National Aeronautics and Space Administration

NASA

COMMERCIAL CREW PROGRAM

2015 CHILDREN'S ARTWORK Calendar


CST-100
BOEING
BLUE ORIGIN
SPACE X
SNC
DREAM CHASER
DRAGON

NASA's Commerical Crew Program

NASA's Commercial Crew Program is working with the American aerospace industry to develop safe, reliable and cost-effective spacecraft and rockets that will carry humans to low-Earth orbit destinations, including the International Space Station. Once NASA determines these systems are safe, four astronauts will fly aboard the spacecraft to the space station. Currently the Russian Soyuz spacecraft carries three astronauts. The fourth astronaut who launches aboard a Commercial Crew vehicle will be able to focus 40 hours a week on scientific research, doubling the total amount of research currently conducted on the station.

Eventually, NASA will buy tickets for its astronauts to ride aboard these systems. Think of it like chartering a plane or taking a taxi ride to low-Earth orbit. Because companies own and operate their own systems, they can market to non-NASA customers. By encouraging companies to provide human transportation services to and from low-Earth orbit – a region NASA's been visiting since 1962 – America's space agency will get the most research and experience out of the nation's orbiting laboratory. It also allows NASA to focus on building spacecraft and rockets for deep space missions, including flights to Mars in the 2030s.

Going into 2015, the Commercial Crew Program has four industry partners:

Blue Origin

Spacecraft:
Space Vehicle

Launch Vehicle:
Orbital Launch Vehicle

Destination:
Low-Earth Orbit

Crew:
You?

BOEING

Spacecraft:
CST-100

Launch Vehicle:
United Launch Alliance Atlas V

Launch Pad:
Cape Canaveral Air Force Station, Complex 41

Destination:
International Space Station

Crew:
You?

SNC SIERRA NEVADA CORPORATION Space Systems

Spacecraft:
Dream Chaser

Launch Vehicle:
United Launch Alliance Atlas V

Launch Pad:
Cape Canaveral Air Force Station, Complex 41

Destination:
Low-Earth Orbit

Crew:
You?

SPACEX

Spacecraft:
Crew Dragon

Launch Vehicle:
Falcon 9 v1.1

Launch Pad:
Kennedy Space Center Launch Complex 39A

Destination:
International Space Station

Crew:
You?

ALANNAH, 5
MERRITT ISLAND, FL

SPACESHIP ON A PLANET

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
December 2014 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	February 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28			1 New Year's Day	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19 Martin Luther King Jr. Day	20	21	22	23	24
25	26	27	28	29	30	31

Spacecraft

NASA's spacecraft of the past had thousands of knobs and dials. Today's Commercial Crew spacecraft will use touchscreens, 3D printed seats and engines, and will be lightweight, but tough enough to withstand meteorites.

January
2015

KEVIN, 10
FORT WALTON BEACH, FL

SPACECRAFT INTERIOR - NASA KEVIN STYLE!

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14 Valentine's Day
15	16 Presidents Day	17	18	19	20	21
22	23	24	25	26	27	28

January 2015

			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

March 2015

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Spacecraft Interior

Every spacecraft's interior has been unique and advanced for its time. Apollo was very different from the space shuttle, and both are very different from the Commercial Crew systems that astronauts will use to fly to the station. Today's spacecraft could feature tablet-like technology, 3D printed seats, Wi-Fi and much more.

February

2015

HAILEY, 14
COCOA, FL

FREEDOM FLYER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8 Daylight Saving Time Begins	9	10	11	12	13	14
15	16	17 Saint Patrick's Day	18	19	20 Spring Begins	21
22	23	24	25	26	27	28
29	30	31				

February 2015

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

April 2015

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

PINK SUITS ME WELL

STACY, 10, COCOA BEACH, FL

Spacesuits

An astronaut's spacesuit is like his or her own personal spacecraft. Commercial Crew spacesuits will keep astronauts safe by providing breathable air and a cool temperature. They also will enable constant communication with people monitoring their health here on the ground.

