**Cernan Earth and Space Center at Triton College 11/16/19**

**Space Exploration**

Merit Badge Prerequisites

**Using the workbook found at** <http://meritbadge.org/wiki/index.php/Merit_Badges>

**will make it easier for you to perform activities and prepare the required materials to earn the badge and for you to show you have completed the work. Come prepared so we can sign off that everything has been done.**

***Requirement # 1***

Prepare in advance a list of at least five purposes for space exploration under each of the four sections A through D. Be ready for a discussion.

***Requirement 2***

1. Complete your space pioneer collector’s card and bring it to show others. Maximum size is 5 x 7 inches. Be able to describe at least three highlights about your chosen space pioneer.
2. Bring the names of at least four other space pioneers you would be interested in learning about and why.

***Requirement 3***

1. If you were able to build, launch, and recover a model rocket and conduct a second launch, bring your proof with you: the rocket (if you can) and any photos or other documentation including a note from your parents or leader.
2. If you were not able to launch a rocket bring a model rocket (based on NASA, commercial company, or other country’s design) or your own detailed diagram and pictures.
3. Be prepared to give a quick history of your rocket.
4. Come prepared to identify or describe parts of a rocket or spacecraft and their purpose.

***Requirement 4***

1. Come prepared to explain each of the concepts in the list A through D, and think about a way to illustrate what they mean using simple materials and physical demonstration.
2. If possible, bring materials to demonstrate or illustrate the concept for others.

***Requirement 5***

You are expected to do TWO of the three options.

1. Bring notes to share information about both your chosen robotic and crewed missions. Choosing an unsuccessful mission is acceptable, but you are still expected to answer questions about the mission including why it failed and what lessons were learned from the failure.
2. Bring your scrapbook about a current planetary mission to show the counselor and share with others.
3. Bring your spacecraft model or illustration and be prepared to tell us where it is going and how the design will help make the mission a success.

***Requirement 6***

Come prepared to talk briefly about the purpose, operation, and components of your chosen vehicle.

***Requirement 7***

Bring a poster board of your proposed base or station. On the board answer questions A - D with a paragraph of at least two sentences.

***Requirement 8***

Complete this section with two careers and at least three answers under each header; qualifications through responsibilities.

1. Try to be specific and consider why this career interests you.
2. *Note* – *Not all space exploration careers require you to go into space.*
3. Be prepared to share with others.

*Your Counselor for this Merit Badge Session is:*

*Kris McCall, Director of the Cernan Earth and Space Center at Triton College.*