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Our week long summer aviation/aerospace "Space" camp takes place at the Truckee Tahoe airport and "Guest Speakers" from the Truckee Civil Air Patrol and others will help us get there. Three camps are available for 12 children (each camp), ages 8-12. Camps runs from Monday, June 22, through Friday June 26, 2020 or Monday July 20, through Friday July 24; or August 10 through August 14, 9:00 am to 3:00 pm.

Saturday June 27, July 25, August 15, 2020 EAA Young Eagle Flight Rally 8:00am.

Cost of the camp is \$150.00. Supplies provided by the Truckee Airport including hat and T-shirt. For more information and registration contact Truckee Donner Recreation and Parks Department at <u>WWW.tdrpd.com</u> or Ken Aronson (530) 587-8807

MISSION TO MARS SYLLABUS

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Activities:

Monday: June 22 or July 20 or August 10

Morning

- 1. Introduction to "Mission to Mars" by camp commander Ken Aronson.
- 2. Get acquainted games with Mission Control Director Rolann Aronson.
- 3. Discuss "Why are we going to Mars?"
- 4. Take a tour of the new airport terminal and meet the airport personnel.
- 5. Watch gliders "soar" at the Truckee airport "glider" port.

Lunch

Afternoon

- 1. Discover flight with balsa wood gliders.
- 2. Explore a real Cessna airplane with "Guest Speaker" from the Civil Air Patrol.
- 3. Learn about the 3 axes of flight (yaw, pitch and roll) and how to control them (rudder, elevator and aileron).
- 4. More flight with other model airplanes.
- 5. Build and sail model sailboats to study how a "wing" works.
- 6. Study the planets
- 7. Can we "fly" to Mars? Why or why not.

Tuesday: June 23 or July 21 or August 11

Morning

- 1. Warm-up: Draw a friendly Martian.
- 2. Discuss simple and complicated machines. Learn about Rube Goldberg's inventions.
- 3. Rolann Aronson will discuss how NASA might use the "Space Shuttle" to get to Mars.
- 4. Watch a movie about the space shuttle.
- 5. Build a model of the space shuttle.

Lunch (during lunch examine home built airplane)

Afternoon

- 1. NASA still wants to use a "rocket" to get to Mars. Build "Estes" model rockets.
- 2. Make "altitude tracker" and find the height of the airport "beacon".
- 3. Tour Airport Control Tower
- 4. Learn about "Frigits". Build your own Rube Goldberg machine

Wednesday: June 24 or July 22 or August 12

Morning

- 1. Warm-up: Continue with your creation of Martian cartoons.
- 2. Put decals on rockets and pack parachutes into them.
- 3. Blast off to Mars!!! Use altitude tracking equipment to see how high rockets go.
- 4. Children are now reduced to the size of a raw egg, after lunch (trip to Mars) we will need to build a landing device that will protect them from a hard landing
- 5. See NASA movie "Roving Mars"

Lunch (during lunch examine another homebuilt airplane)

Afternoon

- 1. Build a device for landing on to the Martian surface.
- 2. Land on Mars. Did you survive???

Thursday: June 25 or July 23 or August 13

Morning

- 1. Warm-up: Finish your Martian cartoons
- 2. Rolann Aronson will help us build a "Space house" (geodesic dome).
- Commander Ken Aronson helps us build a hydroponics' "Space Garden".
- 4. Can robots help us build our Martian city? Study robotics
- 5. Build Martian Rover "Lucky"

Lunch (during lunch look at "CareFlight helicopter)

Afternoon

- 1. Discuss what the night sky might look like on Mars (Constellations)
- 2. Can we fly kites on Mars? Fly kites
- 3. Discuss triangle vs. square as strongest shape.
- Have a contest on building the tallest Martian structure. The winning team members receive unique model airplanes to build and fly.

Friday: June 26 or July 24 or August 14

Morning

- 1. Display the Martian cartoons that were drawn during the week.
- 2. Watch an "Addam's Family" TV show episode called "The Spacemen". Invent a new Martian "language".
- 3. Discuss other means of Martian communication. Will a "telegraph" work on Mars?
- 4. Build a telegraph and learn to send the Morse Code to others.
- Civil Air Patrol Guest Speakers take us on an adventure hike using compasses and maps. See if there is anyone else on Mars.
- 6. Meet Marvin the Martian and receive Astronaut Ice Cream

Lunch (during lunch see how airplanes are repaired)

Afternoon

- Discuss how to get around Mars. Civil Air Patrol Guest Speaker helps us build a Martian "vehicle" (model hovercraft).
- 2. Get evicted from Mars by the Martians. Build "Water rockets" and fly home.
- 3. Graduation ceremony.

Saturday June 27 or July 25 or August 15:

Morning: Fly with the EAA "Young Eagles" from 8:00-10:00 am @ EAA Hangar