DRONE

Resisting Sanitized Remote-Control Death A Publication of the Creech 14



The Creech 14 and other anti-drone demonstrators gathered in front of Creech AirForce base in April of 2009.

We Knew- by David Smith-Ferri

Charahi Qamber Refugee Camp, Kabul October 29, 2010

It has come to this.
Young American women and men—
mainly from poor families,
trained to kill,
paid to kill,
equipped with sophisticated weaponry
and shipped to foreign countries—
kill innocent children and adults,
mainly illiterate,
often people who never met an American before.
We call this fighting for democracy,
and national security.

Before we met Khalid, before he reached like a parent into a pocket of his robe, before his hand emerged with worn photos of his children lying there torn, bloody, dead, before the first assault of shock and horror gripped our throats and shook us like rag dolls, squeezing the air out of us

Before he told us that an American missile destroyed my home killed my wife and five children we knew that he was waiting for us in Afghanistan, that he had left the lowland green fertility of his farm, his goats, his village in Helmand, left all but the memory of his wife and children and come with his cousins to this brown, dusty, barren refugee camp to live with nothing but a tent between him and Kabul's mountainous winter.

We knew that others had come before him and others follow. We knew that alarming numbers of American soldiers home from Afghanistan would beat their wives, abuse their children, kill themselves.

We knew this before Khalid's bearded face and the broken faces of his children looked at us, before the start of US military operations earlier this year in Helmand Province, before Barack Obama ordered a surge of troops, before the first US troops arrived in Afghanistan in October of 2001.

We knew.

An Eye in the Sky

In 2009, President-elect Barack Obama dramatically escalated the CIA's secret air war in Pakistan and the U.S. military occupation of Afghanistan. Relying heavily on unmanned drones for surveillance and air strikes, armed drones and drone-assisted gunships have raised death and destruction to a new level. Soaring civilian casualties demand a public discussion of the legality and morality of drone warfare.

A *drone* is a remote-control spy plane that can also launch bombs to kill people. Variously called an Unmanned Aerial Vehicle (UAV), Unmanned Air System (UAS) or Remotely Piloted Aircraft (RPA), today the focus is on the *Unmanned Combat Aerial Vehicle* (UCAV). As drone technology races toward robotic weaponry, the UCAV is the lethal *multi-mission* drone of future warfare, a "hunter-killer".

The MQ-9 Reaper is the prototype multi-mission ("M") drone ("Q"). The "hunter-killer" Reaper can stay in the air 30 hours tracking people and gathering information. If a decision is made to use the drone's own weapons, the Reaper can launch heat-seeking Sidewinder missiles or laser-guided Hellfire or 500 lb. Paveway bombs.

A drone's primary function is to gather information over long periods of time and relay *intelligence, surveillance and reconnaissance* (ISR) electronic data into a vast communications network for military operations. A drone's "eye" is the *payload*, the \$1 million spherical "skyball" in the drone's "chin" containing high-resolution zoom TV and infrared cameras, telescopic spotter and laser target designator. Drones have GPS guidance, special radar for seeing through clouds and dust storms and Ku-band satellite communications. Signals from controllers in the U.S. take 1.2 seconds to reach drones flying over Afghanistan.

Drones provide military units on the ground with real-time imagery of the terrain from cameras 10,000 to 65,000 feet above the ground. As the billboard reads entering Fort Huachuca, AZ: "An eye in the Sky for Boots on the Ground."

But the "Eye in the Sky" can also be a bomb or a missile intended for people on the ground. On Nov. 4, 2002, a *Predator* drone operated from Djibouti fired a Hellfire missile killing suspected al-Qaeda members driving in a SUV in Yemen. This was the moment in military history that a drone became an offensive weapon, a UCAV.

The Controllers

"Drone-based sensors have given rise to a new class of wired warriors who must filter the information sea. But sometimes they are drowning." New York Times, Jan 16, 2011

Drones are controlled remotely from sites in Southwest Asia or from bases in the United States. The Army's *RQ-7B Shadow*, for example, a 375 lb. surveillance drone is controlled from forward operating bases in Iraq, mainly for detecting IEDs. The 4 lb. *RQ-11 Raven* can be carried in a soldier's backpack and hand-launched to see what's on the other side of the next hill.

