OVERVIEW

The families of servicemen and women also serve this country, and deserve to be supported. This includes making the necessities of life easier to handle back on base. The U.S. Military recognizes this fact and devotes significant resources to Morale, Welfare and Recreational (MWR) support services.

Reliable broadband access is a prerequisite of modern living, and increasingly the onramp is wireless. Service families deserve easy, seamless connectivity as they live their lives on base, whether running errands, picking up the kids from school or going to the library. Wireless Local Area Networks (WLANs) have made dramatic leaps in performance over the past few years, and user expectations have risen as well. What was "good enough" a few years ago now often falls short for military families on base.

Limited staff and budgets are challenges in MWR networks. Some technology also dictates the type of network configuration that must be used, limiting deployment flexibility. Many of the current MWR networks are not delivering a high-quality experience—for either base end users or IT teams.

Ruckus technology delivers far more flexibility for implementation, from the switch all the way to the edge of the network. Unlike other manufacturers, smaller Ruckus deployments require no controller, and larger ones let the IT team decide whether to manage on-premises or via the cloud. MWR IT teams will appreciate the fact that hotels on average reduce the time spent troubleshooting connectivity issues by over 80 percent when they switch to Ruckus equipment.

Bases can be made "smart" via wireless networks with a speed and efficiency unheard of just a few years ago. In effect, a base is like a medium-sized city. Service families would have seamless coverage anywhere they went on base. Much of the infrastructure can be quickly and economically updated with the latest wireless technology, enabling new intelligent capabilities and solutions. One such usage is public safety video surveillance.

Wireless technology can support infrared motion detection video cameras to provide remote situational awareness. The system could also be integrated into a messaging system, allowing alerts to go directly to patrolman handheld devices.
The hospitality industry is a good way to see what the MWR user experience could be like. Hospitality is a very competitive industry, one in which user reviews can make or break a property. With people typically carrying multiple devices today, connectivity is a huge part of the overall travel experience. That's the reason 70 percent of the hospitality market—and 86 percent of the world's luxury properties—rely on Ruckus Networks for Wi-Fi technology.

Ruckus wireless access points with patented BeamFlex+ adaptive antenna technology optimize connections for each and every end user device. They automatically adapt for interference and other problems in real time, so service members and their families can use more devices, in more places, with the same great connection. Ruckus APs are 25–30 percent more efficient than other leading brands, meaning less complex networks with fewer overall APs can serve larger areas at lower costs.

TECHNOLOGY THAT MAKES A DIFFERENCE

**Stunning Wi-Fi Performance**
Provide a great user experience no matter how challenging the environment with BeamFlex+ adaptive antenna technology and a library of 4K+ directional antenna patterns.

**Serve More Devices**
Connect more devices simultaneously with four MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing non-Wave 2 device performance.

**Multiple Management Options**
Manage the R720 from the cloud, or with on-premises physical/virtual appliances.

**Get Optimal Throughput**
ChannelFly dynamic channel technology uses machine learning to automatically find the least congested channels. You always get the highest throughput the band can support.

**Better Mesh Networking**
Reduce expensive cabling, and complex mesh configurations by checking a box with SmartMesh wireless meshing technology to dynamically create self-forming, self-healing mesh networks.

**Expandable Capabilities**
Augment AP capabilities through the onboard USB 2.0 port to provide additional technologies like BLE.

**Deployment Flexibility**
Ruckus has an access point to meet any deployment scenario and/or performance requirement. Some of the more popular Ruckus Wi-Fi Access Points

- **Ruckus R730** Indoor 802.11ax 8x8:8 Wi-Fi AP with 5Gbps Backhaul
- **Ruckus R720** Indoor 802.11ac Wave 2 4x4:4 Wi-Fi AP with 2.5Gbps Backhaul
- **Ruckus T710** Outdoor 802.11ac Wave 2 4x4:4 Wi-Fi AP
- **Ruckus H510** Indoor wall-mounted 802.11ac Wave 2 Wi-Fi AP and 4 port switch
- **Ruckus C110** Indoor wall-mounted 802.11ac Wave 2 AP/switch/cable modem

The Fort Hunter Liggett “Cybrary” is a library and cyber café offering traditional library resources, high-performance gaming computers, and the only Makerspace in the 50-mile radius of post. It is also used to host many events servicing Soldiers, residents and the civilian workforce. Photo by FHL FMWR Marketing Director, Bryan Lee-Ruiz, identified by DVIDS.