

The TMQ-53: Enhancing Operations

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Most Combat Weather Teams are familiar with the AN/TMQ-53 Tactical Meteorological Observing System and its capabilities. From the feedback received by the Air Force Combat Weather Center, CWTs find the TMQ-53 to be an invaluable tool and many CWTs are using the system beyond its intended use.

Originally conceived to support sustained airfield operations in a deployed environment for limited periods of time, CWTs now use the TMQ-53 at drop zones, landing zones, and at bed-down sites. This has forced it to be set up and torn down many more times than ever anticipated. In other instances, TMQ-53s have been in place for extended periods of time. Under these unexpected wear and tear conditions, the instrument has performed very well; however, we believe we can squeeze even more out of the system.

For example, AFCWC is evaluating a satellite communications capability to allow AN/TMQ-53 deployment anywhere in the world. This capability would allow its operations without the limitations of the five-mile operational range of the radio modems that restricts placement of the sensors. A SATCOM solution could allow a CWT to place the AN/TMQ-53 at an LZ on a remote ridgeline, receive the data and remotely provide accurate weather to any team dropping into that LZ.

Additionally, AFCWC is evaluating alternatives like the AN/TMQ-53P, essentially a pole-mounted AN/TMQ-53.



Photo by Staff Sgt. Scottie McCord

Tech. Sgt. Ron Richards, an Air Force Combat Weather Center technician, checks readings on a TMQ-53 display pad.

While most CWTs are slated to receive the state-of-the-art fixed base automated observing equipment, the FMQ-19, the fielding plan does not provide for FMQ-19s at every observing location.

The P-model is being considered for installation at non-Category I/II airfields, ranges, and LZs; i.e., those locations that may not receive an FMQ-19. The P-model uses many of the same sensors as the TMQ-53 and provides the

same data, but is also built to withstand continuous operation, unlike the standard unit.

In-garrison and deployed, whether supporting a semi-permanent location such as Tuzla Main, LZs in the Afghanistan or hopping with your brigade in support of Operation IRAQI FREEDOM, the AN/TMQ-53 gets the job done. AFCWC will continue to improve the system for your operational needs. ♣