

New "Satellite" Tested

Satellite radio and weather balloons appear to be the future of combat communications for Marines on the ground, in the air and at sea.

Marines with the 11th Marine Expeditionary Unit coordinated with the I Marine Expeditionary Force Science and Technology department to test out the Combat SkySat System at the 21 area parade deck at Camp Pendleton, California, on October 24th.

Retired Marine Stephen Heywood, Science and Technology coordinator with I MEF G-7, said the Combat SkySat System has been proven effective by the 26th and 13th MEUs which used them while deployed.

The 11th MEU is slated to use the technology for the first time to support expeditionary operations during an upcoming Western Pacific deployment.

"Our colonel will be able to talk to troops on the ground and Marines flying aircraft simultaneously," Brown said. "You can't do that with any

other form of long-distance communication. A rifleman on the ground can now have a (radio) in his magazine pouch, kick down doors and be able to talk back to a ship more than 500 miles away."

According to Heywood, in order for Marines to use airborne communications, they used to have to put a transmitter in a military aircraft. This technique required aircraft to maintain a specific position in the air in order to sustain capability, which diverted assets from other vital missions and made the aircraft vulnerable to attack.

The Combat SkySat System, priced at \$10,000 per payload, consists of a 2500 gallon helium-filled latex balloon, the Combat SkySat Mil-UHF FM repeater, antenna and portable launch and control system to monitor the position and coverage area.



Lance Cpl. Kenneth W. Klotz, field radio operator with the 11th Marine Expeditionary Unit, does a radio check to test out the new Combat SkySat System at the 21 area parade deck at Camp Pendleton. The 11th MEU is slated to use the technology for the first time to support expeditionary operations during an upcoming Western Pacific deployment.



A latex helium-filled weather balloon and radio transmitting component from the Combat SkySat System floats tethered above the 21 area parade deck. When launched into the air and sustained at 65,000 to 100,000 feet, the system covers a range of 460 to 700 miles.

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Two payloads can cover most of Afghanistan. Because the system is so compact, it can be launched on a ship or on shore. Marines use a tether, unlike similar free-floating systems, which allows them to retrieve the unit, perform maintenance, refill the balloon with helium, or charge the battery. Each system can stay air-born for six to 12 hours and prevail against inclement weather.

"We can control how high we want it to go and how far we want it to cover," Brown said. "It's pretty cool." ❖

Story by Cpl. Jennifer Pirante