# Ammo maintains muscle behind Wolf Pack might

*By Master Sgt. Michael Casados*
*8th Fighter Wing Public Affairs*

AIM-9 Sidewinders, AIM-120 AMRAAMs, AGM-88 HARM missiles, laser-guided bombs, heat-seekers, conventional munitions. These words make up the lingo spoken by the weapons experts working in every facility owned by the 8th Maintenance Squadron munitions flight.

To help defend Kunsan Air Base from the enemy and take the fight North, the flight must keep up with all weapon upgrades and time compliance technical orders directing various modifications.

In January 2000, a TCTO was issued directing an upgrade of the AGM-88 missile software. The task to upgrade the anti-radiation missile, designed to take out enemy radar sites such as the ones found next to surface-to-air missiles, became the responsibility of the precision guided munitions element.

To comply with the TCTO upgrade, Tech. Sgt. Finis Martin, 8th MXS precision guided munitions assistant element chief, and other members of his section use a test set which resembles a green briefcase full of electronics and a keyboard.

"When the TCTO was first released, it was designed to upgrade the missile directly through its missile container while the missile was in storage. It's a lot easier to perform the TCTO upgrade at the storage facility instead of having to bring the missile to the maintenance facility," said Martin. "However, it didn't quite work out that way."

"The problem we found after initially trying to upgrade the missile software [in the storage facility] is that some missiles didn't accept the software. The test set Y-cable didn't interface correctly with some of the missiles," said Martin.

Because of this intermittent problem, Martin said some of the missiles are brought from storage into his maintenance facility for the upgrade. In the facility, members of his section can successfully perform the upgrade by linking the AN/GSM-396 Guided Missile Launcher Test Set to the AGM-88 missile by using a specially made Y-cable adapter. After a few keystrokes on the test set keyboard, they can download the new software stored in the test set into the missile's computer.

"The culprit is not always the Y-cable," said Martin. "In some cases it's the guidance section of the missile that causes the missile to reject the software."

According to Martin, the AGM-88 missile came off the initial tasking order recently and is no longer the primary weapon to be loaded onto the F-16 should we go to war. Instead, the air intercept missile AIM-9 and the Aim-120 will probably be the first weapons used, he said.

Photos by Master Sgt. Michael Casados

**Technical Sgt. Finis Martin, 8th Maintenance Squadron precision guided munitions assistant element chief, carefully removes a small panel to access a cable connector jack on the AGM-88 missile computer to upgrade it's software.**

**Martin enters commands on a keyboard to configure the missile test set to download the latest software. The upgrade will enhance the anti-radar capability of the AGM-88 missile.**

"The [AGM-88] missile could return to ITO status in the future, but for now it will be reserved for follow-on forces," said Martin.

The PGM maintenance shop is only one of 11 elements in the ammo team. The other ten elements are just as critical to the wing's ability to defend the base. Among these elements is the 23-member strong conventional maintenance section where Airman 1st Class Jared Lloyd-Jones, a conventional maintenance crewmember, works.

Lloyd-Jones said his element is responsible for most of the conventional weapons.

"We build the bombs, assemble them, inspect and load them onto trailers," said Lloyd-Jones. "We also handle small munitions such as the 20 mm ammo used by the F-16 guns. We also work with counter-measures material such as chaff and flares."

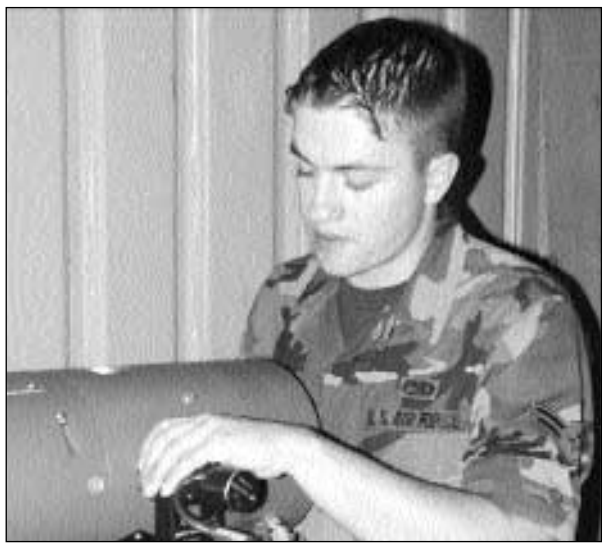
Lloyd-Jones also said his shop recently became responsible for the guided weapons [smart bombs] as well.

"We switched from unguided munitions to guided munitions in June after a change in the ITO," he said.

Unlike the munitions handling element that is responsible for delivering the readied weapons to the aircraft, Lloyd-Jones said his section processes the ammo for the line-delivery folks by loading it on the Universal Ammunition Loading System. The UALS contains the ammo and makes it easier to manage and transport it.

The role the entire munitions flight plays in contributing to the Wolf Pack's mission is absolutely critical, and the supervisors, crew chiefs and crewmembers within each element realize this and feel a great sense of satisfaction.

"This is one of the best jobs you can have in the Air Force. Ammo has a tight-knit group of people," said Lloyd-Jones.



**Airman 1st Class Jared Lloyd-Jones, 8th Maintenance Squadron conventional maintenance crewmember, demonstrates how to set-up the missile test equipment to perform maintenance or upgrades to the guidance section of a laser-guided bomb.**