

Revisiting the Bird Issue

In 1994, "The Great Bird Blast-Off" story was written. A lot has changed since then including the company name (from Thiokol Corp to ATK-Thiokol) and almost all of the players (Dallas Jones is retired and Kenny Allred and Dennis Jenkins are no longer working there either). The players that haven't changed are the birds. They're still absent, even 12 years later. Nobody is willing to assert that the birds' absence is necessarily due to actions discussed in this article, but the results speak for themselves. Whatever the cause, ATK Thiokol is thrilled to be rid of birds. When birds do invade a facility, they're messy, are associated with dozens of transmissible diseases, and cost plenty of maintenance dollars and man-hours. Thanks to the tenured staff of the communications department for helping make this article accurate, and as relevant today as it was in '94.

Bird Proof Gel: Aerospace Construction

R.W. Delaney, Business Writer

Not every problem facing the aerospace industry is a high-tech one. Some are low-tech, down and dirty. Just ask Dallas Jones, Manager of Construction for the Space Division of Thiokol Corporation. His problem was birds.

Thiokol is a giant in the aerospace industry. It builds booster rockets for NASA's space shuttle and makes the Peacekeeper ICBM for the U.S. Air Force, among other activities. The Thiokol plant in Brigham City, Utah, covers 75 square acres and includes 410 buildings. Dallas's problem resided in building A-2, a main administration building.

"We had wall-to-wall swallows nesting—and pooping all over the walls and windows of A-2," he says. "It was a helluva mess—a solid line of nests side by side along the 200-foot roof line." Not only were the droppings unsightly; the odor was atrocious.

During a 33-year career with Thiokol, Dallas had been aware of this problem for many years. From the time A-2 was constructed, barn swallows fell in love with the protection offered by its eaves and columns. "Through the years, the swallows nested and raised their young. Then the babies would come back the following year to nest," he says. Over the years, the swallow population exploded exponentially; and, since swallows typically raise four to six young per nest, "there were thousands of swallows," Dallas reports. And thousands of annoyed Thiokol employees.

First Attack... And More

Dallas first attempted to dislodge the unwelcome aerial visitors by installing 20 owl replicas designed to scare the daylights out of the birds. "The swallows built their nests right on the owls," he says. "They were wary for a few hours only."

Dallas launched a second attack: "We tried a rotating strobe light beacon. We hung it at the same level of the nests, where it was supposed to annoy the birds. But the nesting drive of swallows is stronger than most man-made gimmicks," he observes. The swallows stayed.

Not to be defeated, Dallas tried again. He asked the local Fire Department to come in early spring—before the birds had laid eggs—to knock down the nests with high-pressure water. The nests were obliterated on the exterior of A-2, but the water, under such high pressure, got the computers wet inside the building. This would never do. Furthermore, says Dallas, "the next morning, the swallows were back, rebuilding their nests."

For his next effort, Dallas enlisted the aid of Kenny Allred, Chief Carpenter in the Space Division. They formed the petroleum jelly brigade. Kenny and his crew smeared the greasy jelly on the entire nestbuilding area. This worked. "The birds couldn't get their footing or make their nests stick because of the slick surface," Kenny says. But it was a solution with notable flaws. "It melted in the hot weather and ran down the wall." And Kenny had to remove it all with solvent—a



painstaking process—when the building was scheduled for repainting the next spring.

Then a Thiokol maintenance worker read about a highly effective bird-deterring gel called Bird Proof Gel, made by Bird-X, Inc. in Chicago. Bird Proof Gel is a transparent gel that repels pest birds from their normal roosting areas. When Bird Proof Gel is applied on ledges, beams, rafters, cornices, ornamental copings and similar favorite "landing sites," the gel compound discourages birds from alighting and nesting for a year or more, even under most extreme weather conditions. Bird Proof Gel gel has a tacky feeling that birds shun; yet it's harmless, odorless, nonpoisonous and environmentally safe. It's easy to apply with any standard caulking gun. Bird Proof Gel is also available in liquid form for easy spraying on trees and over other large surfaces or less accessible areas.

"Try it," urged Dallas, who was running out of reasonable options. Although Bird Proof Gel would never be described as high-tech, it held great promise for solving the aerospace company's problem.

