

Bio & Terror Bible

EXPOSING THE COMING BIO-TERROR PANDEMIC

BIOTERRORBIBLE.COM: In the aftermath of man-made bio-terror generated pandemic, the government and media will be feeding the public any number of different scapegoats allegedly responsible for the pandemic that will likely kill millions.

While some scapegoats (see below) are indeed plausible, it is much more likely that the live pathogens or agents responsible for the pandemic will likely be dispersed via A) [chemtrails](#) by government [airplanes or drones](#), B) by the [U.S. Postal Service](#) via [Tide detergent samples](#), C) by the government and medical establishment via [tainted vaccines](#) or by D) the portable petri dish commonly known as the [Trojan condom](#).

Bio-Terror Scapegoats: [Africa](#), [Agriculture \(Food & Animals\)](#), [Airports & Air Travel](#), [Al Qaeda](#), [Bio Labs](#), [Bio-Terrorism Is Easy](#), [Bio-Terrorists \(Bio-Hackers\)](#), [Black Market](#), [Bugs & Insects](#), [Censorship / Lack Thereof](#), [Domestic Terrorists](#), [Exotic Animals \(Zoonosis\)](#), [Government Ineptitude](#), [Mail-Order DNA](#), [Mexico](#), [Missile Shield Failure](#), [Mutation](#), [Natural Disaster](#), [No Clinical Trials \(Vaccines\)](#), and [The Monkeys](#).

Title: Smallpox Martyrs

Date: December 15, 2002

Source: [UCLA](#)

Abstract: The next terrorist attack on America could once again be brought via commercial airliner. The simplest way to deliver the deadliest bio-weapon of all, smallpox, is also the most low-tech and efficient. All you need is a suicide volunteer, and we now know they are legion. Infect him in Baghdad or Karachi or the Gaza Strip; have him sit out the virus's two-week incubation period until he begins to cough and get woozy. Then buy him a plane ticket from New York to Los Angeles, or from Chicago to Atlanta. All he has to do is watch the in-flight entertainment and emit the occasional cough. A sneeze works, too.

Such a person is now referred to by public-health officials with a disconcerting name: the smallpox martyr. Even before boarding his plane, the "human missile" crisscrosses the airport, stands in line at check-in, at the Starbucks stand, in the bathroom, at security. Whenever he coughs, some people close to him will breathe the virus in, and it will lodge in their lips and noses, and they will carry it inside them onto their own planes, passing it to the passengers directly around them. In the airport alone, experts estimate, a smallpox martyr can infect between 3 to 20 other people. And in a confined space with internally circulating air, that number could be even greater.

Americans wouldn't hear anything for another two weeks as the virus incubates. Then in different corners of America, wherever those planes landed, hundreds if not thousands will come down with the "flu." Their backs will ache. Their fevers will spike. Their skin will darken until it looks charred, and then things will really get bad. There is no treatment. By this point, a vaccine is useless.

Such an outbreak would be very hard for authorities to track. (Consider how difficult it was for the Centers for Disease Control to track 18 cases of anthrax.) Even after authorities have become aware of an outbreak, a third of those who contract smallpox will die, but not before infecting others, a third of whom

will also die. And so on. (Smallpox killed 500 million people in the 20th century alone before it was declared eradicated in 1980.) One smallpox martyr could, in theory, bring the United States to a standstill.

The government is soon expected to announce plans to vaccinate some members of the military as well as the 500,000 health-care workers expected to respond to a smallpox outbreak. The vaccination itself does not come without complications; out of every one million recipients, as many as 50 could have serious medical complications, even fatal ones. But this is a cost Americans must bear, say experts who are busily developing strategies to battle a smallpox epidemic. The strongest plan involves "the vaccination ring," in which all those who could possibly have come into contact with a victim are vaccinated. The idea is to corral the virus and prevent it from spreading to new social networks. Some experts think this may work, but others are doubtful. Indeed, if an outbreak occurs, the only sure way to fight it is to go inside and shut your door ([UCLA, 2002](#)).

Title: San Francisco Airport Serves As Lab To Quietly Test Bioterror Sensors

Date: March 25, 2003

Source: [Oakland Tribune](#)

Abstract: As more than 65,000 people a day heft luggage into San Francisco International Airport to be scanned for guns and bombs, hidden machines occasionally sniff the air they breathe for lethal gases and germs.

Inside SFO, defense scientists are quietly testing a variety of chemical and bio-warfare sensors in a race to guard airports nationwide against terrorist attacks.

Today, chemical or biological detectors are at work in New York, Washington and other U.S. cities. But SFO is the nation's only major international airport testing detectors for chemical and biological agents, sensors that are equally or more accurate than the military detectors rolling and flying into Iraq with U.S. forces.

