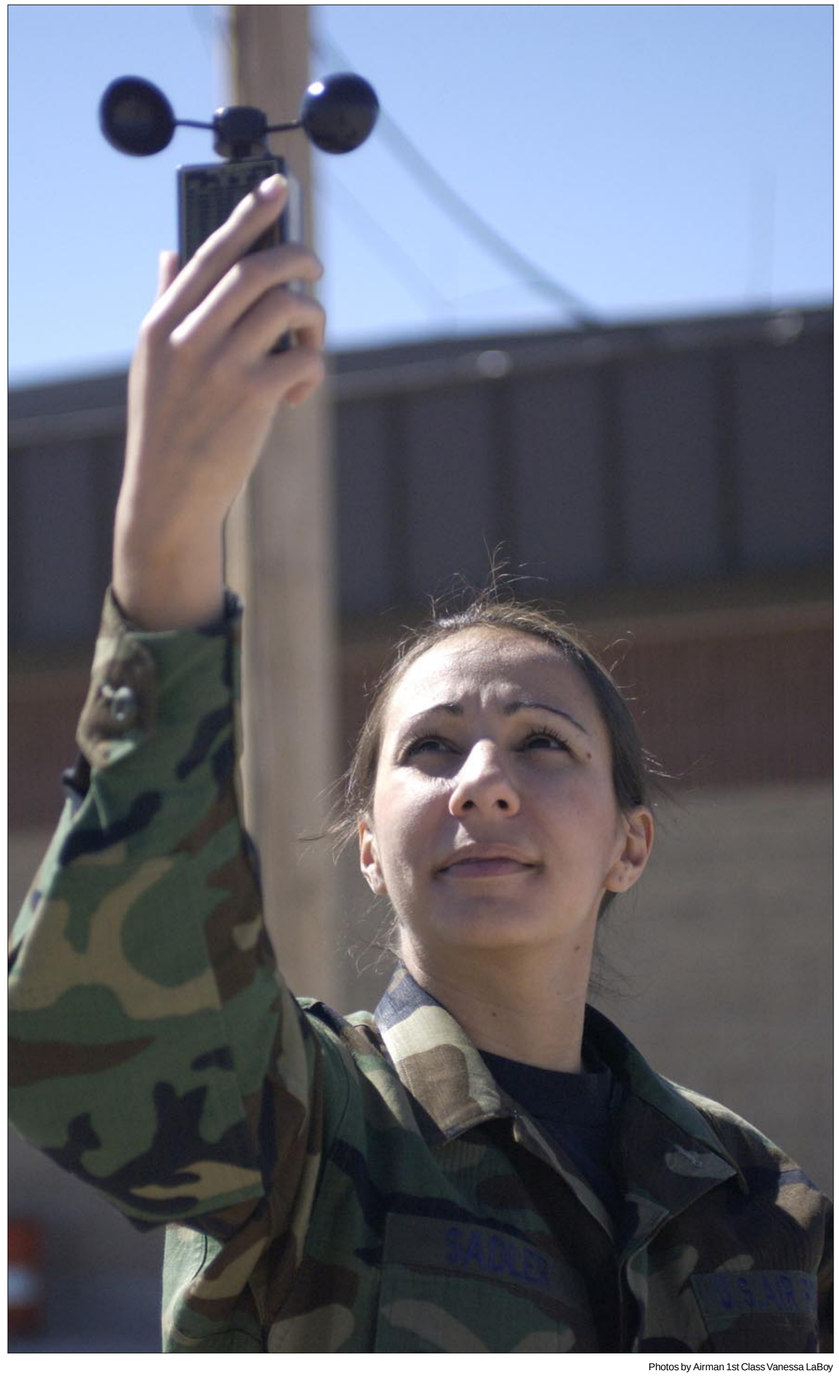

Photos by Airman 1st Class Vanessa LaBoy

Staff Sgt. Emili Saddler measures wind speed with an anemometer.