March

2015

VED, 6
ORLANDO, FL

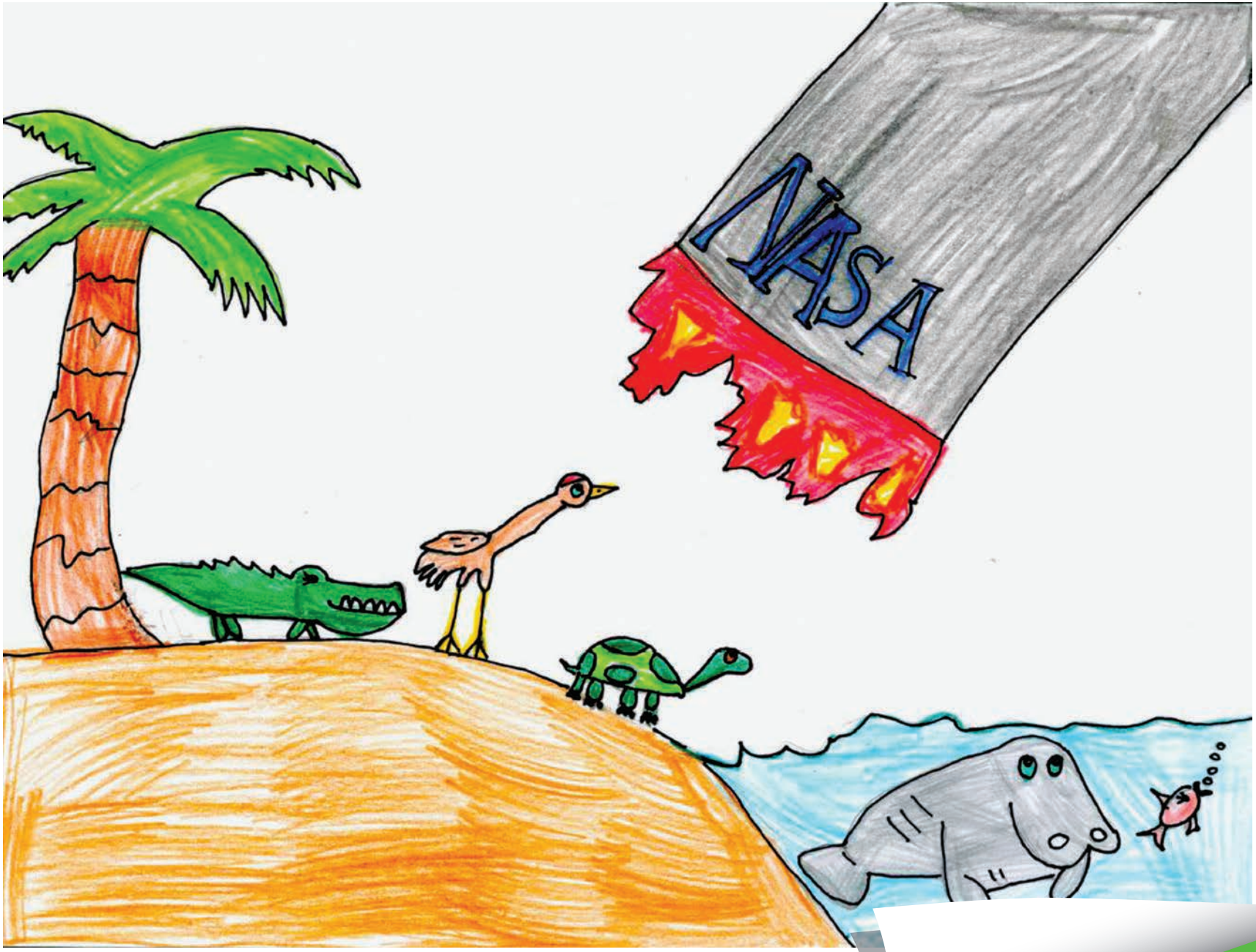
LAUNCH VEHICLE OF NASA

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
March 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	May 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		1	2	3	4
5 Easter	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20 Patriots' Day	21	22	23	24	25
26	27	28	29	30		

Launch Vehicle

The Commercial Crew rockets that will carry astronauts to the International Space Station will be smaller than NASA's previous Saturn V and space shuttle systems. Their missions are different, so their capabilities are different. Think of it like riding your bike to see your next-door neighbor, instead of driving a semi-truck on a cross-country trek.

