

# THE NEW AIR FORCE AND ARMY STAFF WEATHER OFFICER COURSE: EXPANDED WEATHER TRAINING FOR JOINT OPERATIONS

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## 1. INTRODUCTION

Since 1947, the U.S. Air Force (USAF) has provided operational weather support to the U.S. Army. Air Force (AF) combat weather teams (CWTs) are stationed with most major Army units, such as the 3rd Infantry Division at Fort Stewart, GA, the 1st Armored Division at Wiesbaden, Germany, and the 8th US Army in Korea. The combat missions of the US Army are different from those of the US Air Force. This requires Air Force weather (AFW) personnel at Army locations to use different processes to provide effective weather support. They must be trained to work in the Army environment (in-garrison and deployed in the field), which is different than working in a more familiar Air Force environment. In fact, the very survival of an AFW CWT can depend upon how well the CWT knows and uses Army combat field skills.

For more than ten years AFW personnel supporting the Army have received "Army" training via a Staff Weather Officer (SWO) Course. The previous version of the SWO Course was designed for officers and senior enlisted personnel. That course focused mainly on higher-level policy, doctrine, and organizational issues, and not on practical field skills. Combat field skills were taught by AF and Army personnel to newly-assigned person after arrival at an Army support assignment.

Two factors about US combat operations in recent years have brought about changes in the way weather personnel are trained. First, US combat operations are increasingly

more "joint," that is, a combat force consists of forces from at least two, and usually all services; Army, Air Force, Navy and Marines. The two Gulf Wars were executed with forces from all US services, closely integrated with forces from several allied nations. The second factor is the increasing operational deployment of personnel away from the home station, combined with smaller numbers of weather personnel assigned at CWTs. The impact on training caused by these two factors is that many AFW personnel were not receiving the correct type of weather training, nor were they receiving training in critical combat field skills. Air Force weather and Army leadership acknowledged this deficiency in training, and that it could not be easily satisfied using existing training programs at home station locations.

## 2. REQUIREMENTS

In 2001 staffs at the US Army Intelligence Center (USAIC), the Headquarters Army Deputy Chief of Staff for Intelligence (HQDA G-2), and the AF Director of Weather (AF/XOW) began a process to find a solution for the training deficiency. The first step was to find out exactly what was the training requirement.

The SWO Course working group developed a survey (partially shown at Fig. 1) listing numerous tasks and skills that must be mastered by weather personnel supporting Army operations. The survey asked Army officers to prioritize how important were the tasks and skills for accomplishing the Army units' mission. The survey was sent from

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the office of the commanding general, USAIC, to intelligence officers of major Army units having AFW CWTs assigned. The intelligence officers completed the

surveys, the working group summarized the results and reported the initial findings (Fig. 2) to the leadership of AF/XOW and HQDA G-2.

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[...] To help establish the requirements for the course, we ask the G2s to answer a few short questions below by rating them from 1 (most needed) to 5 (not required).

**PRIORITIES:**

FOR THE QUESTIONS BELOW, USE THE FOLLOWING RATINGS FOR EACH QUESTION:

**1 – Essential:** Must be proficient and have complete understanding before AF personnel arrive at their first Army assignment.

**2 - Required:** Must have first time, hands-on experience and general orientation to capability on which AF personnel can build proficiency at first Army assignment.

**3 - Valuable:** Basic capability to operate equipment or understand Army processes is needed, but can be easily supplemented through G2 integration of CWT into routine MI/G2/S2 unit training at the first Army assignment..

**4 - Nice to Have:** Familiarity would be good, but capability or understanding of Army procedures can be learned quickly and easily once assigned to the first Army unit by the G2 integrating the CWT into MI/G2/S2 unit training.

**5 - Not Required:** The MI/G2/S2 does not teach this skill to its soldiers, and AF will learn it easily by going to the field or operating in the organization's TOC environment.

**QUESTIONS:**

\_\_\_\_\_ a. Living and operating in the Field: Using/maintaining CTA-50 gear, site preparation, erecting tents, camouflage, field hygiene, light and sound discipline, TOC configuration, OPSEC procedures.