Dangerous SKIES

Weather Flight helps protect Holloman from the elements

by Airman 1st Class Vanessa LaBoy
49th Fighter Wing Public Affairs

In our area, most people can look outside and predict rain or shine, but for the 49th Operations Support Squadron weather flight their job is not just about predicting Holloman's five-day forecasts, it's all about the flying.

"Our most important job is to supply weather support for Holloman and the surrounding air space to protect Air Force lives and resources," said Staff Sgt. Emili Saddler, 49th OSS weather forecaster.

The combat weather team is a tight-knit group of people who work together to provide flying squadrons with timely and accurate information.

"Every forecaster in our weather flight is essential to squadrons completing missions," said Airman 1st Class Michael Funk, 49th OSS weather forecaster. "In the combat weather team we have positions to provide briefings to air crews, compile the mission execution forecasts and observe the current conditions."

Every day the weather flight provides all of the squadrons with specific weather briefings tailored to flying missions.

"First we observe the current conditions from Davis-Monthan Air Force Base, Ariz. regional weather hub for a forecast and a 24-hour weather prediction," Saddler said. "Based on that information, we provide cross-country weather briefings and about seven to eight MEFs a day. These packages and briefings give the mission planners an idea of weather conditions throughout the local flying area."

Airman Anthony Carvalho points out wind velocity movement to Staff Sgt. Joel Rybarczyk on a NEXRAD Weather Surveillance Radar 88.

Airman 1st Class Michael Funk briefs forecasters on weather patterns.

Predicting the weather at Holloman may seem like a breeze, but the base does receive some unpredictable weather, as seen this past winter.

"We must take into account everything we know of the local area's effects and the different dynamics of the weather system to try and best understand what will happen on our base and in our local flying area," Funk said.

Using this concept, forecasters have an idea of what type of weather to expect in the area at different times of the year.

"The climate of the area does make it easier to know what to look for," Funk said. "We know in the spring, winds cause reduction in visibility due to blowing sand. Also, flying debris, turbulence, wind shear and runway crosswinds can all become a concern when reporting MEFs."

Due to the Mexican monsoon, Funk said, the summer typically will bring mountain-induced thunderstorms. Thunderstorms can produce dangerous lightning, high winds known as downburst, and microbursts, and possibly even hail.

"The fall and winter are calmer months for this area," Funk said. "The previous winter was a little wetter than normal and we got a measurable amount of snow due to an El Nino event in the South Pacific Ocean."

According to Funk, the hardest aspect of the job comes when weather systems don't follow common patterns. Forecasters use advanced equipment to help them determine current and future weather conditions.

"There are computer models used today that use current weather conditions and movement of weather systems to mathematically compute the weather for an area, " said Funk. "We also use satellite and radar pictures to help us determine the movement and intensity of weather systems."

According to Funk, one of the most important things a forecaster can use is the information from a weather balloon. Information may be gathered during the vertical ascent of the balloon through the atmosphere or during its motions once it has reached a predetermined maximum altitude.

But an airman can't just jump into a weather forecasting job.

Before a person is able to forecast weather using this equipment as part of a combat weather team, they must go through at least 10 months of training.

After basic training, an airman attends a forecaster apprentice course at Keesler Air Force Base, Miss. for about six months. After completing this course, the apprentice goes to a regional weather hub for another four months of training. Following all 10 months of technical training, they will receive two years of on-the-job training at a hub or be assigned to a combat weather team.

There are also many supplemental courses for weather forecasters to take throughout their career, such as a radar course and a tropical weather course.

"At our combat weather team, we pride ourselves on giving the customer the best product and service we possible can," said Staff Sgt. Joel Rybarczyk, 49th OSS weather forecaster. "With the type of missions that go on here at Holloman, weather information is essential. We have to have the best personnel to do the job, and we do."

Team Holloman can access the latest in weather updates for the surrounding areas at *https://ops.holloman.af.mil/wx/brief.html.*

Airman Anthony Carvalho checks the temperature and wet bulb temperature with a sling psychrometer.

Senior Airman Melissa Tinoco checks connections on the VSAT.