April
2015



SCARLETT, 7
MERRITT ISLAND, FL

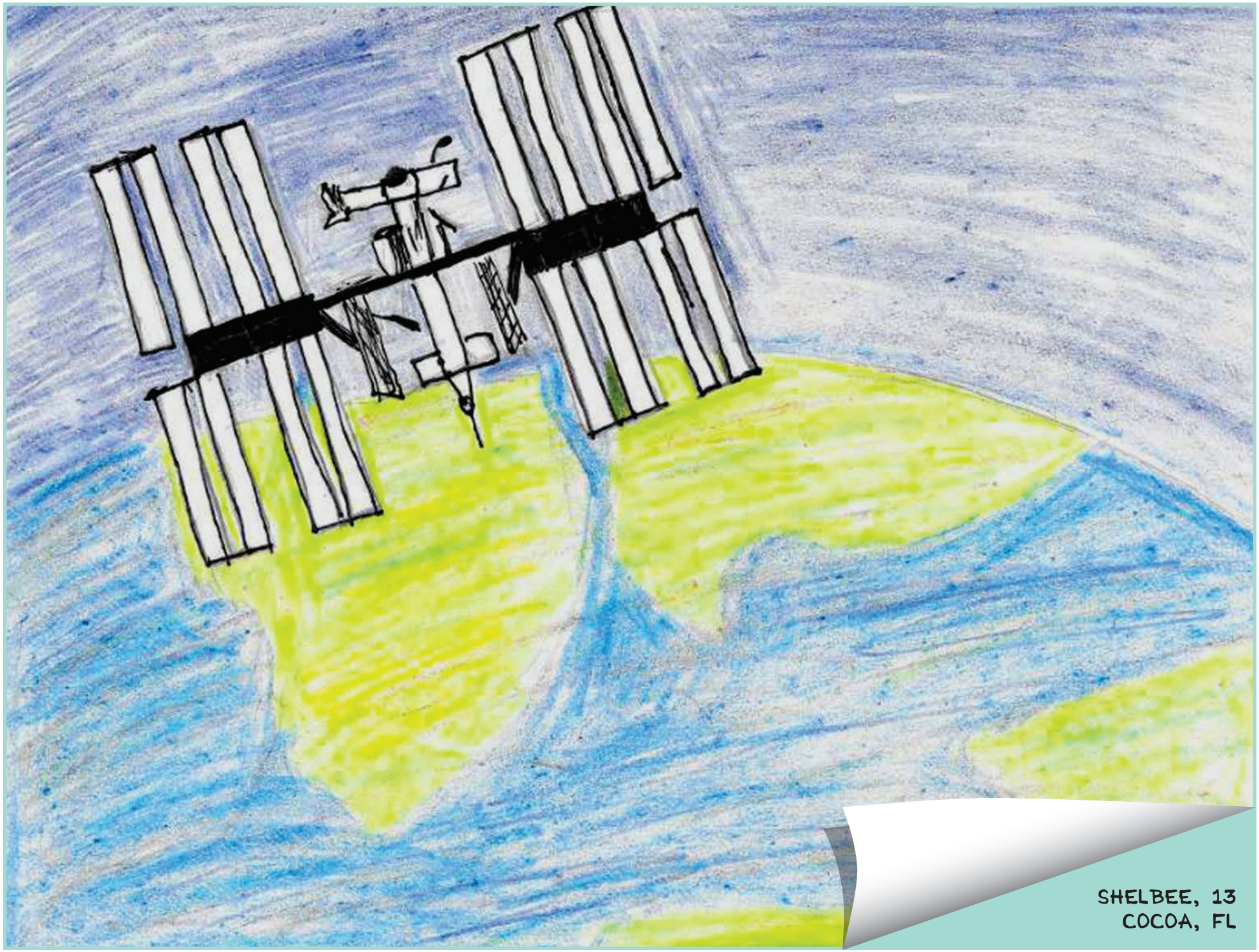
FLORIDA WILDLIFE WATCHING A LAUNCH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
April 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	June 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30				1	2
3	4	5	6	7	8	9
10 Mother's Day	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25 Memorial Day	26	27	28	29	30
31						

Florida Space Coast Launches

The rumble . . . the glow . . . the excitement! Every time NASA has launched people off the surface of Earth and into space, it has been from Florida's Space Coast. In the next couple years, we will see Commercial Crew engines glow orange and plumes of smoke as astronauts again launch to the International Space Station from Florida. In the 2030s, we will also see astronauts launching from Florida's Space Coast as they begin their journey to Mars.