SFO is, in fact, a laboratory, serving as the nation's model for protecting airports and perhaps other large indoor, public places viewed as attractive terrorist targets.

Over months of experimenting, scientists, airport managers and security staff are getting a preview of complications in the domestic war on terror, where they face decisions largely hidden from the flying public.

The SFO experiments suggest that sensor technology, while promising for crisis management, may never be a full answer to bioterrorism. Even the best of today's biosensors, relying on DNA fingerprinting, pose built-in delays of up to four hours in confirming the existence of some key bioterror agents. Guarding airports probably will require multiple biosensors, some slow and accurate, others fast and open to false alarms.

In the event of an attack, that means airport managers still will face a difficult calculus, tinged with uncertainty as they weigh the risk of greater loss of life against frightening or alienating the public through airport evacuations. To compensate, their actions will have to be fast, intelligent and made with a grasp for the consequences.

The SFO experiments put those consequences before airport managers with more clarity than ever before. Scientists already have found new ways to minimize casualties in attacks on any airport. They plan to offer that advice to Oakland International, San Jose International and other airports, even as the SFO work continues.

Using smoke releases and computer simulations, for example, the need for rethinking airport evacuations became obvious. If terrorists strike an airport for maximum effect -- releasing gas or germs in a crowded main terminal -- then evacuating passengers would expose healthy passengers and spread the cloud.

"We discovered evacuation (through main terminals) would actually kill more people," said Duane Lindner, deputy director of Chem/Bio Programs at Sandia National Laboratories/California at a recent biodefense conference.

Sandia executives decline to identify the airports where detectors are installed under PROACT, the federal research project on detectors and other ways to protect airports, now housed in the Department of Homeland Security.

Officials at San Francisco International also decline to talk about the experiments. "I can't talk about that for security reasons right now," said Michael McCarron, SFO director of community affairs.

Officials involved in the experiments insisted on keeping details of the detectors secret -- their number, location, appearance and capabilities -- so that terrorists could not identify, disable or defeat them. But all were designed for anonymity, to be unobtrusive boxes breathing on a wall or floor.

Despite the secrecy, sufficient details have emerged in public statements and interviews with government officials and scientists to show SFO has a leading role in exploring national anti-terror defenses.

It could be a year or more before the SFO experiments lead scientists to a standard chem-bio sniffer system that federal security officials will recommend for every U.S. airport and possibly airports abroad. But in a matter of months, officials expect much of what is learned at SFO will change how U.S. airport managers plan to respond to terror attacks.

Scientists began studying subways and airports in the late 1990s as anti-terror experts realized both were chillingly efficient at magnifying the effects of terror attacks. In airports, the greatest fear is the release of smallpox or other contagious agents, unwittingly carried by airline passengers across the nation and across the globe in hours.

The latest evidence came last week when a germ leaped two oceans in a few days, stowing away in the lungs of a Singapore doctor en route to New York then Frankfurt. The bug triggers a mysterious pneumonia classified as Severe

Acute Respiratory Syndrome (SARS) and has spread to at least 16 countries, with 10 suspected cases of infected individuals in California, half of them in Santa Clara, Alameda and Sonoma counties -- most having flown from Asia.

Scientists are mapping the air flows of subways and airports, designing sensor networks and advising airports on responding to alarms from a variety of detectors. But the fastest and most relevant are the most open to mistaking common bacteria for biowarfare agents.

For now, no biodetector is capable of foolproof, "real-time" identification of the likeliest bioterror agents. The most accurate commercial biodetectors, originally devised by Lawrence Livermore Lab, issue a false alarm just once every 10,000 tests. But the turnaround time for results is two to four hours.

That may be enough time for authorities to intercept airliners full of infected passengers before they reach their next destination and start administering antibiotics or vaccines. It is what anti-terror scientists call a "detect to treat" technology.

Yet even as Livermore scientists roll out a new, robotic smoke-alarm for germs, performing both antigen tests and DNA-fingerprinting tests in less than half an hour -- a staggering feat -- it probably still won't be fast enough to alert airport officials to evacuate a terminal.

"Today, there is no silver bullet," said Pat Fitch, director of Livermore lab's Chemical and Biological National Security Program ([Oakland Tribune, 2003](#)).

Title: Airport Shows Off "Human Carwash"

Date: March 26, 2003

Source: [LA Times](#)

Abstract: Worries about anthrax were confined to cattle ranches in the Midwest when Michael DiGirolamo first suggested that the city purchase a decontamination unit for Los Angeles International Airport.

