1. INTRODUCTION

The US Air Force (AF) provides operational weather support to the US Army. Air Force combat weather teams (CWTs) are stationed with most major Army combat units. AF CWTs use several pieces of equipment to receive, process, and transmit weather intelligence to supported Army and AF warfighting units. One weather processing system used by the CWT is called the Integrated Meteorological System, or IMETS. IMETS comes in three versions; the vehicle-mounted version shown at Figure 1, a “light” version based on a highly portable laptop computer, and a command post version. AF weather (AFW) and Army personnel receive training on the IMETS, in several different forms, all managed under one overarching institution known as the “IMETS University.”

2. SHARED MANAGEMENT

The development and delivery of educational content for the IMETS University is managed by a joint team of Army and Air Force agencies. The overall responsibility for the training program rests with the Program Director for the IMETS (PD-IMETS), headquartered at the Army Research Laboratory at White Sands Missile Range, NM. PD-IMETS is responsible for successful development, fielding, and user training of the IMETS. Since the operators of the IMETS are Air Force weather personnel, two AF agencies assist in the development and execution of IMETS training: the AF Combat Weather Center (AFCWC), Hurlburt Field, FL, and the Training Division of the Air Force Weather Agency (AFWA) at Offutt AFB, NE. The training for the maintenance personnel who sustain the IMETS during its life cycle is managed by the Army’s Battle Command Training Team (BCTT), Fort Leavenworth, KS. Representatives from all these agencies maintain close cooperation and collaboration on the training program through regular IMETS training team meetings.

As mentioned above, IMETS University is composed of several different but related training programs. The need for several different training programs stems from the way the IMETS is fielded to operational units and the joint nature of the IMETS system.

3. NEW EQUIPMENT TRAINING

When a new IMETS is first fielded to a CWT, the first type of training, the New Equipment Training (NET), is provided. When the CWT receives its IMETS, the NET Team (NETT) goes to the location of the CWT to provide training. The NETT conducts a three-week course (two weeks for operator, one week for system administrator / information systems security officer, and a one-week course for IMETS maintainers) at the CWT’s location. These NET courses may be conducted simultaneously, but the total NET time will not exceed four weeks. The NETT will provide both individual training and crew training exercises. The IMETS NETT consists of two trained Air Force personnel from the AFCWC augmented by civilian contractor instructors, and two trained Army personnel from the BCTT at Fort Leavenworth, KS. The NETT uses student handouts and operator-level lesson plans that were developed by PD-IMETS. The NETT trains the AFW operators and Army maintainers on the IMETS system. After NET is completed, the AF CWT periodically reviews the training information using a digital (CDROM and online) training package for sustainment training. Supplemental training material is maintained at the AFCWC and AFWA and can be accessed via the Internet.
4. FORMAL TRAINING

The second form of IMETS training is the IMETS Training Course. This formal training course uses training material nearly identical to that used in the NET. The formal course is taught away from the CWT location by a team of IMETS trainers. Several locations have been used; the Central Technical Support Facility at Fort Hood, TX; the US Army Intelligence Center and School (USAICS), Fort Huachuca, AZ; and contractor facilities near Seattle, WA.

Two reasons for using this formal course are: 1) new training for IMETS-equipped CWTs when a major new version of IMETS software is released, and 2) AFW or Army maintainer personnel arrive at an IMETS-equipped CWT after the unit has already received NET.

5. JUST IN TIME TRAINING

IMETS University also includes "just-in-time training," or JIT. JIT is taught mainly at the AFCWC. AFCWC operates a classroom with four IMETS, has a staff of several instructors. AFCWC can provide a four-day course of IMETS instruction to AF weather personnel who are enroute to an Army support assignment, or to a deployment location. Frequently the AFCWC responds to this JIT requirement on a short- or no-notice basis.

6. DISTANCE TRAINING

A recent addition to IMETS training is a new distance-learning initiative. PD-IMETS has developed a beta version of a computer-based training program that will be provided to all AF CWTs that operate IMETS, to be used as refresher or recurring training after NET is completed.
7. STAFF WEATHER OFFICER COURSE

The last form of IMETS training is a week-long block of IMETS instruction presented during the Army Staff Weather Officer (SWO) Course at USAICS. AFW personnel attending the SWO Course are usually enroute from their first operational AF tour to an assignment supporting the Army. Because they have likely missed their CWT’s NET, SWO Course attendees receive a condensed version of the IMETS training provided in the NET course.

In addition to the week of classroom training, the SWO Course attendees get hand-on experience setting up and operating a vehicle-mounted IMETS under field conditions. Finally, the SWO Course provides hands-on practical experience using the IMETS in simulated combat conditions. AFW students participate in a three-day, two-night integrated command post exercise with Army intelligence officers. The exercise provides valuable cross-service training as AF weather personnel learn how the Army incorporates weather intelligence, and Army intelligence personnel see how the AF weather teams use the IMETS to provide weather intelligence to improve the Army commanders’ military decision-making process.

8. OTHER TRAINING

There is a new initiative underway at the USAICS to provide limited introductory IMETS instruction to Army intelligence students. USAICS is developing an Intelligence Training Center (ITC), which will host simulated intelligence-based combat exercises. Plans include all current and future intelligence processing systems including the IMETS. Preliminary plans have IMETS University providing a three-hour block of IMETS instruction at the ITC during every one of the thirty-plus intelligence classes currently taught at USAICS.

9. CONCLUSION.

As long as there is an Army-provided weather information system operated by AF weather personnel, there will be a requirement to train AF weather personnel on how to operate that system. The IMETS team is anticipating the training needs of the CWT of the future, when there will be a single integrated weather processing system used at both Army and Air Force locations. Plans are being drafted today to provide an effective training program to satisfy those future needs.

IMETS University programs are jointly supported by the Army’s Program Manager for Intelligence Effects and by the Air Force Director of Weather.