The armed drones, MQ-1 Predators and MQ-9 Reapers, are controlled from bases in the U.S. Controllers, or flightcrews, work 12 hour shifts flying 50 drone patrols a day. A flightcrew is typically two sensor operators (a pilot and camera operator) and one or more intelligence analysts. When a drone takes off in Afghanistan and reaches thousands of feet in altitude, a flightcrew at a U.S. drone base takes control by satellite link. Video feeds from the drone's camera are shared with other analysts around the world, coordinated by a central command post in Qatar. A military air controller is a bridge between the drone flightcrew and ground units.

Since 9/11, intelligence from drone surveillance has shot up **1,600 percent**. Predator and Reaper drones provide at least 400 hours of video a day to ground units in Afghanistan. Predators were flying 40 patrols a day in 2009 (compared to 12 in 2006) and 50 missions a day in 2010. In 2011, the U.S. plans to fly 65 drone patrols a day from numerous bases around the U.S.:

Creech AFB, NV. Indian Springs, 45 miles north of Las Vegas. Creech is the hub of the drone air war in Afghanistan and drone patrols in Iraq. According to an interview on "60 Minutes" in May 2008, Creech has 250 drone pilots of the 432nd Air Expeditionary Wing flying Predator and Reaper surveillance and armed patrols 7,500 miles away via satellite communications. The 432d Wing has six operational squadrons, including the 11th Reconnaissance Squadron Formal Training Unit (FTU), the 15th RS, the 17th RS and 42nd Attack Squadron (Reapers), the 78th RS of the Air Force Reserve Command, and one maintenance squadron.

Nevada Desert Experience organizes Ground the Drones protest in April at Creech AFB, NB.

Beale AFB, CA. Marysville, CA. 1st and 12th Reconnaissance Squadrons of the 9th Reconnaissance Wing. Operation, training and maintenance of the RQ-4 Global Hawk for world-wide intelligence gathering and combat operations. Since April, 2010, Global Hawks have flown the "Northern Route" from Beale AFB over Canada to Southwest Asia and back.

Cannon AFB, NM. Clovis, NM. 3rd Special Operations Squadron (Air Force Special Operations Command). Operates Predator combat support missions since Oct. 2005.

Davis-Monthan AFB, AZ. Activated in Sep 2007, the Arizona Air National Guard 214th Reconnaissance Group in Tucson flies Predator remote reconnaissance patrols and combat missions 23/7 in Iraq and Afghanistan. The 214th Predator Unit also controls drones that patrol the Arizona border with Mexico. It was revealed in March 2011 that Predator surveillance drones have been secretly flown over Mexican territory since 2009 helping Mexico to track activities of the drug cartels. In Feb 2011, *MQ-9 Reapers* also began flights over Mexican territory.

Ellington Field, TX. Houston, TX. Texas Air National Guard operates 12 Predators patrolling the Texas-Mexico border.

Ellsworth AF B, SD. 432nd Attack Squadron (ATKS) to be reactivated in 2010 to control *MQ-9 Reapers* for remote combat operations and to assist U.S. Customs & Border Protection in patrolling the U.S.-Canadian border.

Hancock Airfield, NY. The New York Air National Guard 174th Fighter Wing in Syracuse has been flying Reapers over Afghanistan since Dec 2009. Hancock Airfield is also the maintenance and repair center for Reapers. NY Sen. Schumer is promoting the Adirondacks as a testing and practice area for flying drones in national air space. Peace activists hold regular vigils every second and fourth Tuesday afternoons at rush hour.

In April, 2011, Peace Now Ithaca organized a 5-day peace march from Ithaca to Syracuse to protest the drone air war with the Upstate Coalition to Ground the Drones and End the Wars. On April 22, 37 peace activists were arrested during a nonviolent action against drone warfare. This action was held in solidarity with the Sacred Peace Walk and drone protest taking place at the same time at Creech AFB, NV.

Hector International Airport, ND. Fargo, ND. 119th Wing of the North Dakota Air National Guard flying Predator ISR missions over Iraq.