Five years later, LAX is one of three airports in the country, including Ontario and Dallas/Fort Worth international airports, that have such units available to help clean people after a chemical or biological attack, an aviation fuel spill or a natural disaster.

DiGirolamo requested the decontamination systems, which cost \$243,000 each, in 1998 after a 1995 nerve gas attack on rush-hour commuters in a Tokyo subway.

"I went to the Los Angeles Fire Department and asked them if we could decontaminate an entire airplane," said DiGirolamo, deputy executive director of airport operations and public safety for the city agency that operates LAX. "And they said we could, but it would take forever."

Only recently has the city decided to publicize the units to reassure travelers that the airport -- cited as the state's No. 1 terrorist target in a recent government report -- is ready to handle the fallout from a biological or chemical attack.

Mayor James K. Hahn got a firsthand look at how the units operate Tuesday at a crowded demonstration outside the airport's Imperial Terminal.

"After spending time touring the LAX decontamination units, I remain convinced that LAX is one of the world's safest airports," Hahn said. "As a result of the current global climate and the high state of alert, I'm requesting [the city agency that operates the airport] purchase two additional units as a precautionary measure."

The request is the latest in a series of efforts by city and federal officials to increase security at the world's fifth-busiest airport. Hahn has announced numerous measures, including more cameras and tighter perimeter security, since the Sept. 11, 2001, terrorist attacks and last year's deadly July 4 shooting at the Tom Bradley International Terminal.

At Tuesday's demonstration, firefighters showed off the decontamination units' ability to clean chemicals from victims in a matter of minutes. The system features a firetruck with enclosed showers that can be attached to a large, heavy plastic tent that covers additional nozzles. The showers spray users with warm water, to which bleach or soap can be added. Each unit can clean 250 people per hour.

After 20 firefighters spent an hour assembling the tent unit and tapped into a nearby hydrant, Chief of Airfield Operations Raymond Jack gamely volunteered to strip down to his black and red swimsuit and walk through what some dubbed the human carwash. Jack's clothes were placed in a trash bag, and he was given a plastic wristband with an identification tag.

A firefighter wearing a hooded plastic suit, rubber boots and gloves and an oxygen tank greeted Jack at the tent's entrance and hosed him down with a retractable nozzle. Jack proceeded along the right side of the red, green and white tent set aside for men. The left side was designated for women and those who could not walk on their own.

Next, Jack stepped into a hazy red light in the middle of the tent, where two similarly attired firefighters hosed him down again and used a broom to scrub his skin. Contaminated water ran under the showers where Jack stood and was siphoned out of the tent into a 600-gallon bladder. When Jack emerged from the tent he was given a baby blue paper suit and yellow booties.

"I didn't know if I should bring shampoo and my rubber ducky," Jack said after he changed back into his track suit. "It's no different than being in a big locker room shower."

The firefighters who operate the units work with the city's three hazardous-materials teams, relying on a variety of sensors and monitors to detect minute concentrations of nuclear, biological or chemical contaminants.

The units can also be used outside the airport, and were sent to Sunday's Academy Awards ceremony and to the 2000 Democratic National Convention in Los Angeles ([LA Times, 2003](#)).

Title: A Germ Has A Ticket To Ride, And Airlines Can't Stop It

Date: April 28, 2003

Source: [UCLA](#)

Abstract: The terror attacks of Sept. 11, 2001, alerted us to the fact that commercial airliners can be weapons. The recent spread of SARS reminds us that airliners can deliver far more than passengers, packages and duty-free knickknacks. They are a fast and efficient way to share germs.

"Within the known incubation period of any known agent, you can get from the rain forest to [Boston's] Logan Airport in eight hours," said Dr. David Ozonoff, chairman of the Department of Environmental Health at Boston University's School of Public Health.

Humans have always moved and migrated with their illnesses. Air travel has accelerated the process. In one month, air travelers take about 130 million flights. But the speed at which a given germ can move through the air transport system depends on a number of factors — from how catchy the bug is to whether it's more likely to infect people on airplanes than in other public spaces.

Ozonoff says the "hub-and-spoke" airline "is made to order for these kinds of [disease] spreads." The system brings lots of passengers together in large hub airports before shuttling them off to smaller "spoke" sites. For an easy-to-transmit illness like smallpox, this would be a recipe for a very rapid distribution.

Scholars at Johns Hopkins University in Baltimore, Md., created a computer model of the spread of smallpox via contagious airline passengers in the United States. In the case of smallpox, government officials would have only a few days to shut down the air travel system in order to staunch the spread of the disease, according to Hugh Ellis, a professor of environmental engineering at Johns Hopkins and one of the authors of the computer model. Ellis said it is not known whether a healthy individual is more likely to get sick during a plane ride than in another public setting.