\_\_\_\_\_ b. Perimeter defense, Constructing hasty fighting positions, React to ambush, Unexploded ordinance identification

\_\_\_\_\_ c. Weapons familiarization training (M-16), Chemical Defense

\_\_\_\_\_ d. SINCGARS, COMSEC operations, ABCS/ATCCS connectivity

\_\_\_\_\_ e. Vehicle license/operations, PMCS, generators, and other MTOE operations

\_\_\_\_\_ f. Land navigation, UTM/MGRS maps, ground proofing, convoy procedures, vehicle night movement/operations, NVGs

\_\_\_\_\_ g. Army symbology, Army terms, OPORDs/OPLANs, Staff organization, IPB, MDMP, BFAs/BOSs

\_\_\_\_\_ h. Staff coordination procedures, TOC operations, Planning cells, Key functions affected by weather, weather effects on unit weapon systems, personnel, planning, and execution, coordination of weather communications with G6 (OPLAN annex K)

\_\_\_\_\_ i. Army culture, unit tactical standard operational procedures (TSOPs), split base support, Supply and Property Book system

[...]

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**Figure 1. Partial survey of tasks, skills, and priorities**

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# Army Weather Support Training Priorities

## Priority 1 - Mission skills

- Install and Operate IMETS equipment in TOC field environment
- Camouflage personnel, vehicles, & equipment
- Operate SINCGARS
- Understand Army COMSEC procedures
- Operate generator (familiarization)

## Priority 2 - Mission environment

- Conduct map reading & land navigation/operate GPS/PLGR
- PMCS vehicles (familiarization)
- Participate in convoy movement
- Apply noise/light discipline in a field environment
- Participate in perimeter defense

## Priority 3 - Personal skills

- Assemble, maintain, and wear field gear
- React to ambush
- Practice field safety/hygiene
- Operate field heater (familiarization)

Figure 2. Initial results from training priorities survey

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### 3. RECOMMENDED SOLUTION

Armed with the results from the survey the working group developed several candidate solutions for satisfying the training requirement.

The option most favored by all participants was to extend the existing SWO Course at the USAIC, Fort Huachuca AZ. The working group worked with training personnel to develop individual training modules for the top priority tasks, duties, and skills. These modules were then integrated into a coherent curriculum. The Army and AF leadership committed resources for a four-week course, so the working group included those top-priority lessons that fit within the time constraint (Fig. 3). Two key components of the new expanded course are the field skills training (FST) exercise and the integrated intelligence training (Capstone) exercise.

The FST takes the class outdoors to a special training range on Fort Huachuca. A team of Army and AF instructors provides hands-on training on practical skills and tasks during the three-day, two-night exercise.

The Capstone exercise brings the SWO Course students into four simulated tactical operations centers. The AF students put to practical use the concepts they've learned during the course, as they work side by side with Army intelligence students. The objective of the Capstone is to simulate three days of combat operations conducted in near-field conditions. Instructors provide a realistic scenario and the intel and weather students develop intel and weather information to support execution of the battle plan. Army and AF students interact closely and learn about how each can help the other produce a greater contribution for the commander.

## Expanded SWO Course Schedule

(20 Days + 4 Nights)

### Army Organization, Systems, Doctrine (6 days)

In Processing Army Org & BOS's	Army Org./BOS's; G2 Org.; Role of the WO; Weather Sources/Army Weather Policy & Doctrine; UAV Overview	Army Ops & Tactics; MDMP; Intel Cycle & IPB; Coll. Mgmt.; Targeting	IPB Practical Exercise	MDMP COA P.E.
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### IMETS Operator Training (7 days)

ABCS/ASAS overview IMETS Operator Tng	<b>Integrated Meteorological System (IMETS) Operator Training</b>			
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### Field Skills Training (3 days, 2 nights)

