



Student Astronaut Training eXperience Confirmation Letter



Thank you for choosing to participate in the Student Astronaut Training eXperience (SATX). SATX immerses your students in the world of today's astronaut training – an exciting combination of hands-on experiences, which will prepare you for the rigors of space flight.

Your group is scheduled to attend SATX on <Month, Date, and Year>. Your group training schedule provides a range of interactive activities, from a simulated Space Shuttle mission to activities designed to help students learn the sciences behind space travel. A variety of motion-based simulators allow you to experience many aspects of Astronaut training. A tour through the Astronaut Hall of Fame Museum will help you adopt the excitement and enthusiasm of the past, present and future of human spaceflight programs.

Please Note: Kennedy Space Center is a working space flight facility with security restrictions, therefore all SATX participants must check-in and sign-in on our SATX roster. Also, schedules and program dates may be altered in order to accommodate Kennedy Space Center operational requirements.

Due to the highly interactive nature of the SATX program, it is preferred that all participants wear a form of athletic footwear. Shorts or pants are recommended (no skirts). Some height and weight restrictions apply on certain simulators. Please see Medical Restrictions Consent Form. ***(IMPORTANT: Bring one completed form per child on your program date.)***

The program will start at **9:00 AM** and end at approximately **3:00 PM**. Registration will begin at 8:45 AM. Upon arrival to the Astronaut Hall of Fame, follow directional signs to ATX which will lead you to the east side of the building and into the Education Lobby.

Afternoon sessions of the SATX program begin at 3:30 PM with registration beginning at 3:15 PM. The afternoon program will end at approximately 9:00 PM.

If you have any additional questions regarding your reservation or payment, please contact the sales office at (321) 449-4400. If you have questions about the program components or operation please call (321) 455-7036.

Thank you and welcome to the Student Astronaut Training eXperience!

See you soon!

Cancellation Policies:

IF YOU CANCEL:

In the event that you need to cancel your reservation you can receive a refund minus the \$100.00 non refundable deposit if we receive written notification of cancellation 30 days prior to your SATX. There will be a \$10 per handling fee, to cover the costs incurred in processing your reservation. Cancellations made 29-15 days prior to your SATX - will receive a 50% refund less the \$100.00 non refundable deposit and a \$10 handling fee. All monies will be forfeited if

cancellations are made with less than 14 days notice. If circumstances arise, with a notice 7 days prior to the program date, you may change to a future available date.

IF WE CANCEL:

Kennedy Space Center is a working space flight facility. In the event we need to cancel an SATX program, we will do our very best to inform you as soon as possible of the cancellation. You will receive a full refund if the program is cancelled due to Kennedy Space Center Operations or other unforeseen events.



STUDENT ATX GOALS



The Student Astronaut Training Experience at the Astronaut Hall of Fame provides participants with:

- An exciting, day-long experience for 5th - 12th grade students, focused on aspects of astronaut training.
- An experience on motion-based simulators modeled after actual training simulators used by astronauts in the past.
- An opportunity to perform a space shuttle mission while operating the controls of a full-scale space shuttle replica, or a simulated mission control center.
- A guided tour of the Astronaut Hall of Fame Museum, including highlights from the Mercury, Gemini, Apollo, and Shuttle programs.
- Interactive student activities that explain and teach about the many sciences used to launch rockets and show how humans survive in the vacuum of space.
- A greater appreciation of the talent, dedication, hard work and preparation that goes into conducting NASA's human spaceflight program.



STUDENT ATX PROGRAM COMPONENTS



Welcome and Orientation

As you arrive at the Astronaut Hall of Fame (AHOF) your group will be directed to the Education Lobby and greeted by the Educator Team. Educators begin the program by introducing themselves and welcoming the guests. Participants are briefed on the day's scheduled events and are given a brief overview of the Space Shuttle system and space exploration.

Motion-Based Simulators

Simulations may include but are not limited to the Multi Axis Trainer (MAT) and 1/6th Gravity Chair and the Trajectory Chair. Prior to experiencing the simulators, Educators brief participants on the purpose, history, and learning objective of each simulation. For the safety of all our guests, height and weight restrictions apply to some of the motion-based simulators. *(Please see medical release form for more information)*

U.S. Astronaut Hall of Fame

Participants explore the Astronaut Hall of Fame Museum which highlights important events in the Mercury, Gemini, Apollo, and Shuttle programs. The participants have time to engage in the hands-on activities in the interactive area.

Lunch

Participants enjoy a 45-minute lunch break in the pavilion. Participants need to provide their own lunch. Catered lunch is available for an added cost.

Student Activities

Educators lead interactive presentations on space flight sciences that include the effects of space flight on the human body, thermal protection systems used on the Shuttle, foods and packaging for space flight and sciences behind the vacuum of space.

Simulated Space Shuttle Mission and Training

Educators lead participants through a thirty-minute training session, which prepares them to operate the controls of a full-scale space shuttle replica or a simulated mission control station. Participants perform a simulated space shuttle mission, using Space Shuttle simulation software and a mission script. The mission simulation provides participants the experience of successful space flight as they perform specified tasks. The software includes a variety of anomalies that the Educators may use to encourage positive problem solving and teamwork.

