

# The Christa McAuliffe Space Education Center Mission Briefing and Extension Activities 1990-2005 Fifteen Year Anniversary

## Intolerance

Dear Teacher:

For a successful field trip your students should be briefed on the mission and its objectives before arrival. We recommend you look over the curriculum several weeks before your visit. The Pre - Field Trip Expansion Ideas will give you suggestions on incorporating the field trip into your science, social studies, art, and language arts curriculum.

### Introduction

This year the Space Center celebrates its fifteenth birthday by bringing back a favorite mission called "Intolerance" with Rool the Pennae and his antagonist the Pennou. Hopefully it will be several days or weeks before your class comes to the Space Center. Please consider doing the following activities to prepare your students for their field trip and to teach your space unit.

### Pre - Field Trip Expansion Ideas

#### Field Trip Bulletin Board

Have your students pretend they are taking a journey to Starbase 12 Wellington to board the *Voyager Odyssey and Phoenix* (depending on the number of simulators your class will need). Track their progress on a bulletin board. Set up a bulletin board using black paper as background. Have several students paint white dots to represent stars. In the bottom left corner place the Earth. In the top Right corner place an area of space labeled "Wellington". Have a student paint a small wormhole in this sector. Place two spaceships in front of the wormhole. Label one the USS *Ranger* and the other Pennae. Paint the course your starship *Voyager* will travel between the Earth and the Wormhole. Have a student draw the *Voyager*. Place the *Voyager* in orbit over the Earth. Paint divisions on this line to represent the days or weeks to the field trip. Each day move the *Voyager* one space closer to the Wormhole. Your class should reach the wormhole the morning of your field trip. The bulletin board should show them starting from Earth and moving outward. Each day move their starship closer to the Wellington. Along the way they will encounter astronomical objects you have placed on the board. What a great way to review the astronomy concepts you covered in your space unit. Another idea is to teach your space unit as they encounter the objects along the way. They begin at Earth and move through the solar system. Along the way the planets, comets, and asteroids can be taught. Once outside the orbit of Pluto and clear of the dangerous Oort Cloud they can engage their bulletin board starship's warp engines and jump to warp speed heading for Starbase Wellington. Teach or review stars, black holes, comets, dark matter, background radiation, protostars, etc as they progress through deep space. They should move their starship to the Wellington just before boarding the school bus for their field trip. Some teachers transform their classrooms into Starfleet Academies. They use the space theme as a curriculum tie for the entire year. Its a way to get the most out of your field trip dollars.

#### Language Arts / Science Integration

Language arts, science, and art can be introduced into the curriculum by having your students

pass four fictional solar systems which contain stars, similar to our sun, that you have placed on the bulletin board (described above). Suggested names of the stars could be:

1. Chyron
2. FV 432
3. Phylos Major
4. Tarawa-Pentae

Inform your students that these systems have not been surveyed—only cataloged. Divide your class into four teams and assign each team one of the new solar systems. Tell the class that deep space probes have been launched to visit the newly discovered solar systems. Once the probes reach the locations on the bulletin board they will begin sending back information. Because these are fictional system the student teams will write and draw the information coming back from the probes. Pick a day where each team of astronomers will get to stand up and present their findings to the other teams. Their presentations could include the following information about their system:

1. Size, Color, and Temperature of Star
2. Age of the Star
3. Is the star alone, binary, or trinary?
4. Number and description of planets
5. Any moons or rings around the planets?
6. Are there Asteroid belts, comets, etc?

Each star should have several planets in various orbits. The student team presentations should discuss what they found on the newly discovered planets.

1. Type of life present, if any? Plant, animal, etc.
2. Planet's size in relation to Earth's. Its rotation, revolution, atmosphere, land to water ratio, gravity in relation to Earth's, distance from its primary star
3. Are there signs of intelligent life? If so, what? Has the planet's population developed space travel? Forms of communication? Forms of travel?
4. A detailed report of the life forms including pictures (drawings). The oral report should include how the life forms satisfy their basic needs of food, water, and shelter. Do they have a name?

**Caution:** The student's reports must mix the true science of solar systems with science fiction and creative thinking.

**Example:** If the student's model solar system contains a Jupiter like planet then any life on that planet must display characteristics of extreme gravity with the ability to live and survive in the clouds . What would that life look like?

## Pre-Visit Mission Background Briefing

**Teachers, please read the following information carefully. It will give you the information your class must understand to succeed on their mission in the simulators.**

1. Please chose your ship's captains and Voyager Ambassador.
2. Please give each of them a copy of the Starbase Letter a day or two before you do the mission briefing in your class. Let one of them read the letter to the class.
3. Please copy the Ranger's Letter and give it to your captains and Ambassador a day before you do the class briefing. Tell them to read and study it carefully . Assign one of them to read the letter to the class on Briefing Day. Invite them to help you brief the class.