Martha Waters, a research industrial hygienist with the National Institute for Occupational Safety and Health in Cincinnati, said airline passengers are in close quarters — just as bus and subway riders are. But in airliners, she said, the air around them is moving much faster. Waters, who is part of a team that has been studying the airliner environment, said cabin air is a combination of fresh air and filtered,

recycled air. She noted that the mix of fresh and recycled air — and the kinds of filters used — varies with the airplane model and with the airline itself.

Of course, a given passenger's chances of getting an in-flight infection depend on a host of factors, including susceptibility and the way in which the particular illness is spread. Waters notes that sicknesses that spread via droplets — like colds and, apparently, SARS — certainly can be spread by a sneezing passenger to a seatmate. But that doesn't mean that airplanes become flying hot zones.

"Would I take that any further and say that people shouldn't get on airplanes?" Waters said. "Absolutely not."

Health authorities around the globe already have intervened in the air travel system, notes Ozonoff, by alerting passengers traveling from SARS hot spots and encouraging citizens to put off nonessential travel to those areas. Some measures — like the brief quarantine of a jetliner from Tokyo at the airport in San Jose, on April 1 — may be too extreme. Ozonoff said that even the hint of smallpox elsewhere in the world would cause the severing of air links to that area. But SARS is neither as deadly nor as contagious as smallpox ([UCLA, 2003](#)).

Title: An Action Plan To Reopen A Contaminated Airport

Date: December, 2006

Source: [Lawrence Livermore National Laboratory](#) (PDF)

Abstract: How would authorities respond if San Francisco International Airport (SFO) were to be contaminated with anthrax, and how long would it take to restore the airport to full usability? An intentional bioterrorist attack at the airport could endanger the health of hundreds of people. Long-term closure of this critical transportation hub during decontamination would have disastrous effects on the regional and national economy.

Recall the events of late 2001 when letters containing anthrax spores contaminated office buildings and postal facilities in Florida, New York City, Washington, DC, and other locations. Although some buildings were back in full operation in less than a month, others took many months to reopen, and one Department of State facility was closed for three years. With that experience in mind, the Department of Homeland Security (DHS) funded a project to minimize the time a major transportation facility would be closed following a biological attack.

Lawrence Livermore and Sandia national laboratories led the project, in partnership with SFO, to develop response and restoration protocols for such events. The group's work culminated in January 2006 when 120 officials from local, state, and federal agencies participated in a two-day demonstration at SFO's old international terminal to test the new procedures. Returning the international terminal and a boarding area at SFO to full operation from a large-scale terrorist incident may have taken up to two years based on other bioremediation activities and the decontamination and restoration methods that were available in 2001. Using the protocols developed by the Livermore–Sandia team reduces that time by at least 50 percent. In fact, the team estimates that the time required would actually be less than six months, depending on the level of planning in place prior to an attack.

A new DHS assignment for Livermore is to develop protocols for responding to and cleaning up a large outdoor area contaminated by a bioagent. Researchers already know that sunlight will naturally degrade many biological pathogens. Also, when some bioagent particles hit soil, they stay there, so re-aerosolization is less of a problem. Still, planning for such an attack is new territory. Says Raber, "At this point, no one has experience with wide-area urban decontamination." **The Laboratory is also developing a site-specific biological restoration plan for Grand Central Station in New York City,** where Livermore's Autonomous Pathogen Detection System has been tested. (See *S&TR*, October 2004, pp. 4–5.) A major subway station offers yet another set of challenges because it is part of a web of tunnels, staircases, and large semi-contained areas. "We look forward to continuing our involvement with

major transportation facilities," says Carlsen. "They are a key to our nation's economic vitality and the well-being of our citizens" ([Lawrence Livermore National Laboratory, 2006](#)).

Title: Feds Stage Airport Test Of Plan To Slow Pandemic

Date: November 12, 2008

Source: [CIDRAP](#)

Abstract: Officials from several agencies recently converged on Miami's international airport to take part in a full-scale exercise of the federal government's risk-based strategy to slow the spread of a future pandemic influenza virus across US borders.

Christine Pearson, a spokeswoman for the US Department of Health and Human Services (HHS), attended the first day of the 2-day drill on Nov 5 and told CIDRAP News that, unlike previous tabletop discussions to test the risk-based border strategy (RBBS), the exercise at Miami included a real plane and actors who played the role of passengers in an airport setting.

"It provided a level of realism that we hadn't had in past exercises, which had mostly been facilitated discussions," she said.

