Army astronauts in the Space Shuttle Program

By Mark Hubbs
SMDC/ARSTRAT Historical Office

In January 1978, NASA announced the selection of 35 new astronaut candidates for the Space Shuttle Program, the first chosen since 1969. This group included two new astronaut job titles, pilot and mission specialist. Included in this group was Maj. Robert L. Stewart, who would become the Army's first astronaut.

Stewart began a rigorous training and evaluation period at the Johnson Space Center in Houston for assignment to future space shuttle flight crews. After clearing this initial hurdle, Stewart became an astronaut in August 1979. Stewart, who held a Master of Science degree in Aerospace Engineering, emerged from the training as a mission specialist, responsible for shuttle operations in areas affecting shuttle experiment procedures. Mission specialists conducted space walks, handled payload and maintenance activities and other operations as needed. Mission specialist qualifications included an advanced degree in engineering, life, physical sciences or mathematics, along with specific age, physical and medical requirements.

On his initial mission in 1984, Stewart and another astronaut were the first to perform an untethered space walk using the manned maneuvering unit, or jet pack, on Space Shuttle *Challenger*. He also took part in a classified military mission in 1985. Altogether Stewart logged 289 hours in space. After he left the astronaut corps, he became a brigadier general and deputy commander of the U.S. Army Strategic Defense Command in Huntsville, Alabama, a predecessor to our current command.

In 1986, the Pentagon established the Military Man in Space program as part of Shuttle operations. The object of the program was to evaluate, through experiments proposed by each uniformed service, ways in which military operations on earth could be improved using space-related facilities and technologies. In 1987, the Army proposed experiments that would improve its war fighting capabilities. During the next six years Army astronauts would conduct several experiments that would determine if imagery taken from a space platform could detect targets from space or could evaluate terrain to make basic observations of ground targets, determine soil color, type, ground cover, and other terrain data. This type data could greatly enhance the Army's use of terrain for tactical movement and employment.

Courtesy Photo

Lt. Col. Robert L. Stewart using a jet pack during an untethered spacewalk on his 1984 mission.

Additionally, lessons learned from the site observations and direct communications between the Shuttle and ground sites were used to determine the Army's communications and observation requirements.

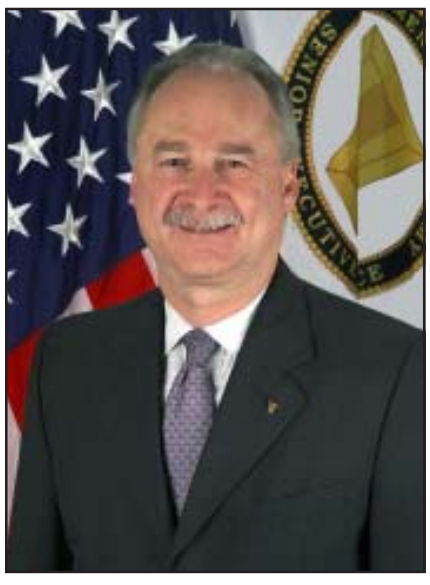
In 1987, as its participation in NASA burgeoned, the Army established an Army Astronaut Detachment at the Johnson Space Center. That same year, the Army formalized its relationship with NASA in a new MOU that governed the assignment of personnel at the astronaut detachment. In 1988, the unit fell under the control of the new U.S. Army Space Command, the Army's central organization for operational space support.

Army astronauts have continued to serve the Army and NASA and have participated in 23 NASA space flights. The most recent was Col. Jeffrey Williams who flew aboard a Russian Soyuz rocket, along with cosmonaut Pavel Vinogradov to the International Space Station on April 1 2006. Vinogradov, Expedition 13 commander, and Williams, NASA space station science officer and flight engineer, were the 13th International Space Station crew. The mission included over 65 scientific experiments (including some to test human reaction to prolonged space travel) and two successful spacewalks logging over 12 hours wearing both Russian and U.S. spacesuits. The Expedition 13 mis-sion concluded on Sept. 28, 2006 with a safe landing in the steppes of Kazakhstan. Col. Douglas Wheelock has been assigned to Space Shuttle Mission STS-120, which is expected to launch in August 2007.

The USASMDC/ARSTRAT Army Astronaut Detachment currently has five members who are stationed at the Johnson Space Center, Houston Texas.

Schexnayder: Ideas must be developed, cost effective

By Diane Schumacher
SMDC/ARSTRAT
Public Affairs



Michael Schexnayder

REDSTONE ARSENAL, Ala. — Michael C. Schexnayder, deputy to the commander [SMDC/ARSTRAT] for Research, Development and Acquisition, conducted a town hall meeting April 9, here, briefing about a possible reorganization of RDA.

Schexnayder opened the meeting by presenting an award to Tilden M. Clark, program security manager, SMDC/ARSTRAT, who, working with Maj. Nick T. Kioutas and Army Aviation and Missile Research Development and Engineering Center staff, was able to transition the Army Responsive Tactical Space documentation from AMRDEC to SMDC/ARSTRAT in record time — ahead of schedule. Schexnayder then invited Lt. Col. Robert J. Phillips, in the G-3 Strategy and Policy Division and Garfield Boon, deputy to the principal assistant responsible for contracting to come onto the stage. He presented a coin to each for their work on and presentation of the command briefing to Shaay Assad, director of defense procurement acquisition policy.

Schexnayder then quickly moved to discuss the possible reorganization of RDA.

"We're considering changing the organization," he said as he began the town hall meeting. He used slides and analogies throughout his presentation as ways to better explain his statements.

"The RDA organization is, well, pretty complex," said Schexnayder, as he displayed the first slide — an organizational chart of all centers, offices and units within SMDC/ARSTRAT.

In order to simplify RDA's organizational structure, "there's a study being conducted to realign organizations within RDA such as Integrated Capability Management, Joint Ventures, Command Analysis the and Technical Interoperability and Matrix Center. The new organization would be called Space and Missile Systems Center; no one has been identified as the director," Schexnayder said.

He added that the commanding general (Lt. Gen. Kevin T. Campbell) had not yet been

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