

SAYLOR CREEK RANGE

So far the mission has been a breeze. The Electronic Warfare Officer (EWO) informs the pilot that the target area is 30 seconds away. Suddenly, the EWO notices ground based radar tracking their progress. Could this threat be real? Does it mean that a surface to air missile (SAM) is homing in on the EF-111?"

This time, no; the antagonist on the ground is none other than personnel stationed at Mountain Home Air Force Base, Idaho, : Derating terminal threats from the Saylor Creek Electronic Combat Range. This 117 person unit, formerly based at Gila Bend, Arizona, has been operational at Mountain Home AFB since November 1982. Its primary mission is to develop, operate, and maintain a simulated hostile electronic threat environment for the training of tactical aircrews.

The unit accomplishes the mission by situating terminal threats on their permanent facility at Saylor Creek in southern Idaho collocated with the bombing and gunnery range. In addition they regularly deploy to locations throughout the western United States and Canada during composite force training, joint exercises and other activities that require simulated hostile air defenses. The unit forms a mini enemy integrated air defense systems (IADS) with simulated anti-aircraft artillery (AAA), acquisition, height finder, and surveillance radars. Aircrews can expect to see a little of everything as they fly in close proximity to Saylor Creek range.

The success of the unit is largely due to the initiative and hands on efforts of its personnel. Major T. G. Bender, the commanding officer, described the process of relocating the ECR at Mt. Home as a gigantic "do-it-yourself project." The first home for the ECR at Mt. Home was a strip of tarmac and the personnel operated from trailers (after first organizing, emplacing, and refurbishing them). Now the effort is located in more permanent quarters as they await completion of a new building scheduled for mid '84.

Performing the electronic combat range (ECR) mission is demanding at Saylor Creek, but the real work begins when the unit takes its show on the road approximately nine months of the year, battling frigid cold in winter and scorching heat in summer, while traveling to various exercises in California, Utah, New Mexico, Arizona, Kansas and Cold Lake, Canada. Deployments represent the prime mission. The effort in the field is to acquire and, if possible, lock-on "hostile aircraft." The aircrews resist these tracking attempts by terrain masking, jinking and the use of electronic counter measures (ECM). The Saylor Creek team undertakes the role of the enemy and seeks to block opposing aircraft by its simulated air defense system.

Virtually any aircraft with a radar warning receiver (RWR) can receive training from the unit. Threat emitters transmit signals which represent the actual enemy threat, thus producing an appropriate indication on the radar warning receiver. Aircrews participate in a variety of training, ranging from basic radar warning receiver familiarization and ECM equipment operation to multi-threat combat tactics and realistic combat scenarios.

At the present time, the majority of the ECR operation consists of presenting the aircrews with threat indications and then observing their defensive maneuvering and response jamming. Although effectiveness of ECM cannot be analyzed and evaluated at Saylor Creek at present, with the addition of the

unique mission of the EF-111 Raven, the ECR will be obtaining new equipment designed specifically for EF-111 support. In the near future, the Saylor Creek ECR will be able to conduct complicated EF-111 evaluation and operate a fully developed Electronic Warfare Evaluation Program near Grasmere, Idaho. EF-111 evaluation requirements rail for a mixture of early warning acquisition (ACQ), ground Control intercept (GCI), height finder (HF), and terminal threat radars. A total of 60 radar signals from three different azimuths is needed to meet this requirement. So far the ECR only begins to challenge the sophisticated systems of the EF-111 or its aircrew capabilities, according to Maj. Bender. To alleviate this problem, three multiple threat emitter systems are scheduled for delivery at separate locations in southern Idaho, one to Mountain Home AFB, another to Saylor Creek Range, and the last one to Grasmere, Idaho. These highly technical multiple emitting systems together with existing radar assets will stimulate responses from the EF-111A ALQ-99/ALR-62 system. A MSR-T4 analyzer will be used in conjunction with the multiple emitting systems to measure the appropriateness of the jamming response, thus providing a valuable feedback to the aircrew.

The Ravens will not be the only ones to benefit when a fully operational EWEP program is available, it will provide an opportunity for all 12th Air Force RWR/ECM equipped aircraft to be evaluated. Such a program will test the operational status of electronic warfare equipment; assess the knowledge level of the aircrews; identify deficiencies in electronic warfare equipment and provide aircrews with training experience in a dense, simulated enemy terminal threat environment.

The major changes in line for the Electronic Combat Range at Mountain Home AFB ensure that they will continue to offer and improve electronic combat training at Saylor Creek Range and at deployed locations throughout the United States and Canada. The upgrading of the ECR complex will support advanced EF-111 techniques and training requirements and support the system's continuous growth in electronic warfare including exercises such as Maple Flag and those involving US Central Command (USCENTCOM) and the 12th Air Force.

LINEAGE

STATIONS

DEPLOYED STATIONS

ASSIGNMENTS

ATTACHMENTS

WEAPON SYSTEMS

ASSIGNED AIRCRAFT SERIAL NUMBERS

ASSIGNED AIRCRAFT TAIL/BASE CODES

UNIT COLORS

COMMANDERS

HONORS

Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

EMBLEM

EMBLEM SIGNIFICANCE

MOTTO

NICKNAME

OPERATIONS