

Hello, again and welcome. I'm Jim Tedder in Washington with the program that helps you learn and improve your American English. You can also learn about our world ...As It Is. Today we hear about the relationship between India and the United States. Are better days ahead now that an ambassador has resigned?

Then some exciting news from NASA, the U.S. space agency. If you like airplanes, you will want to hear what they are working on.

You are listening to the Voice of America, and we are coming to you from Washington.

The resignation of the United States' ambassador to India could lead to improved ties between the two countries. The resignation of Ambassador Nancy Powell came as no surprise to observers in the Indian capital, New Delhi. Ties between the countries have been tense since the arrest of an Indian diplomat in New York. Jonathan Evans tells us more.



Marie Harf is a spokesman for the US State Department. On Monday, she denied that there is a connection between the diplomatic dispute and the resignation. She told reporters in Washington that Ambassador Powell was retiring after a celebrated career.

"It is in no way related to any tension, any recent situations. There's no big behind-the-scenes story here."

But observers in New Delhi disagree. They say the US hopes to reset relations with India over the arrest of the Indian diplomat in New York. Law enforcement officials required the diplomat to remove her clothing while they performed a body search. The Indian woman was arrested on charges of underpaying her housekeeper. The diplomat has since returned to India.

Observers say the ambassador's resignation increases the possibility for business contacts with a new Indian government. However, the bigger barrier to better relations is the US position on Narendra Modi.



He is the prime ministerial candidate of the Bharatiya Janata Party. Studies have shown his party could win enough votes to form a new government after the Indian elections end next month.

Narendra Modi has been banned from traveling to the US and several other Western countries. They claim he did not do enough to stop religious riots in 2002. More than 1,000 people died in the unrest. Many were Muslims in Gujarat, his home state.

But several European countries opened diplomatic contacts with Mr. Modi last year. Ambassador Powell held her first meeting with him only six weeks ago. Indian observers say the meeting took place too late to be effective.

Chintamani Mahapatra is the chairman of the Center for U.S and Latin American studies at Jawaharlal Nehru University in New Delhi.



He says the United States has been slow in reaching out to the BJP leader. And he thinks some issues could have been dealt with in a better way. For example, Mr. Modi was denied a visa in 2005. Since then, no serious steps have been taken against him.

Ambassador Powell will leave her position by the end of May.

Observers in New Delhi hope that the new ambassador will be a strong political force, and not a career diplomat like Ms. Powell.

Chintamani Mahapatra is one of those observers.

"This gives an opportunity for the U.S. administration to start a process by appointing an important person as an ambassador who can restore the strategic partnership between the two countries and interactions will be more cordial and friendly rather than exchange of bitter words."

I'm Jonathan Evans.



## **NASA Works on New Airplanes**

America's National Aeronautics and Space Administration, NASA, is known for its work in space exploration. But aeronautics – a science that deals with airplanes and flying - is still a big part of the agency's research.

NASA engineers are testing ideas that someday may produce lighter and quieter aircraft that produce less pollution. For more on the story, we turn to Bob Doughty.

NASA officials would like to see better airplanes by 2030. They want planes that burn 60 to 70 percent less fuel, pollute less and are quieter than 2005 models. Scientists say such goals are possible if manufacturers make changes to the design of aircraft and use lightweight materials. They also say new kinds of fuel need to be considered.



NASA engineers have been testing a new design of airplane wing. The wing is made of a composite material that is lighter than the aluminum alloy now being used. Composite materials are made from two or more substances.

In the future, plane wings will likely be made out of materials like this. Robert C. Scott is an aerospace engineer.

"With advances in materials, advances in design and analysis capability and the need for higher efficiency, you end up with – you are driving yourself toward very lightweight designs."

Project scientist Richard Wahls says one of those designs is the long, truss-supported wing.

"That allows you to stiffen the wing, keep the wing thin, grow the span to reduce, to reduce drag."

If someone decides to build such an aircraft, he or she will be able to use the results of NASA tests.



Researchers are also testing a new way of manufacturing composite materials. Instead of placing the fibers in straight lines, the material is instead placed around the points of heavy load, explains materials research engineer Karen Taminger. She also says new structural designs will help manufacturers to reduce the weight of airplanes and make them more energy efficient.

Fay Collier supervises NASA's Environmentally Responsible Aviation project. He says researchers also want to reduce the pollution that comes out of airplane engines.

"We want to take advantage of alternative fuels and the emergence of alternative fuels, and we want to design advanced combustors to minimize the output of what I call oxides of nitrogen."

American scientists wanted to learn about the smoke of an airplane that burned a mixture of petroleum, an oil-based product, and an alternative-based fuel.



To do this, they flew a second plane right behind the first one. Equipment on the second plane measured the percentage of pollutants contained in different fuel mixtures.

Project scientist Richard Wahls says the space agency is always looking for ways to improve aviation.

"We hope to find technologies that we can accelerate forward through the research, but other technologies, you know, they may not be possible for 20 or 30 years. They are just an idea."

Until then, he says, there are small changes moving airplane manufacturers towards better, safer and more efficient aircraft. I'm Bob Doughty.

And I'm Jim Tedder in Washington. Are your ready for today's history lesson? On this date in 1783, American writer Washington Irving was born. Two of his best known short stories are "Rip van Winkle" and "The Legend of Sleepy Hollow."



And entertainer Wayne Newton celebrates his 72nd birthday today. Here is what he sounded like in 1963 when this song made him famous.



