**EO C140.01 – LAUNCH A FOAM ROCKET**

1. **Performance**: Launch a Foam Rocket

2. **Conditions**:

   a. Given:

      (1) 30-cm piece of polyethylene foam pipe insulation (for ½ inch pipe),

      (2) Rubber band size 64,

      (3) Bristol board,

      (4) 7 to 8 inch cable ties,

      (5) 75-cm string,

      (6) Scissors,

      (7) Meter stick,

      (8) Push pin,

      (9) Washer, nut or other small weight that can be attached to a string,

      (10) Quadrant plans,

      (11) Masking tape,

      (12) Rocket construction instructions located at Attachment A,

      (13) Launcher Quadrant Pattern located at Attachment B,

      (14) Launch record sheet located at Attachment C,

      (15) Supervision, and

      (16) Assistance as required.

   b. Denied: Nil.

   c. Environmental: Classroom or training area large enough to accommodate the entire group and an outdoor area or gymnasium with a high ceiling.

3. **Standard**: The cadet, in groups of 4, shall:

   a. construct a foam rocket; and

   b. launch a foam rocket.

4. **Teaching Points**:

| TP | Description | Method | Time | Refs |
|---|---|---|---|---|
| TP1 | Have the cadets, in groups of 4, construct a foam rocket. | In-Class Activity | 25 min | C3-349 |



Unofficial convenience copy of A-CR-CCP-801/PG-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-801-PG-001/A-CR-CCP-801-PG-001.pdf.
Verify against the official publication.

| TP | Description | Method | Time | Refs |
|---|---|---|---|---|
| TP2 | Have the cadets, in groups of 4, launch a foam rocket and record the launch data. | In-Class Activity | 25 min | C3-349 |
| TP3 | Conduct an activity debriefing. | Group Discussion | 5 min | |

5. **Time**:

| | | |
|---|---|---|
| a. | Introduction / Conclusion: | 5 min |
| b. | In-Class Activity: | 50 min |
| c. | Group Discussion: | 5 min |
| d. | Total: | 60 min |

6. **Substantiation**:

   a. An in-class activity was chosen for TPs 1 and 2 as it is an interactive way to demonstrate rocket propulsion to cadets. This activity contributes to the understanding of rocketry in a fun and challenging setting.

   b. A group discussion was chosen for TP 3 as it allows the cadets to interact with their peers and share their knowledge, opinions, and feelings about their experiences launching foam rockets.

7. **Reference**: C3-349 *Rocket Activity, Foam Rocket*. Retrieved October 1, 2008, from http://www.nasa.gov/pdf/295787main_Rockets_Foam_Rocket.pdf

8. **Training Aids**:

   a. 30-cm piece of polyethylene foam pipe insulation (for ½ inch pipe),

   b. Rubber band size 64,

   c. Bristol board,

   d. 7 to 8 inch cable ties,

   e. 75-cm string,

   f. Scissors,

   g. Meter stick,

   h. Push pin,

   i. Wash, nut or other small weight that can be attached to a string,

   j. Quadrant plans,

   k. Masking tape,

   l. Rocket construction instructions located at Attachment A,

   m. Launcher Quadrant Pattern located at Attachment B, and

   n. Launch record sheet located at Attachment C.



Unofficial convenience copy of A-CR-CCP-801/PG-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-801-PG-001/A-CR-CCP-801-PG-001.pdf.
Verify against the official publication.

9. **Learning Aids**:
    a. 30-cm piece of polyethylene foam pipe insulation (for ½ inch pipe),
    b. Rubber band size 64,
    c. Bristol board,
    d. 7 to 8 inch cable ties,
    e. 75-cm string,
    f. Scissors,
    g. Meter stick,
    h. Push pin,
    i. Wash, nut or other small weight that can be attached to a string,
    j. Quadrant plans, and
    k. Masking tape.
10. **Test Details**: Nil.
11. **Remarks**: Nil.



Unofficial convenience copy of A-CR-CCP-801/PG-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-801-PG-001/A-CR-CCP-801-PG-001.pdf.
Verify against the official publication.

THIS PAGE INTENTIONALLY LEFT BLANK



Unofficial convenience copy of A-CR-CCP-801/PG-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-801-PG-001/A-CR-CCP-801-PG-001.pdf.
Verify against the official publication.