Debriefing

Educators debrief participants to bring closure to the day's activities, congratulate the participants on their teamwork skills, and recognize their accomplishments on the mission simulation. Participants are presented information about NASA's new Constellation Program and how man will return to the Moon, Mars and beyond.



SATX Shuttle Simulation

Position Descriptions

STS-300 requires a twelve-member team for an ideal mission. Six mission controllers are stationed inside Mission Control, and six astronauts are onboard Discovery.

Mission Control Crew

FLIGHT DIRECTOR – Responsible for all the ground and orbit operations. Maintains direct contact with the orbiter crew. *(Heavy reading position for someone with leadership skills.)*

FLIGHT DYNAMICS OFFICER (FDO) – Monitors performance of the vehicle. Performs countdown for liftoff.
(Medium reading position needs to be able to look at computer monitor and read information off monitor into the script.)

PUBLIC AFFAIRS OFFICER (PAO) – The voice of NASA.
(Heavy reading position.)

SPACECRAFT SYSTEM OFFICER (SSO) – Monitors maneuvering systems onboard.
(Light reading position, needs to be able to look at computer monitors and read information off monitor into script.)

EMERGENCY, ENVIRONMENTAL, CONSUMABLES OPERATIONS MANAGER (EECOM) – Monitors navigation and environmental systems.
(Light reading position, needs to be able to look at computer monitors and read information off monitor into script.)

SCIENCE (SMO) – Monitors science/medical experiments and health of crew.
(Fewest lines out of the mission control positions. Talks directly to orbiter crew members.)

Orbiter Crew

COMMANDER – Flies and lands the orbiter. You are responsible for all crew functions.
(This position requires responsibility, good listening skills, multi-tasking between reading lines, flipping switches and typing on a small keypad. They will LAND the orbiter!)

PILOT – Assists the Commander.
(This position requires responsibility, good listening skills, multi-tasking between reading lines, flipping switches and typing on a small keypad.)

MISSION SPECIALIST – (MS 1 and MS 2) Solar Panel Construction.
(Light reading position. Needs to work well with his/her partner. Needs to follow directions well and like to work with hands.)

(MS 3 and MS 4) On-Board Chemical Reaction Experiments.
(Light reading position. Needs to work well with his/her partner. Needs to follow directions well and like to work with hands.)



Directions

Astronaut Hall of Fame

From Orlando: Take the Beeline Expressway (also called State Road 528) EAST to 407 North. Take 407 NORTH to 405 EAST. Follow signs to Kennedy Space Center and the Astronaut Hall of Fame. The Astronaut Hall of Fame is on your Right just prior to entering the gates of KSC.

From the North: Take I-95 South to exit #215 and follow the signs to 405 EAST. Follow signs to Kennedy Space Center and the Astronaut Hall of Fame. The Astronaut Hall of Fame is on your Right just prior to entering the gates of KSC.

From the South take I-95 North, to exit #212 and take 407 NORTH to 405 EAST. Follow signs to Kennedy Space Center and the Astronaut Hall of Fame. The Astronaut Hall of Fame is on your Right just prior to entering the gates of KSC.

Medical Restrictions Consent Form

SATX Program Date: _____ **Group Name:** _____

IMPORTANT: Bring completed form with you on your program date

Kennedy Space Center Visitor Complex is proud to include several motion-based space simulators as part of the SATX experience. These simulators, located on the Training Floor of the Astronaut Hall of Fame, are an exciting way for SATX participants to learn the science of spaceflight and experience components of astronaut training, past and present.

During simulator training, individuals may experience up to three G's or gravitational force, disorientation, or fluid shifts. Persons with cardiac conditions, pulmonary dysfunctions, sensory handicaps or chronic illnesses may not be able to participate fully in the program.

Please let us know if any of the following apply to the participant:

Inner ear disorders

Vertigo

Motion sickness

Heart problems

High blood pressure

Head colds (within the last week)

Fear of heights

Recent broken bones (during the preceding school year)

Back injuries

Knee or leg injuries

Any other issues our educators should be aware of

Please explain:

Below is a brief description of our motion based simulators

Multi-Axis Trainer (MAT) *Minimum height of 52 inches***Maximum weight of 250lbs*****

This simulator will simulate a capsule tumbling out of control. The participant will be strapped into our MAT via 5-point harness to experience the disorientation associated with this tumbling.

1/6th Gravity Chair *Maximum weight of 250lbs*****

This simulator is designed to simulate walking on the moon. The participant will be raised slightly in a harness so that they are relieved of some of the effects of gravity.

Micro Gravity Wall *Minimum weight of 75lbs***Maximum weight of 250lbs*****

The Micro-Gravity Wall simulates the freedom of movement that a spacewalking astronaut has while performing a space walk. This is done by counterbalancing the participant via a weight system to achieve neutral buoyancy.

Trajectory Chair (T-Chair)

The T-Chair will introduce the concept of trajectory to the participant. It will allow them to learn some of the challenges associated with launching a vehicle here at Kennedy Space Center.

I/We _____, the parent(s) or guardian(s) of the child grant permission for our child to participate in the simulator training element of SATX.

Adult's Name: _____

Signed: _____

Relationship to Child: _____

Date: _____