## Social Studies / Mission Briefing Integration

The social science items of discussion and debate will open your student's minds to problems we have faced since the dawn of humanity — intolerance, discrimination, and hatred. You see the same problems between the Pennae and the Pennou. Students see what man is doing to man on the news and in the newspapers. They hear people discussing the issues. They wonder how such things can happen and try to understand its roots. The key to that understanding is education. It provides the knowledge to stop the hatred. An excellent educational video covering individual responsibility is "Cipher in the Snow." Check with your district video library to see if the video is available. The human species has battled hatred and prejudice for thousands of years.

Before the field trip your students could research these conflicts and prepare reports the Ambassador could use in deciding the Pennae's case. These reports should detail the injustice done and what we, as humans, are doing now to insure it doesn't happen again. Those examples should emphasize individual classroom projects to combat discrimination and prejudice. On a broader scale the examples should highlight national and international victories (Civil rights victories of the 60's and 70's, desegregation of the schools etc - International victories include the end of apartheid in South Africa, a cease fire in the bloody conflict between Catholics and Protestants in Northern Ireland, Israel's softening attitude toward the Palestinians, etc). All examples of nations and peoples listening and working to resolve their differences without bloodshed.

During your student's travel to the Romulan Sector on the bulletin board mentioned above they could enrich their preparation for their field trip by studying the following social science concepts and terms. This preparing will give your students a greater comprehension of the "Man against Man" conflict which is the basis of this entire mission.

1. Rool, a Pennae, is seeking political asylum. What is political asylum? Research the policy of the United States concerning political asylum and immigration. Discuss your findings as a class.

2. Rooll says his planet has two continents. The larger continent is inhabited by the Pennou. The smaller continent is home to his people the Pennae. For hundreds of years the Pennou and Pennae have fought war after war for control of the planet's resources. One thousand years ago the Pennou succeeded in capturing the Pennae continent and enslaving his people. The Pennae continent was stripped of its natural resources. Many Pennae were forcefully taken from their home and taken by ship to the Pennou continent as slaves. Once the Pennou developed space flight they abandoned the Pennae continent and began finding the resources they needed in their solar system but the slavery of the Pennae continued. The Pennae continent is still occupied by the Pennou. The Pennae people, not living as slaves, live in poverty. The Pennou provide a very basic education of reading, writing, and math to the brightest Pennae. The educated Pennae are taken as slaves to the Pennou continent to work in the high tech industries where they receive extensive training. They run many of the nation's businesses and industries leaving their owners free to pursue their pleasures. The uneducated Pennae are used for labor in industry and agriculture.

4. The Pennou regard the Pennae as a lower life form and therefore feel that slavery is justified. Rool is one of those slaves. Pennae that resist slavery and fight for freedom have been taken to "reeducation camps." Rooll tells of rumors that these camps may really be death camps.

5. Understanding these facts—do you believe the Federation should give political asylum to Rooll? Why or Why not?

6. Are there any examples in Earth's history of this kind of hatred, prejudice, and discrimination? What are the similarities? What are the differences? What did the nations of the Earth do to stop the violence and killing? Was there anything they could do? Some say a nation should take care of its own problems and keep its nose out of the affairs of other nations. Do you agree or disagree? Why?

7. The escaped slave Rool fears a slave hunter may come through the wormhole looking for him. If that happens what will you do? We suggest a statement should be prepared to be read to the Pennou slave hunter should this occur. Your Ambassador is the chief negotiator. If you decided to give Rooll political asylum then, as a crew, you must help the Ambassador prepare an argument to

defend your opinions. Remember, the Pennou may use our own history to justify their actions.

8. What if Pennou slave hunter attacks your ship? What will be your response? According to reports from the USS *Ranger*, the Pennou are advanced in weaponry. Are you willing to risk your own crew to defend Rooll's rights? **REMEMBER, TO CHANGE THE WORLD WE BEGIN BY CHANGING OURSELVES. HATRED AND VIOLENCE CAN BE ROOTED OUT OF OUR CHARACTER. WE MUST TREAT PEOPLE THE WAY WE WANT TO BE TREATED.** Change comes slowly. Look how long it has taken African Americans to gain their rights.

9. If you wish to defend Rooll and his people then don't give the Pennou ammunition to use against you in an argument. Teach by example. Show them how a civilization can live together in peace. We have different skin colors, languages, religions, cultures, and traditions We have learned to enjoy our differences and to learn from each other. If we respect others—they respect us. What can you do as a crew to stop hatred and discrimination in your classroom and school? List examples and begin working hard to achieve those goals.

10. Concerning Rooll, Starfleet Command gives the Ambassador the authority to do what he/she thinks is best. Your crew will be supported no matter what decision the Ambassador makes.

## Summary

Teachers, realizing how valuable your time is and understanding how difficult it is to cover everything in the State Core we recommend the following if you can't do everything this curriculum suggests:

1. Review the setting of the mission.
2. Review the characters in the mission.
3. Review the plot of the mission.
4. Discuss political asylum with your class. Why is it a part of our immigration law. Who benefits from asylum?
5. Help your Ambassador prepare to debate the evil of slavery with someone that believes in the institution. A mock debate in the classroom may be helpful.
6. Have the class read and study the Starbase and Ranger's Letters.
7. Prepare a Boarding Pass for each student.

Thank you for your support of the Space Center. We hope you find your trip educational and enjoyable.