

**AMERICAN ROCKETRY CHALLENGE 2024  
QUALIFYING/SELECTION FLIGHT DEMONSTRATION**

TEAM'S SCHOOL/ORGANIZATION: Explorer Post 1010 Team 1

AIA TEAM NUMBER: 24-728 ADULT ADVISOR: Robert Ekman

DATE OF THIS FLIGHT: 4/1/2024 QUALIFICATION ATTEMPT # (Circle) 1 2 **3**

**MINIMUM FLIGHT REQUIREMENTS (ALL MUST BE CIRCLED "YES" OR THE FLIGHT IS DO)**

- Did this rocket weigh less than 650 gm at takeoff, with egg and motors, was it 650mm or more long, and did it use two body tubes within the required diameter constraints, each at least 6 inches long?  YES /  NO
- Did all parts of the rocket remain connected together throughout the entire flight?  YES /  NO
- Did it use motors from the ARC approved list containing a total of no more than 80 N-sec total impulse?  YES /  NO
- Did it contain one Grade A large, raw hen's egg and an ARC-approved altimeter?  YES /  NO
- Did this rocket make a safe flight and recovery under the ARC 2024 rules & NAR Safety Code?  YES /  NO
- Did the rocket land without any human intervention?  YES /  NO
- Did the egg carried by the rocket remain uncracked after the flight?  YES /  NO

**SCORING**

TIMER # 1 (NAR OBSERVER):	<u>42</u> . <u>26</u>		EXCESS ABOVE 46.00 SEC:	___ . ___	
	SEC HUNDREDTHS				
TIMER # 2 (OTHER ADULT):	<u>42</u> . <u>15</u>	OR	MULTIPLY EXCESS BY 4:	___ . ___	
	SEC HUNDREDTHS				
AVERAGE TIME:	<u>42</u> . <u>21</u>		SHORTFALL BELOW 43.00 SEC:	<u>0</u> . <u>79</u>	+
	SEC HUNDREDTHS				
ALTIMETER ALTITUDE:	<u>796</u>	FEET	MULTIPLY SHORTFALL BY 4:	<u>3</u> . <u>16</u>	+
			DIFFERENCE FROM 820 FEET:	<del>7</del> <u>24</u> <u>2</u>	+
			(NO NEGATIVES)		
			<b>FINAL SCORE (SUM)</b>	<u>27</u> . <u>16</u>	+
			<b>Put <u>only</u> "DQ" if any answers above are "no"</b>		

**SUPERVISING TEACHER/ADULT CERTIFICATION**

I certify that the student members of this team designed, built, and flew this rocket without my assistance and, to the best of my knowledge, without the assistance of any other adult or any person not on the team. I also certify that no more than the allowed number of official qualification flight attempts were made by this team, and that the team information on file at AIA is current. I understand that team membership can no longer be changed and only team members on file at AIA with valid parent consent forms are eligible to receive prizes.

SIGNATURE: Robert Ekman PRINT NAME: Robert Ekman

**ADULT N.A.R. MEMBER OBSERVER CERTIFICATION**

I certify that I am currently a Senior NAR member who personally observed this flight, and the above initials and scores are mine, based on my observations. I certify that I am not related to any team member or the team's adult supervisor or an employee of their school or non-profit organization, that this flight was conducted in compliance with the rules of the ARC competition, and that this flight was declared to me to be an official qualification flight before its liftoff.

SIGNATURE: J. Rains PRINT NAME: JONATHAN RAINS PHONE: 301-529-3449  
 NAR NUMBER: 13911 CITY, STATE: SILVER SPRING MD EMAIL: jrainsecomcast.net

**SUBMIT USING ONLINE PORTAL AT [PORTAL.ROCKETCONTEST.ORG](http://PORTAL.ROCKETCONTEST.ORG) (Successful flights only)  
 OR E-MAIL SCANNED COPY TO [QualificationFlights@aia-aerospace.org](mailto:QualificationFlights@aia-aerospace.org)  
 NO LATER THAN MIDNIGHT (EST) APRIL 8, 2024\*\*\*\***

**Team sends in form if flight successful, NAR observer sends in form for unsuccessful flights.**