The RBBS is a short-term strategy that the federal government will use in the initial states of a pandemic to delay the spread of the virus enough to afford officials a little extra time to educate the public on how to protect themselves from the disease, produce and distribute vaccine, and position medication and supplies, Pearson said. The strategy involves screening international air passengers to gauge if they are sick or have potentially been exposed to others who are sick with the pandemic virus.

The system would begin when it's clear that a pandemic influenza virus is spreading globally and would end as soon as the virus begins causing illnesses in the United States.

Many public health experts have supported keeping borders open in a pandemic setting, because they don't believe closure would block the spread of the virus and because keeping borders open would preserve the flow of crucial supplies and soften a pandemic's impact on national economies.

Pearson said last week's drill was a joint exercise that involved the HHS, the Centers for Disease Control and Prevention (CDC), the Department of Homeland Security (DHS), Customs and Border Protection, the Department of Transportation (DOT), along with numerous state, local, and airline-industry partners.

The scenario involved a novel and lethal human influenza strain that emerged in Southeast Asia and spread quickly and efficiently among humans, she said. The playbook had the World Health Organization (WHO) identifying a human-to-human H5N1 variant that spread to areas of Thailand, Laos, Vietnam, and Cambodia. The WHO declared a severe (phase 6) pandemic, prompting the United States to raise its response stage to 3 and the secretaries of DHS, HHS, and DOT to enact nationwide RBBS activities.

She said Marty Cetron, director of the CDC's Division of Global Migration and Quarantine, was pleased with how the exercise went and said it exceeded his expectations, particularly how well the partners worked together.

It's likely that the RBBS in its current form will change, based on what officials learned during the exercise, Pearson said, adding "But by testing this now, we will help ensure that the plan we have in place will do what it's designed to do and will ultimately help us to protect the public's health during the next pandemic."

Federal officials routinely conduct drills at quarantine stations, Pearson said, and though additional activities are planned, no plans are in the works to do another large-scale exercise. Officials are likely to

conduct more tabletop discussions that could include smaller drills to address certain parts of the RBBS plan ([CIDRAP, 2008](#)).

Title: Tularemia Outbreak At A Metropolitan Airport, Texas.

Date: September 7, 2009

Source: [Pub Med](#)

Abstract: A jackrabbit die-off near a metropolitan airport was observed by an airport contractor. Further investigation determined that this die-off was probably due to epizootic tularemia. Because of proximity to areas of heavy human traffic and fears of transmission of tularemia to humans, the local health district and department of emergency management organized a multiagency response involving local animal control, environmental health, public health, law enforcement, and airport personnel, in addition to state and federal agencies. The tularemia epizootic subsequently ended, and no cases of human tularemia occurred. In our after-action analysis, we identified several lessons learned: the importance of animal illness surveillance, which can serve as a warning for potential human illness and epidemic; the usefulness of pre-event planning, training, and exercises in facilitating a coordinated response; the usefulness of an effective communication system with the healthcare community; the importance of responders being familiar with Centers for Disease Control and Prevention (CDC) Category A bioterrorism agents when considering a rapid response; and the fact that attempts at environmental control may result in perturbations in animal populations with unintended consequences ([Pub Med, 2009](#)).

Title: TSA Report Says Airline Industry Vulnerable To Attack

Date: November 30, 2009

Source: [Bio Prep Watch](#)

Abstract: A recently released report by the Homeland Security Department's inspector general has raised questions about the safety of air cargo, leaving cargo vulnerable to a bioterror attack.

"Air cargo is vulnerable," the report, which cites repeated problems with the Transportation Security Administration's program aimed at stopping terrorists from sneaking weapons into cargo packages, says.

The report says that investigators managed to slip into warehouses where cargo is stored that were supposedly secure. The cargo was then loaded onto airplanes and the investigators walked away unchallenged.

Some workers at the facility who handled the cargo were also found to have not received required background checks or training.

The report raises concerns about the TSA's congressionally mandated effort to tighten security for the 12 million pounds of cargo carried each day in passenger planes. The report states that the TSA does not currently have enough personnel to handle new rules for screening cargo.

Airline cargo, unlike luggage, is not screened by the TSA, which oversees airlines, freight handlers and manufacturers who pack and transport cargo and ensure its security.

TSA spokeswoman Kristin Lee said that the agency has its inspectors focusing on airlines and companies that have been deemed higher risk because of past problems.

The news of unsecured cargo raises questions as to the potential for a bio attack through the air, with a commission on bioterrorism noting that a two kilogram release of anthrax spores into the air could cause more deaths of Americans than died in all of World War II ([Bio Prep Watch, 2011](#)).

Title: Study Reveals Ease Of Bioattack On Airline Industry

Date: January 11, 2010

Source: [Bio Prep Watch](#)

Abstract: In a study on potential airline bioterrorism, RGF, in association with Kansas State University, has revealed that the release of a bioagent within a plane or airport terminal easily, potentially creating a pandemic.

