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B-1B weapons school makes live JDAM drops

ELLSWORTH AIR FORCE BASE, S.D. (ACCNS) - The B-1B Division of the U.S. Air Force Weapons School at Nellis AFB, Nev., ushered in a new era of combat capability Oct. 4 and 5 with the first live release of GBU-31 Joint Direct Attack Munitions during school syllabus training.

The GBU-31 allows the B-1B to hold at risk a wider variety of target sets to include some hardened targets such as bunkers and hardened aircraft shelters. It's an all-weather, launch-and-leave, global positioning system-aided munition, providing the B-1B with an advertised "near precision" accuracy of 13 meters or less.

"Incorporating GBU-31 training during the current class marks the first time we've been able to expose students to a new weapon system before it makes its operational debut throughout the B-1B community," said Lt. Col. Dan Walker, B-1B Division commander at Ellsworth.

"Graduates from this class will take this invaluable experience back to their units where, as new weapons officers, they'll be relied upon heavily as GBU-31 employment experts. Many of them will also become their unit's initial instructors for the B-1B's Block D conversion," Walker added.

The training flight on Oct. 4 consisted of a B-1B launching from Ellsworth and dropping a GBU-31 at the Nellis Range Complex. The training flight on Oct. 5 consisted of two B-1B's from Ellsworth dropping GBU-31s at the same location. A total of seven weapons were delivered over the two days.

During these missions, students were tasked to deliver live GBU-31s in two different release modes against simulated munitions bunkers on the range.

After the live drop, students then reloaded simulated munitions and exercised an improved "self-targeting" mode of the radar to derive targeting information which they then used to dynamically re-target GBU-31s against previously non-surveyed targets.

"The results from both days were outstanding with average miss distances of just over 10 feet," Walker said. "In reality, previous test flights, as well as the Oct. 4 and 5 flights, have consistently demonstrated accuracy within 15 feet."

He added that such accuracy greatly reduces collateral damage and makes it possible to destroy targets with fewer bombs delivered by fewer aircraft. Furthermore, it reduces the number of aircrews having to fly into harm's way to accomplish their missions.

The GBU-31 is similar to a laser-guided munition. However, laser-guided munitions are constrained by environmental effects, such as weather, which can limit their capabilities.

In contrast, the GPS-guided munition eliminates these problems with a "relatively small tradeoff in accuracy," according to Walker.

"The B-1B is quietly emerging as the GBU-31 workhorse," Walker said "It's capable of carrying 24 of these munitions - that's eight more than the B-52H or B-2 can carry."

The GBU-31 is the latest addition to a growing list of munitions in the B-1B arsenal. The B-1B is currently capable of carrying both the GBU-31 Version 1 and Version 3. Version 1 is based on the 2,000-pound Mk-84 general-purpose bomb. Version 3 is based on the 2,000-pound BLU-109 hard target penetrator.

The B-1B is also capable of employing the Mk-82/84/62/65 and the CBU-87/89/97.

"This expanding weapons capability coupled with the aircraft's ability to detect and target both stationary and mobile targets will provide theater commanders with a formidable, versatile and flexible weapons delivery platform well into the next century," Walker said.

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