

4/28/07

“Space Age Technology”

by  
Tom Holbrook

My garage door began squeaking as it opened and shut a few months back and the first thing I reached for to cure the problem was my can of WD-40. When that problem was solved I then had to pack some books in boxes and used my duct tape to seal them shut. I then used that same duct tape to stop a leak in my garden hose and that night used it to tape the words of a song I was singing to the back of the guy singing in front of me. Talk about versatility!

Later I grabbed my cell-phone and called home to advise I would be a little late and when I got home I turned on my HD digital TV picture coming to me in brilliant color and clarity being beamed to my 18” satellite dish. From a satellite 22,238 miles above the equator my TV received the Geostationary Satellite’s view of the storm coming toward us from Texas and the approximate time it would arrive in our area. These satellites can see the Earth nearly from pole to pole. I went to my bedroom and set the Weather Alert Radio to the zip codes in 5 counties around me so that while I slept it would monitor any emergency broadcasts and wake me up with a loud siren, or voice if I so programmed it, warning me of impending danger.

Next morning I got into my hybrid vehicle, powered in part by solar panels on the roof, and turned on the GPS system which used its sensual voice to lead me to my destination. Later, having locked my keys in the car the door was opened electronically by someone a thousand miles away after identifying me through voice prints on file.

What’s all this got to do with anything you might be asking? It has everything to do with my complacency and others like me who accept these miracles as something that just appeared one day, not really knowing or caring how they all came about. It was a trip I took the other day with my visiting son Lane, and his family, that woke me up to where these miracles came from and the great price that was paid for them.

A day trip to the Kennedy Space Center at Cape Canaveral opened my eyes once again to how our race against the U.S.S.R. (Union of Soviet Socialist Republics for the younger set,) spawned most of the “miracles” above. The race, into space and to put the first man on the moon, demanded we create better methods of communication; greater ability to forecast weather in advance; smaller but more powerful computers; cordless battery operated tools; more accurate navigational tools; freeze-dried drinks and foods with greater shelf lives; and stronger yet more flexible metals and glass, etc., etc., etc.. Exciting new concepts created, then adapted and adopted to commercial and household use.

The WD-40 we all know and love was created in the laboratory in 1953 as a Water Displacement solvent to prevent rust and de-grease Atlas rockets. The scientists were successful on its 40<sup>th</sup> attempt in finding the correct formula, hence the name WD-40. Only 4 people know the recipe for it and when employees of the plant started sneaking the mix home for personal use some smart people in marketing suggested the public might be interested in buying it in an aerosol can... and a star was born.

Duct tape, although a product created by the military in the 40s, played an integral part of the Space Race when it served as a literal lifesaver in the 1970 Apollo 13 shortened and endangered moon flight to

modify square carbon dioxide filters from the Space ship's failed command module to fit round receptacles in the lunar module, which was being used as a lifeboat after an explosion en route to the moon. The lunar module CO<sub>2</sub> scrubbers started working again, saving the lives of the three astronauts on board. These two products inspired the saying in construction circles, "Only two tools required...if it should move and doesn't use WD-40; if it does move and shouldn't... use duct tape."

While visiting Kennedy Space Center we viewed many archived pictures detailing the evolution of space exploration and heard from the astronauts themselves via video... from the early cadre of the 1960s Mercury astronaut team to the those on the current roster of Neil Armstrong wannabes... explaining why they daily prepare themselves to be attached to the top of a literal bomb consisting of 3 million-plus pounds of solid rocket fuel and be jettisoned into outer space seeking new frontiers to conquer. Listening to each one speak I couldn't help reflect on stories read and movies watched on the lives of Columbus, de Soto, Magellan and the like. Brave men who refused to listen to the nay-sayers of their time who insisted the world was flat and that sure death awaited anyone who would dare sail too far in any one direction. The danger those men faced centuries ago pales in comparison to the threat of death our astronauts of today must face every time they strap themselves into the cockpit of a modern day space shuttle.

For you among us who rant that space exploration serves no purpose other than wasting billions of taxpayers' dollars sit down and list all the luxuries and "necessities" of your life today that you would be missing if we had decided not to enter the race into space. Also, think about and be thankful for the 24 American astronauts who have given their lives to bring us to where we are in technological advances that make our lives all the richer with the ancillary bonuses we receive. Maybe you should visit Kennedy Space Center yourself and become a believer in what these modern day explorer/heroes are accomplishing for the sake of all mankind?

#