May
2015



SHELBEE, 13
COCOA, FL

STATION IN SPACE ABOVE EARTH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14 Flag Day	15	16	17	18	19	20
21 Father's Day Summer Begins	22	23	24	25	26	27
28	29	30				

May 2015

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

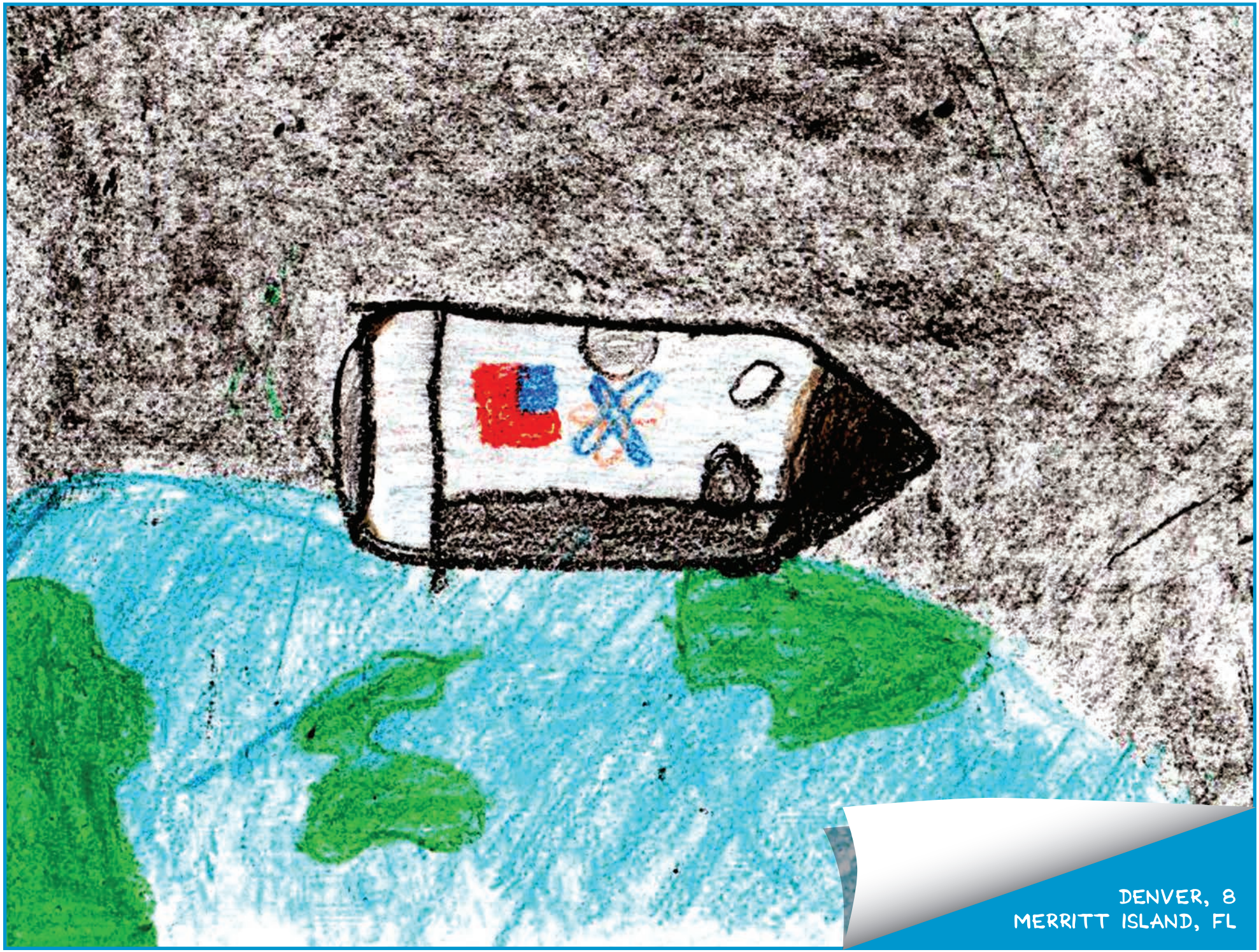
July 2015

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

International Space Station

Look up! The International Space Station is orbiting about 250 miles above the surface of Earth, 24 hours a day, seven days a week, 365 days a year. On board, astronauts conduct ground-breaking research that helps us here on Earth. They are also learning what it takes to live for long periods of time in space, which will help them on their journey to Mars. Commercial Crew will help add an additional crew member to the station, essentially doubling today's research potential.