The study says that terrorist would be able to use a small, hand-activated aspirator, which could easily be purchased at a drugstore or be made from an over the counter nasal spray bottle, to release a virus on an plane, in a terminal or in any commercial building.

The terrorist, the study contends, would simply have to place the virus with the aspirator and release it in the intended area, leaving no one the wiser until they had traveled and spread the virus, leading to a worldwide pandemic.

The solution, RGF says, is to kill the virus before it can reach another person. The study says that advanced oxidation technology could potentially kill an airborne virus. China, during the recent SARS scare, used such technology on its city buses and subways to kill the airborne virus.

RGF's own oxidation technology has shown that a kill rate of 88 percent for viruses in the air can be achieved at three feet, eliminating a host of viruses and stopping a potential bioterror threat and subsequent worldwide pandemic ([Bio Prep Watch, 2010](#)).

Title: Miami Airport Closed For Hours Amid Bioterrorism Fears

Date: September 8, 2010

Source: [NTI](#)

Abstract: Authorities closed much of Miami International Airport and nearby hotels for hours last week when a man attempting to carry a suspicious container through customs was linked to a 2003 investigation over his handling of plague samples, the Associated press reported (see [GSN](#), May 5, 2006).

Former Texas Tech University professor Thomas Butler, 70, caught the attention of a Transportation Security Administration officer at 9 p.m. Thursday at a customs checkpoint. The inspector checked a database and found that Butler had been charged previously with plague-related crimes.

The airport was evacuated and Butler was taken into custody for a short period. He provided full cooperation and faces no charges in the incident, according to a law enforcement source. An analysis of the container determined it contained no dangerous material, a high-level police official said.

Butler in January 2003 reported vials of plague bacteria stolen from his laboratory. Federal agents were called in to search, but stopped looking when Butler submitted a written statement in which he acknowledged making a "misjudgment" by not telling his supervisor the vials were "accidentally destroyed."

Butler was convicted of fraudulently sending plague samples to Tanzania in an inaccurately marked package, although charges he had smuggled and illegally transferred the samples were dropped. He also received a two-year prison sentence for fraud and theft relating to contracts with pharmaceutical firms ([NTI, 2010](#)).

Title: UDT Calls For Upgrade In Air Cargo Systems Detection

Date: November 3, 2010

Source: [Bio Prep Watch](#)

Abstract: Universal Detection Technology has analyzed the recent government alert connected to bioterror weapons like advanced synthetic DNA makers in such locations as the air cargo systems on an airplane.

Commercial genetic sequencing has been around for years, but if sensitive genetic materials get into the wrong hands, it may be possible to recreate bacterial pathogens like smallpox. The technology may also allow terrorists to enhance these pathogens, increase their potency and devise new "designer" biological weapons.

"It is well known that Al-Qaeda has been trying to develop biological weapon capability for some time and the packages sent last week would have gone undetected had they contained a biological weapon such as anthrax," Jacques Tizabi, CEO of Universal Detection Technology, said. "The air cargo transport system should take advantage of the most advanced bioweapon detection technologies."

The vast volume of packages in the air cargo system and the lack of standardized regulations on government inspections may lead to dangerous vulnerabilities. The air cargo moves on both passenger and freight planes. The screening process for this cargo is much more stringent on passenger planes than it is on freight planes. The cargo rules also tend to vary from country to country, which can create vulnerability when freight is brought to the United States.

Twenty million pounds of cargo are transported by passenger planes every single day, according to the International Air Cargo Association, which makes up 16 percent of the total freight carried into or out of the United States ([Bio Prep Watch, 2011](#)).

Title: Bioterror Fears Raised Over Cargo Flights

Date: December 27, 2010

Source: [Bio Prep Watch](#)

Abstract: Security and bioterrorism prevention experts have pointed to the potential vulnerability of cargo flights that pass over the United States each week as potential sources of bioterrorism.

These flights, called overflights, do not receive federal standards of screening or use the terrorist watch list, the Washington Post reports.

"(A terrorist could) explode a plane with a dirty bomb or a biological weapon or an actual nuclear weapon on board, and that material will spread wherever it crashes," Richard Bloom, a longtime U.S. intelligence operative and current teacher of counterterrorism courses at Embry-Riddle Aeronautical University in Arizona, said, according to the Washington Post.

While the Transportation Security Administration said that other countries have their own screening processes for cargo, it does not use the same methods as the TSA's Secure Flight program that might weed out potential terrorists, according to the Washington Post. This vulnerability has security experts divided.