Bird Proof Gel Blasts the Birds

"We applied the repellent to a test area about 30 feet long just as the swallows were beginning to nest," Dallas says. "They nested on both sides of the test strip, but not on the test repellent."

Impressed, the maintenance crew on the swing shift knocked down existing nests and applied Bird Proof Gel to the entire eaves area of the building. "Thousands of swallows went someplace else," says Dallas. But his triumph was short-lived, for the swallows didn't return to Capistrano; they headed much closer.

"A-2 is built like the Pentagon," he explains, "with wings off of it. So we had to apply Bird- Proof Gel repellent all the way around the building." It worked like a charm. "We're in our third year now, and no reapplication has been necessary."

With Bird Proof Gel, the birds don't nest, he says. "I don't know why the birds don't like it."

It's also efficient. "When we used vaseline," Kenny says, "I had to apply a strip five or six inches wide—a hands-width. With Bird Proof Gel, it takes just a one-half inch bead. Everywhere we put it, it has been 100 percent effective - no nesting."

Big Dividends

From a public relations viewpoint, Bird Proof Gel scores extra points. "Nobody likes to see birds destroyed," Dallas says. Since Bird Proof Gel repellent works by discouraging birds from nesting in the first place, "there are no dead birds and no broken eggs," he says.

The gel is a winner in terms of cost savings, too. At Thiokol, the swallows' droppings had been obscuring the windows. To get rid of the mess and keep the odor under control, Dallas had to have contractors come in every two weeks to wash the windows. "You can't work at a desk and see solid bird poop without being distressed," Dallas notes. "Even if you couldn't smell it, you would think you could." So throughout the May-June-July nesting season, the window washers came. "It took three days with a crew of six," Dallas says. The former clean-up costs didn't come cheap.

Bird Proof Gel helped create a healthier environment, too. Getting rid of bird pests means getting rid of a potential health hazard, since bird droppings often harbor fungi that can cause serious—even fatal—lung diseases (namely, histoplasmosis and crypotococcosis) when the spores are transmitted to humans who may breathe in the harmful fecal dust.

Further Applications



While the problem with swallows at A-2 was solved, building A-1 at Thiokol had another problem: Starlings. "Starlings are dirty birds," Dallas says. "They would fly up and land on the sheet metal ducts and build nests in the wall." The noise from the birds was harassing the occupants of A-1. "Kenny took a caulking gun and made circles of Bird Proof Gel gel around the duct. The starlings stopped coming in. I'm convinced it will work on any species of bird," he says.

Meanwhile, another area of Thiokol had its own Battle of the Birds. Dennis Jenkins, Maintenance Support Planning Engineer for the Strategic Division, was doubly plagued. "Swallows were nesting under the roofs of porches in the trailer complex that serves as temporary offices," Dennis says, "and crows were building nests under the awnings of some of our 200 buildings. We'd had problems with birds for more than a decade. We tried sonic units, but the loud noise drove the employees nuts," he recalls.

Then Dennis heard the favorable reports from the Space Division about Bird Proof Gel, and he decided to use it, too. "It's the best thing we've found in my experience," says Dennis, who has been with Thiokol for 17 years. It's part of his maintenance routine now.

Dallas Jones found another original application for Bird Proof Gel. His friend who owned a summer cabin at Bear Lake was bothered by nesting swallows. Droppings littered his friend's deck... until Dallas gave him a cartridge of Bird Proof Gel. It worked, so Dallas gave him advice: "Buy a case of it. You'll be the nicest guy on the lake front. All your neighbors will love you for solving their swallow problem." And so it was.

Advice To Others

"Take action before the birds build their nests or after the young are raised and gone," Dallas advises. This way, no bird lovers will be offended. Nobody likes to see baby birds harmed.

In a company as large as Thiokol, maintenance schedules for machines are computerized. "We put bird control in the computer, too," says Dallas. "Every March, we're programmed to check to see if swallows are nesting. We watch every spring, and we'll rush in with another application at the first sign of a swallow's mud nest under construction," he says.

So far, so good: No reapplication has been necessary. But preparation is part of the permanent battle plan. "We have two or three cases of Bird Proof Gel repellent ready for next time," Kenny says. When and if Bird Proof Gel appears to be bird-proven!