically Topic Transition	Presentation and speaker used good transition between topics										
	22	Summary	Speaker provided good summary of the objectives, emphasized main points, and created interest										
	23	Clear	Visual Aids (charts, handouts, and models) were easy to see, read, and understood.										
	24	Sufficient (Appropriate Level)	Use of visual aids to drive main point (animation, pictures, models)										
	25	Relevant	Visual Aids are relevant to discussion and understanding of the objectives										

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			2016 Judging Criteria
		Topic	Basis of Judgement
	Material piece to furt		During the presentation, the teams shall provide a single sheet (8.5" x 11") marketing/promotion piece to further detail aircraft's feature, capabilities, and unique design attributes (2016 Rule Section 5.1.8)
NTS	27	Static Display	Regular and Micro Class shall display their entry aircraft during technical presentation. Advanced Class team are exempted from the requirement to have a static display if and only if the size of the aircraft prevents entry into the room (2016 Rule Sections 5.1.6 and 5.1.7)
REQUIREMENTS	28	LOAD DEMO (Regular Class Only)	A minimum of ten (10) pounds must be used during the demonstration. One (1) minute to load/secure the homogeneous payload to Flight Ready Status (2016 Rule Section 5.2)
8	29	UNLOAD DEMO (Regular Class Only)	A minimum of ten (10) pounds must be used during the demonstration. One (1) minute to unload the homogeneous payload.  (2016 Rule Section 5.2)
	30	Presentation Time	Technical presentation shall last ten (10) minutes followed by a five minutes Question/Answer (2016 Rule: Section 5.1.1)

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