"We have tens of millions of packages flying almost every night," Yossi Sheffi, director of the Center for Transportation and Logistics at the Massachusetts Institute of Technology, said, according to the Washington Post. "We can't stop the huge flow of packages from all over the world. There has to be a balance between acceptable risk and the economy."

The recent October plot to detonate bombs placed in printer cartridges designed to detonate in flight evaded X-ray detection even though authorities knew they were in the packages.

"Congress would make a mistake by passing a requirement for 100 percent screening of cargo," Rafi Ron, former security chief at Tel Aviv's airport, now a security consultant based in McLean, said, the Washington Post reports. "What's the use of legislating 100 percent screening even if the bomb which triggered this legislation would not have been detected by it?" ([Bio Prep Watch, 2010](#)).

Title: Powder Grounds Alaska Airlines Flight

Date: May 19, 2011

Source: [Bio Prep Watch](#)

Abstract: The flight crew of an Alaska Airlines flight departing Seattle, Washington, and headed to Santa Ana, California, this week notified authorities of an unknown white powder in the back lavatory that turned out to be toilet paper.

After the 1,000-mile flight landed, law enforcement officers, fire department crews and hazardous materials experts circled the plane after it touched down at John Wayne Airport on April 22 at 4 p.m., KTVU reports.

The 151 passengers and six crew members deplaned as authorities climbed aboard. Members of the county's sheriff department along with members of the Orange County Fire Authority tested the suspicious substance.

Upon further investigation, Capt. Greg McKeown, the fire department's spokesperson, told KTVU that the white dust was determined to be a "cellulose paper material" or, in simpler terms, what appeared to be toilet paper.

After the powder was determined to be nonhazardous, the aircraft went back into service.

According to the Centers for Disease Control and Prevention, anthrax is caused by *Bacillus anthracis*, a spore-forming bacterium. Anthrax was used as a weapon in 2001 as it was deliberately spread through the postal system, causing 22 cases of anthrax infection.

Anthrax is classified as a category A bioterrorism agent that may pose the greatest possible threat for a bad effect on public health, needs a great deal of planning to protect the public's health and may spread across a large area or require public awareness ([Bio Prep Watch, 2011](#)).

Title: Air Force Testing New Decontamination Process

Date: July 14, 2011

Source: [Bio Prep Watch](#)

Abstract: A retired, ground-instructional C-130 at the Little Rock Air Force Base in Little Rock, Ark., has become part of a series of tests to determine how heat and humidity affect the decontamination process for an aircraft.

"We are using a simulant (*Bacillus thuringiensis*) that has similar properties and reacts in the same way the actual agents would; however, here are no live agents," 2nd Lt. James Reilly, the 19th Medical Group Bioenvironmental Engineering Flight commander, said. "The simulant is in no way shape or form harmful to individuals or the environment."

The tests use *Bacillus thuringiensis*, a commercially-available insecticide, to simulate a biological agent.

Officials at the base have determined that the testing procedures are safe for the flightline and for the community of the base.

"By heating the interior of the aircraft from 150 to 170 degrees Fahrenheit in conjunction with a relative humidity at 80 to 90 percent over a period of one to five days, we will gain valuable data on how to destroy biological agents without harming the aircraft," Tim Provens, an Air Force Research Laboratory project engineer at Wright Patterson AFB, Ohio, said.

Staff members are testing to see if the "green" technology of heat and humidity can neutralize the environmentally safe and simulated biological warfare agent. The Air Force currently decontaminates aircraft with hot soapy water, which isn't practical for an aircraft's interior and has limited effects on anything that absorbs into the paint on the skin of an aircraft. Decontamination solutions that are typically used for buildings would be highly corrosive to thin aircraft panels and sensitive electronic equipment.

Effectiveness of the system will be determined by small detection papers coated with the environmentally-approved simulated agent and placed throughout the fuselage before being analyzed on site. The technology has previously been demonstrated in Orlando, Fla., on a commercial aircraft ([Bio Prep Watch, 2011](#)).

Title: Small Airports On Alert For Bioterror Threat

Date: September 7, 2011

Source: [Bio Prep Watch](#)

Abstract: The U.S. Department of Homeland Security has alerted small airports and flight instructors to be on alert, warning that terrorists may try to use small aircraft loaded with chemical or biological weapons in an attack on the United States.

The director of the Gaylord Regional Airport in Northern Michigan, a typical small airport, recently said that his facility has expanded on the set Federal Aviation Administration standards to make things safer, according to UpNorthLive.com.

"We do have countermeasures that people have been briefed on and practice that would be what our response would be to somebody with clandestine intent to prevent that aircraft from leaving here," Matt Barresi, the airport's director, said, UpNorthLive.com reports. "We're put in a position to kind of think the unthinkable and what countermeasures we can put in place."