June
2015



DENVER, 8
MERRITT ISLAND, FL

ORBITING THE EARTH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
June 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	August 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		1	2	3	4 Independence Day
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Research in Space

Every day, astronauts perform research aboard the International Space Station, Commercial Crew's ultimate destination. That research makes our lives better here on Earth. It helps us understand more about our own planet and prepares us for longer missions to Mars.

July
2015

FINLEY, 7
BENTON, AR

ASTRONAUT RECOVERED AT SEA

Sunday	*Monday*	*Tuesday*	*Wednesday*	*Thursday*	*Friday*	*Saturday*
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

July 2015

		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

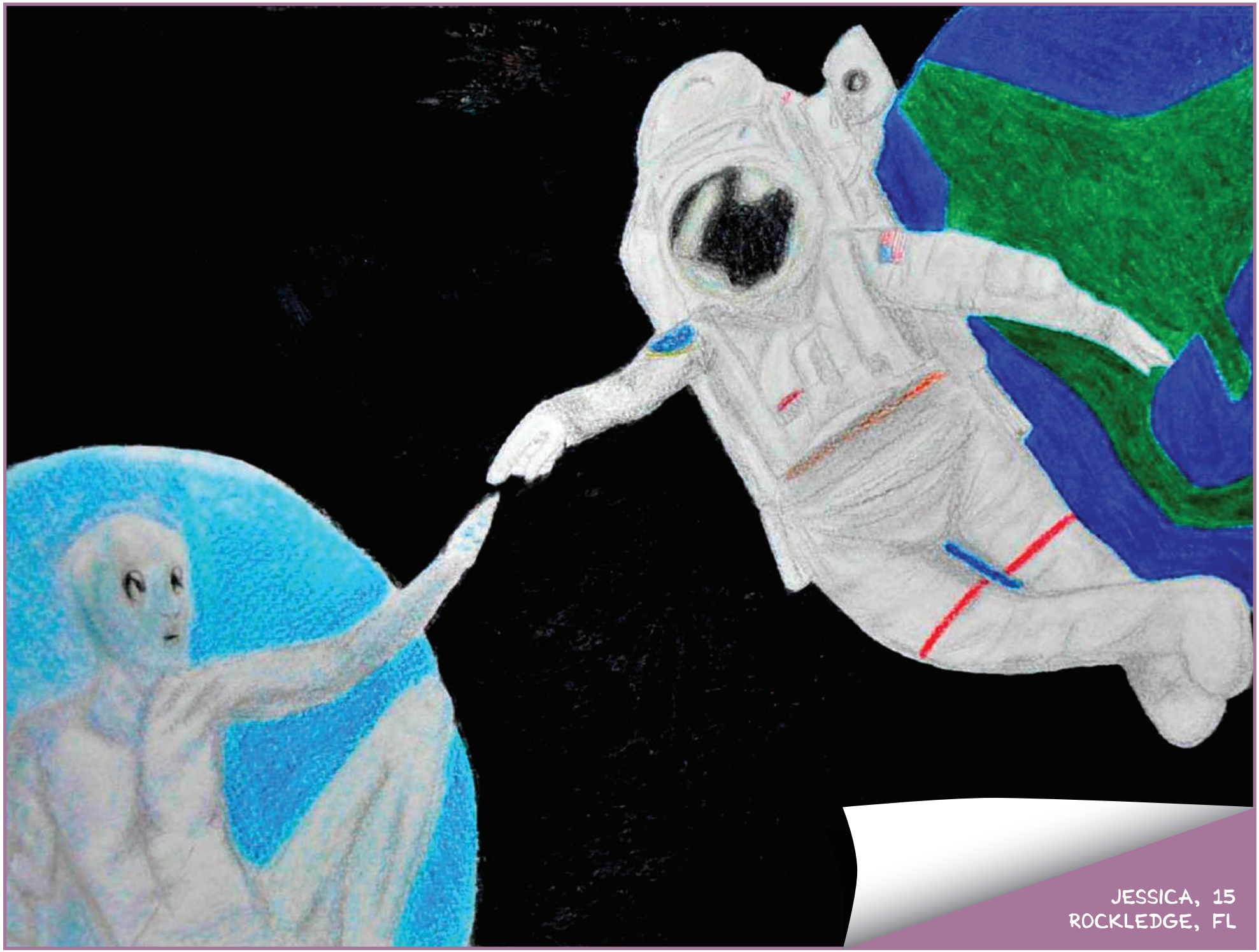
September 2015

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Lifeboat

Similar to lifeboats on a cruise ship, Commercial Crew spacecraft that will fly astronauts to the International Space Station are designed to safely and quickly evacuate the station's crew in an emergency.

