

**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: 3/30/24 QUALIFICATION ATTEMPT # (Circle) 1 2 3

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

- 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>34</u>								
	SEC HUNDREDTHS								
TIMER # 2 (OTHER ADULT):	<u>42</u> / <u>41</u>								
	SEC HUNDREDTHS								
AVERAGE TIME:	<u>42</u> / <u>38</u>								
	SEC HUNDREDTHS								
ALTIMETER ALTITUDE:	<u>803</u>	FEET							

  

EXCESS ABOVE 46.00 SEC:	— . —				
MULTIPLY EXCESS BY 4:	— . —				
SHORTFALL BELOW 43.00 SEC:	<u>0</u> . <u>62</u>	+			
MULTIPLY SHORTFALL BY 4:	<u>2</u> . <u>48</u>	+			
DIFFERENCE FROM 820 FEET:	<u>17</u>	+			
	(NO NEGATIVES)				
<b>FINAL SCORE (SUM)</b>	<b><u>19</u> . <u>48</u></b>				
<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: [Signature] PRINT NAME: Michael Marut PHONE: (703) 789 3520

NAR NUMBER: 5374 CITY, STATE: Fairfax VA EMAIL: mjmarut@gmail.com

**SUBMIT USING ONLINE PORTAL AT PORTAL.ROCKETCONTEST.ORG (Successful flights only)**

**OR E-MAIL SCANNED COPY TO 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.**