At nearby Traverse Lakes Aviation, anyone interested in flying must first undergo a background check. Before anyone goes up in a plane, they must have their identification verified.

"We get their driver's license, social security number, pilot's license, medical certificate, all that gets copied along with a contract they have to fill out and then they go for a check ride with an instructor before they can even get in an airplane," Michael Head of Traverse Lakes Aviation said, UpNorthLive.com reports.

Jeff Weiber, a pilot with North Country Aviation, a charter service, said his services have also been regulated. Passengers who book flights must also be checked.

"We have to do a TSA background check, a no-fly list, we have to check every one, I have to see a valid picture, a government ID, before I allow them on the aircraft," Weiber said, according to UpNorthLive.com ([Bio Prep Watch, 2011](#)).

Title: Drone Technology Could Be Used To Spray Bioweapons

Date: October 12, 2011

Source: [Bio Prep Watch](#)

Abstract: Experts have warned that as remote-controlled drone technology produces smaller and cheaper units, terrorists could seek to use them to potentially spray biological weapons.

The U.S. military is currently the undisputed leader in drone warfare, but many world powers are quickly acquiring and adapting the technology, which presents a challenge to American security experts, according to TheAustralian.com.au.

"I think of where the airplane was at the start of World War I: at first it was unarmed and limited to a handful of countries," P. W. Singer, the author of the book *Wired for War*, said, TheAustralian.com.au reports. "Then it was armed and everywhere. That is the path we're on."

The recent arrest of Rezwan Ferdaus, a 26-year-old man accused of plotting to fly an explosives-laden remote controlled airplane into the U.S. Capitol, shows that a scenario where an unmanned vehicle could be used to attack a city is not farfetched.

To date, only the United States, Israel and Britain are thought to have used drones for air-to-ground strikes, but more than 50 countries have bought or developed their own unmanned aerial vehicles, according to the New York Post.

The same qualities that make U.A.V.'s appealing to the Obama administration for counterterrorism make them appealing to the terrorists themselves. They can be used for surveillance or strikes, are cheap and no danger is posed to their operator, who could be located on the other side of the world ([Bio Prep Watch, 2011](#)).

Title: Organization Of American States Conducts Bioterror Simulation

Date: October 31, 2011

Source: [Bio Prep Watch](#)

Abstract: The Organization of American States recently conducted a bioterrorist attack simulation in Santiago, Chile.

The drill, funded by the Canadian government, took place at Santiago's Arturo Benitez international airport, according to SantiagoTimes.cl. The airport was chosen because of the large amount of air traffic that flows through it, making the city highly susceptible to airborne contagions.

Six international agencies from Uruguay, Brazil, Argentina and Paraguay took part in the exercise, along with 23 law enforcement agencies from Chile.

"This is being done to help us prepare formal plans or to improve emergency management and crisis for such an attack, and to promote inter-agency coordination," Chile's Undersecretary of the Interior Rodrigo Ubilla said, SantiagoTimes.cl reports.

Throughout the drill, which lasted several days, a series of suspicious packages containing what appeared to be *Yersinia Pestis*, or the bubonic plague, were left throughout the airport. Similar packages were also left at a high-rise hotel in Santiago. The training consisted of at least one false alarm when a plane carrying a sick passenger heads for the airport.

Two days after the first “attack,” the virus appeared to have spread throughout Chile and its neighboring states. In the simulation’s final stage, the participating agencies had to coordinate an international effort to contain it.

The mock attack in Santiago is the first of three major exercises planned by the OAS. The next will take place in March.

The participating states are expected to meet to discuss overall strategies for containing an attack and planning for the additional exercises immediately after the current one ends.

“The meeting will have to do with the creation of a comprehensive public policy that addresses complex issues of our time,” Ubilla said, according to [SantiagoTimes.cl](#). “The issues will require specific protocols and clear definitions in terms of chains of command” ([Bio Prep Watch, 2011](#)).

Title: Optimal Response Against Bioterror Attack On Airport Terminal

Date: December 30, 2011

Source: [Science Direct](#)

Abstract: We consider a potential bioterror attack on an airport. After the attack is identified, the government is faced with the problem of how to allocate limited emergency resources (human resources, vaccines, etc.) efficiently. The government is assumed to make a one-time resource allocation decision. The optimal allocation problem is discussed and it is shown how available information on the number of infected passengers can be incorporated into the model. Estimation for parameters of the cost function (number of deaths after the epidemic is over) is provided based on known epidemic models. The models proposed in the paper are demonstrated with a case study using real airport data ([Science Direct, 2012](#)).