

The following is a message to NASA employees and contractors from former Space Shuttle Program Manager Wayne Hale about the Columbia Safety Exhibit.

On a recent trip to Washington, I visited Arlington National Cemetery. At the Tomb of the Unknowns, the guard was being changed. We were asked to stand out of honor and respect. Just over the hill are the Challenger and Columbia memorials. You stand there, too. Visiting these sites, and paying homage to those who sacrificed the "last full measure of their devotion" is important for us the living. The highest honor we can give these dead is to have the lessons of their lives inscribed on our hearts.

Many have sacrificed their lives so that we can live in a free and prosperous country. We owe it to them to treasure our freedoms and work hard in our time to maintain them.

The Challenger and Columbia crews did not lose their lives attempting to deliver a communications satellite nor complete microgravity life science research. They gave their lives in the conquest of the final frontier, the exploration of the universe.

A few days ago, some of us gathered at the Astronaut Memorial in Florida to mark the fifth anniversary of the loss of the Columbia crew. There was a solemn ceremony, speeches were made, flowers and wreaths laid, and the band played patriotic music. It was an altogether fitting memorial. But it was too little. Those of us safely on the ground who send others in our place must do more.

How can we honor the brave memory of our crews and live in such a way to ensure that the exploration of the new frontier does not falter?

Two thoughts: first, we must renew our vigilance and our technical thoroughness. Both shuttle accidents and Apollo 1 as well were preventable. If we had collectively recognized the danger or been more rigorous in our review, all of these tragedies could have been avoided. This is not a new message. After every accident this same message blazes across our consciousness. But in the long, slow, daily grind of little compromises and tedious details, this message can be lost. Can we maintain our vigilance five years after our last tragedy? Ten years? For the next generation?

Avoidable tragedy can happen again. The only bulwark between an accident and a safe, successful space mission is the competence and attention of highly focused individuals.

I wish there was an easier message, but there is not. If we are to truly honor the sacrifice of these crews, we must teach that lesson to every new person that

comes to work here and live each day with the utmost commitment to safety in all its details.

To this end, we have constructed a traveling memorial that will spend this year visiting every NASA center. We hope this memorial will provide the thoughtful contemplation of our duty, similar to a visit to the Vietnam War memorial or Arlington. This memorial is not for the public, nor the media, it is for the NASA family. Lest we forget.

(The memorial) will be displayed at your center in a place where all employees, but not the public, can see it. Please look for it and attend. And remember.

There is a second thought, however. These crews chose to go forward into the unknown, despite the danger because they believed the risk was worth while. Brave men and women are still making that choice. Shortly after the Columbia loss, NASA put on an exploration conference. Speaker after speaker extolled that our first priority has to be safety. Then one notable took the microphone and corrected our thinking with these words: "Safety is very important and we need to consider it in all that we do, but the most important thing in exploration is – to go."

A century ago, the great writer Jack London wrote for all of us, on the ground or in flight:

"I would rather be ashes than dust. I would rather that my spark should burn out in a brilliant blaze than it should be stifled by dry-rot. I would rather be a superb meteor, every atom of me in magnificent glow, than a sleepy and permanent planet. The proper function of man is to live, not to exist."