Holloman AFB, NM. Alamogordo, NM. The 6th Reconnaissance Squadron is part of the Remotely Piloted Aircraft Flying Training Unit for Predators and Reapers.

Langley AFB, VA. Drones being flown in the secret war in Pakistan are controlled by the CIA's secret intelligence and surveillance center in Langley, VA., part of the Air Force's \$5 billion global surveillance network. In a big warehouse, hundreds of TVs are monitored by "cubicle warriors", each watching 10 TVs showing "Death TV", live video from drones in Southwest Asia.

March Joint Air Reserve Base, CA. Riverside, CA. The California Air National Guard in 2007 was first ANG to fly Predators on remote combat support missions. Assigned 12 Predators using Edwards AFB for training.

Whiteman AFB, MO. Knob Noster, MO. Predator basing in Feb 2011, operated by Air Force active duty, Air National Guard and Air Force Reserve.

Many training and testing sites are also part of the ubiquitous drone control, communications and manufacturing complex: *Edwards AFB, CA*, is used by March Joint Air Reserve Base for *Predator* flight training, and for flight testing Northrup Grumman's X-47B and Boing's *Phantom Ray* UCAS combat drones; **Ft. Huachuca, AZ**, 50 miles south of Tucson, is a drone training center and closed-range facility for demonstration tests of small reconnaissance and target-acquisition drones, like the Army's *RQ-7BShadow* series drones. *Predator* drones controlled by Davis-Monthan AFB for border surveillance are housed in new hangers at Ft. Huachuca. **Nellis AFB, NV**, adjacent to Creech AFB is a drone training center for foreign countries. Xe (Blackwater) mercenaries train at Nellis to load missiles and bombs on *Predators and Reapers*. **Yuma Proving Grounds, AZ**, is the test site for new high-altitude, longendurance drones, such as the U.K.'s solar powered *Zephyr* designed to stay aloft for up to three months.



The Drone Merchants

The U.S. Military is using over 7,000 unmanned drones. In 2010 unmanned drones outnumbered manned aircraft. Drone sales will earn \$20.2 billion over the next 10 years for aerospace war manufacturers, with \$20.6 billion more spent on R&D.

General Atomics and Northrop Grumman have 57% of the U.S. market and U.S. companies control 65% of the international market. World-wide, 49 companies make over 150 different drone aircraft:

AAI Corp. Hunt Valley, MD.

Shadow RQ-7B tactical army drone: 11' long, 14' span, 375 lbs. Flies 135 mph to 15,000 feet for 5-7 hours and a range of 75 miles.

AeroVironment. Monrovia, CA.

Hummingbird, world's smallest flapping-wing drone, for close-in surveillance such as flying through open doors and windows. 6.5 in. span, 1 oz. Video camera and 4 electric motors.

Dragon Eye reconnaissance/surveillance drone: 3' long, 3.8' span, 5.8 lbs. Flies 40-60 mph to 500 feet for 1 hour and a range of 3 miles.

Wasp III small reconnaissance/surveillance drone: 1.25' long, 2.4' span, 1 lb. Flies 40-60 mph to 1,000 feet for 45 min.

Raven RQ-11 reconnaissance/surveillance drone: 3' long, 4.5' span, 4 lbs. Flies 25-80 mph to 10,000 feet for 1.5 hours and a range of 6 miles.

Global Observer, world's largest high-altitude, long-endurance (HALE) persistent ISR drone: 250' span, 10,000 lbs. Stays aloft for 7 days up to 70,000 feet. World's first liquid hydrogen-powered drone flight, May 2005.

Aurora Flight Sciences. Manassas, VA

Orion Medium-altitude, long-endurance (MALE) ISR and weaponized UCAV drone: 57' long, 132' span, 8,900 lbs. with 1,000 lb. payload. Can carry 1,200 lbs. of external fuel tanks or hellfire missiles under each wing. Flies 140 mph up to 30,000 feet for 5 days with a 9,500-mile range. **In development**, first flight summer 2011.