August 2015



JESSICA, 15
ROCKLEDGE, FL

MAKING CONTACT

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
August 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	October 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1	2	3	4	5
6	7 Labor Day	8	9	10	11 Patriot Day	12
13	14	15	16	17	18	19
20	21	22	23 Autumn Begins	24	25	26
27	28	29	30			

Enabling Deep-Space Exploration

Commercial Crew spacecraft will go to the International Space Station about 250 miles above Earth. But the solar system has hundreds of other interesting places, too! Future astronauts could use other spacecraft to explore asteroids that are close enough to Earth, or maybe even a comet.

September
2015

KOHLEY, 6
OCALA, FL

SPLASH LANDING

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12 Columbus Day	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31 Halloween

September 2015

	1	2	3	4	5	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

November 2015

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Landing

Spacecraft landings are quite impressive. After flying through space and re-entering the atmosphere at 17,500 miles per hour, spacecraft have to land smoothly to protect the astronauts and scientific research they carry. Commercial Crew spacecraft designers are looking at options to land with parachutes and airbags, fly to a runway, similar to an airplane, or land using only rocket engines.

October

2015

KENJI, 5
MERRITT ISLAND, FL

ENCOURAGING NASA'S JOURNEY TO MARS

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Daylight Saving Time Ends	2	3	4	5	6	7
8	9	10	11 Veterans Day	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26 Thanksgiving Day	27	28
29	30					

October 2015

			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

December 2015

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

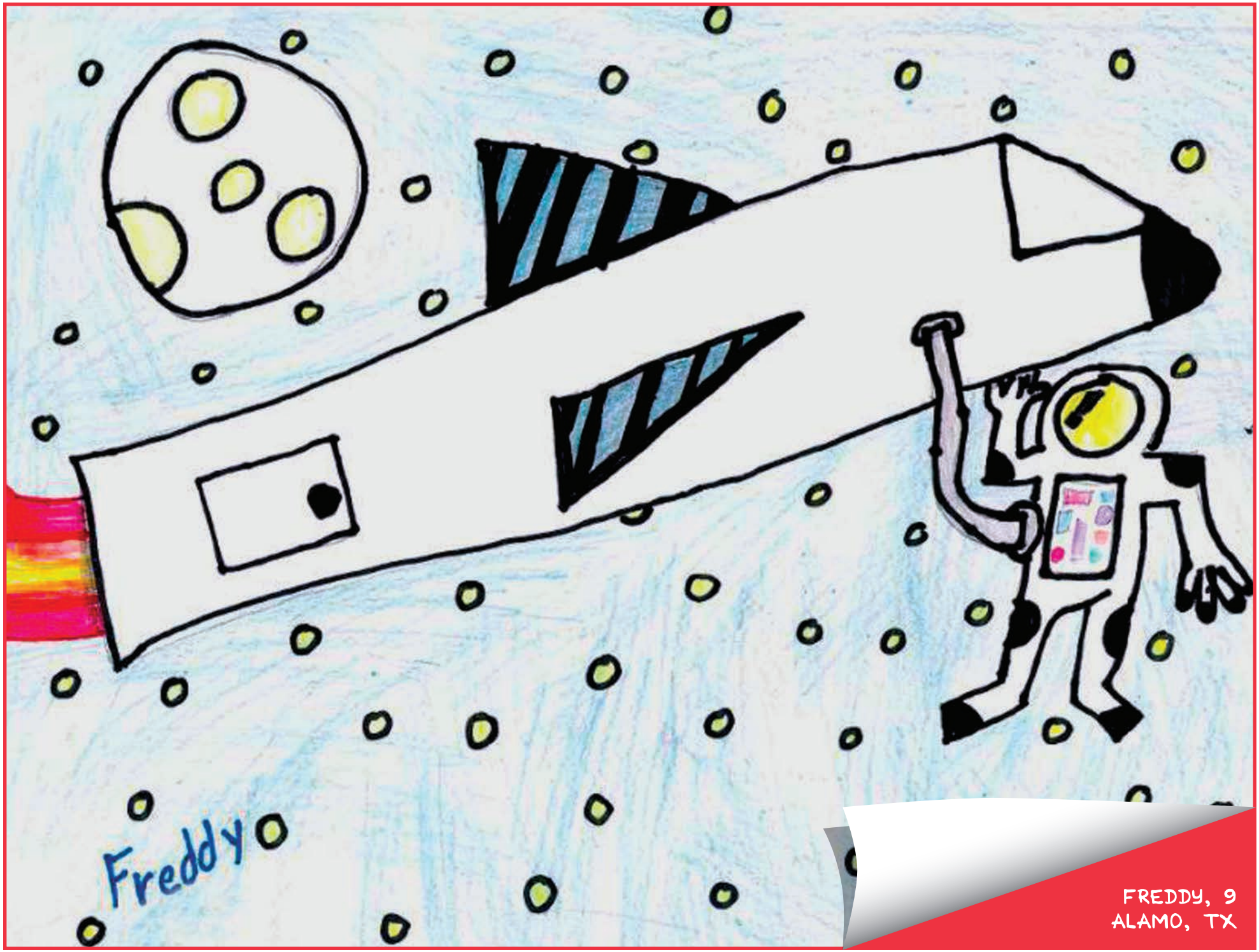
ELF IN SPACE
SCARLETT, 7
MERRITT ISLAND, FL