SINCGARS; Army Supply; draw equip. & TA-50; Pace Count; Troop Leading Procedures/Convoy Plan PMCS; Day Convoy; Establish TOC/ Defense; Install IMETS	Gen. & Htr. Ops & Safety; Map Reading/Resection; GPS PLUGR; Land Nav/Terrain/Tactics PE; Land Nav night PE; Relocate TOC at night	Relocate TOC-day/convoy/ React to Ambush/PMCS/Army Supply PE (recovery)
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### Integrated Intelligence Training (4 days, 2 nights)

<b>Integrated Intel Training (Capstone Event)</b>			Graduation Out Processing
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Figure 3. SWO Course schedule

#### 4. IMPLEMENTATION

Resources were committed by Army and Air Force leadership to host the course at USAIC, Fort Huachuca, eight times each year. Facilities were developed to handle a maximum of 15 students during each course, so a maximum of 120 personnel could receive the training each year. The first course was scheduled for FY 2004 (October 2003).

To ensure that the course design adequately accomplished the training goals, a pilot course was offered during August 2003. Experienced Army support veterans were invited to participate in the pilot course, with the expectation that they would "fine-tune" the content and delivery of the lessons. Daily "hotwashes" were conducted throughout the pilot course to capture

suggested improvements. A sample of the feedback form appears at Figure 4. Overall, the pilot course attendees were favorably impressed with the content and delivery of the course, and acknowledged the value provided by the new training. The original course design was slightly modified for subsequent offerings.

At the time of this writing the pilot course and one regular course have been completed, with more than 20 students receiving the training. Feedback from students indicates satisfaction with the content and delivery of the course.

#### 5. FUTURE PLANS

Plans for the future include technology upgrades to keep pace with the equipment used by field units, and a survey of AFW

and Army leadership at the units receiving the students from the course. That survey will gauge how well the SWO Course training prepared the SWO Course student to assume CWT duties immediately after arriving at the new duty station. Feedback

from this survey will be used to further improve future offerings of the course.

The expanded SWO Course is funded jointly by the US Army Intelligence Center and by the Air Force Director of Weather.

PILOT SWO COURSE DAILY AFTER ACTION REPORT						
DAY 4	7-Aug		CLASS LEADER: MSgt ABCDEFG XXX-YYYY ext ZZZ			
<b>Question 1</b> Was the training environment appropriate?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5		Overall
0	0	0	3	7		4.75
Comments: xxx						
<b>Question 2</b> Was the training meaningful?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5		Overall
0	0	2	3	5		4.3
Comments: xxx						
<b>Question 3</b> Were student handouts appropriate?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5	N/A	Overall
0	0	1	2	5	2	4.5
Comments: xxx						
<b>Question 4</b> Was the instructor knowledgeable and able to answer questions?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5		Overall
0	0	2	4	4		4.25
Comments:						
<b>Question 5</b> Did the instruction follow a logical sequence?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5		Overall
0	0	4	4	2		4
Comments: xxx						
<b>Question 6</b> Did the course provide enough hands-on training?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5	N/A	Overall
0	0	0	3	7		4.7
Comments: xxx						
<b>Question 7</b> Was the training too long?						
		Y	N			Overall
		2	8			N
Comments: xxx						
<b>Question 8</b> Was the training too short?						
		Y	N			Overall
		0	10			N
Comments: xxx						
<b>Question 9</b> Were there adequate supplies for training?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5		Overall
0	0	0	3	7		4.75
Comments: xxx						
<b>Question 10</b> Is the instruction appropriate and useful for AF Wx students with no prior Army experience?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5	N/A	Overall
0	0	0	4	5	1	4.75
Comments: xxx						
<b>Question 11</b> Which part of the instruction did you find most valuable?						
Comments: xxx						
<b>Question 12</b> Which part of the instruction would you modify and how?						
Comments: xxx						
<b>Question 13</b> What was today's instructions overall rating?						
Poor 1	Fair 2	Good 3	Outstanding 4	Excellent 5		Overall
0	0	2	4	4		4.25
Comments: xxx						

Figure 4. Sample daily course evaluation form