Wearable Device to Lighten Soldier Load

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A new wearable device hopes to deliver supplies to US Marines and soldiers on demand, instead of leaving members of the armed forces to carry supplies on their back.

The PCARD, or personal combat assistant and reporting device is a wearable electronic device smaller than a playing card and about as thick as a thumb, and is months away from being in the hands of Marines.

Staff Sgt. Alexander Long from the Marines is trying to bring wearable technology down to the fire team level with the hopes of streamlining logistics and having Marines carry only what they need, with "real-time" resupply a near future reality.

"The common problem is the warfighter is too heavy," he said. "We spend a lot of money just trying to make the equipment lighter. Units still go out with three days of supplies even if they're just walking a kilometer on patrol."

The device has basic options such as food, water and ammunition that an individual fire team member can submit when they need more of any of those items.

Squad leaders hold tablets, wirelessly connected to the smaller wearables. The information is funneled up to the platoon commander, who can make supply decisions quickly as Marines move in the field through operations.

According to marinecorpstimes.com, once in place, the commanders can forecast Marine resupply needs, Long hopes, to then deliver items when they're needed, where they're needed and in the right amount. Drones may eventually be used to deliver supplies.

A prototype of the device was tested this summer by undisclosed Marine units and is scheduled for further field testing at Camp Pendleton in October.

Marines in the field usually carry at least three days' worth of supplies, which can total a whopping 65 to 100 pounds, depending on situation and mission.

Long said much of that weight is consumables and hopes his project can reduce the overall carried weight by 33 percent.