

Dover AFB bird radar to test airplane strikes

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11/1/2006 - **DOVER AIR FORCE BASE, Del. (AFPN)** -- In an effort to prevent aircraft bird strikes, the Air Force Safety Center's, Bird/Wildlife Aircraft Strike Hazard, or BASH, chose Dover Air Force Base as one of the test sites for a radar that will help prevent bird strikes.

The radar is expected to be operational this month, and the concept of operations will be developed over the next six to nine months with coordination between flight safety, bird control, air traffic control and base operations.

"The bird radar is a state of the art risk management tool that is designed to identify biological targets (such as birds) in and around the airfield," said Ron Merritt, president of DeTect Inc. in Panama City, Fla., and former Air Force BASH Team chief.

Dover AFB recently received the 2006 Merlin XS2530 bird radar from DeTect Inc., which scans both vertically and horizontally more than six nautical miles and costs approximately \$300,000.

The bird radar serves two purposes. It will collect data to help compile information on bird movement patterns and will provide real-time bird detection to locate large flocks.

"Due to the location of the base along the Mid-Atlantic coast, (Dover AFB) is in the middle of a major migration route for birds and is at the center of the wintering grounds for greater snow geese and large numbers of migratory Canada geese, as well as many gull species," said Dr. Karen Voltura, Dover AFB's Bird and Wildlife Aircraft Strike Hazard chief of operations for Flyaway Farm and Kennels Wildlife Management, the BASH contractor for Dover AFB.

While Dover does not usually have a large number of bird strikes, it has had several damaging strikes in past years.

"Currently, we average about 25 strikes per year," Doctor Voltura said. "During the last four years, the Dover BASH program has been able to decrease bird strikes here by over 55 percent."

The bird radar is expected to reduce these Dover statistics even more.

"The information collected (by the radar) will help the BASH program refine the scheduling restrictions that are part of the Dover BASH plan, and eventually it will allow the immediate detection of birds that are a direct risk to aircraft flying in and out of Dover Air Force Base," said Doctor Voltura.

A Merlin radar system at Dare County Bombing Range, N.C., has almost completely eliminated serious bird strikes, Mr. Merritt said.

"The bird radar should dramatically improve understanding of how birds use the landscape around Dover Air Force Base both in time and space," he said. "The displays should allow the bird control staff to more efficiently deploy control efforts as well as provide air traffic controllers with real-time advisories for aircrew."

Such real-time detection enhances risk management, particularly at night or foggy, low-visibility days when Airmen cannot visually locate flocks entering flight paths.

The birds are displayed by the radar onto a radar screen as a target track, which is displayed over a map. Other objects such as trees, buildings or large, fast moving aircraft are rejected by the radar software, leaving only the targets of interest on the display, said Mr. Merritt.

The radar is located on the flightline here, and the radar picture it provides can be displayed on any computer with Internet access. Eventually, the goal is for air traffic control to observe the presentation and pass bird location information to aircrews via radio communications.

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