Journey to Mars

By encouraging private companies to provide human transportation services to and from low-Earth orbit – a region NASA's been visiting since 1962 – America's space agency will get the most research and experience out of the nation's orbiting laboratory. Commercial Crew allows NASA to expand its focus to build spacecraft and rockets for flights to Mars.

November

2015



FREDDY, 9
ALAMO, TX

ME IN SPACE

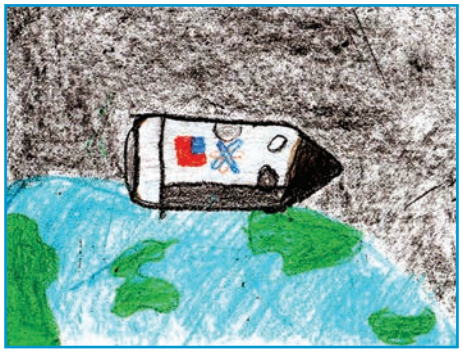
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
November 2015 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	January 2016 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21 Winter Begins	22	23	24	25 Christmas Day	26
27	28	29	30	31 New Year's Eve		

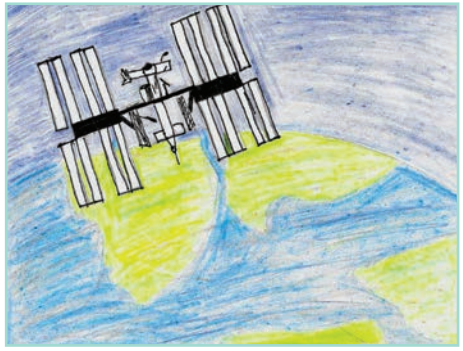
SANTA'S NEW RIDE
KATHRYN, 12, TITUSVILLE, FL

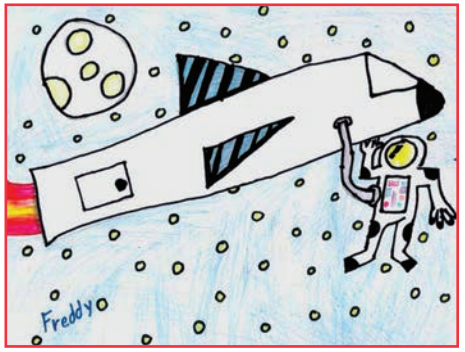
You Could Fly to Space

Remember when only astronauts could go to space? NASA won't be the only customer for new Commercial Crew spacecraft. Companies will own and operate their crew transportation systems and be able to sell services to other customers . . . will you be one of them?

December
2015







COMMERCIAL CREW

NASA's Commercial Crew Program and its partners in the American aerospace industry are advancing systems to transport crews to and from low-Earth orbit destinations, including the International Space Station, from the U.S. By working with companies as they develop safe, reliable and cost-effective systems for low-Earth orbit, the agency can expand human exploration farther into the solar system on its journey to Mars.

For more information, go to: **www.nasa.gov/commercialcrew** and **blogs.nasa.gov/commercialcrew**

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www.nasa.gov

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