Excaliber tactical strike drone: 23' long, 21' span, 2,600 lbs. Flies 300 mph up to 40,000 feet for 3 hours. **In development.**

Boeing Defense, Space and Security. St. Louis, MO.

A160 Hummingbird reconnaissance/surveillance helicopter drone. 35' long, 36' rotors, 5,000-6,500 lbs. with 1,000 lb. payload. Flies 200 mph up to 30,000 feet for 20 hours with a 2,500-mile range. In 2011, will be equipped with an Argus-IS gigapixel multi-camera sensor with 65 video feeds. **In development**, but Army will deploy three Hummingbirds to Afghanistan in 2011.

Solar Eagle reconnaissance/surveillance drone: 435' span, 6,000 lbs. To stay aloft for five years (43,800 hours). **In development**, first demonstration flight in 2013.

Phantom Ray, built as the X-45C advanced multi-mission UCAS: 36' long, 50' span, 36,500 lbs. Flies 615 mph up to 40,000 feet. **In development**, redesigned for electronic attack. Cost: \$60-70 million.

General Atomics Aeronautical Systems. San Diego, CA.

MQ-1 Predator long-duration ISR and weaponized UCAV drone: 27' long, 55" span, 2,500 lbs. with 450 lb. payload. Flies 138 mph up to 25,000 feet for 40 hours with a 675 mile range. Carryies two 100 lb. laser-guided hellfire missiles. Cost: \$5 million.

MQ-9 Reaper long-duration ISR and weaponized UCAV drone. 36' long, 66' span, 10,500 lbs. Flies 275 mph up to 50,000 feet for 30 hours. Can carry 3,000 lbs. of munitions, including Sidewinder heat-seeking missiles and laser-guided Hellfire and Paveway 500 lb. bombs. Defense Dept. purchased 48 Reapers 2009-2010, 36 in 2011, and plans to procure 48 per year for the next four years. In 2011 will be equipped with Gorgon Stare, wide-area camera sensor with 10 video feeds to track multiple targets. Cost: \$13 million.

The Defense Department's Force Objective is to procure 195 MQ-1 Predators, 319 MQ-9 Reapers, and 77 RQ-4 Global Hawks (see below). In 2005, General Atomics won a \$5.7 billion contract to provide the Air Force with MQ-1 Predators for 15 squadrons over five years.

Avenger multi-mission CUAV drone: 38' long, 64' span, 16,800 lbs. Jet-powered, stealthier than Predator or Reaper. Flies 460 mph to 50,000' for 20 hours. Weapons bay and Hellfire missiles. In development.

Sea Avenger sea-based combat and ISR drone: Designed for Navy's Unmanned Carrier-Launched Airborne Surveillance and Strike (UCLASS) System. "Deployable soon".

Honeywell Aerospace. Phoenix, AZ

RQ-16 T-Hawk MAV vertical takeoff and landing drone: 17 lbs and flies 45 mph up to 7,000 feet for 40 minutes.

Northrop Grumman Aerospace Systems. Redondo Beach, CA

MQ-88 Fire Scout multipurpose helicopter: 23' Long, 27.5' rotor, 3,150 lbs. Flies 144 mph up to 20,000 feet for 8 hours with 126-mile range. 800 lb. payload. **In development**.

RQ-4 Global Hawk reconnaissance drone: 44' long, 116' span, 25,600 lbs. with 2,000 lb. payload. Flies 450 mph up to 6,500 feet for 24 hours with 13,800-mile range. Camera sensors can cover 40,000 square

miles in a day. Operated in U.S. from Beale AFB, CA, and three stationed at Anderson AFB, Guam. Cost: \$35 million.

MQ-4C Global Hawk (BAMS) Broad Area Maritime Surveillance drone: 47' long, 130' span, 32,250 lbs. Flies up to 60,000 feet for 36 hours with a 600-900 mile range. **In development**, \$1.16 billion DoD contract. First flight May 15, 2012. Operational in 2015 to patrol Persian Gulf and Asia-Pacific.

X-47B CUAV: 27' long, 27' span, 5,500 lbs. Flies 172 mph up to 35,000 feet for 12 hours. Designed to take-off, land and operate autonomously from an aircraft carrier. **In development**, scheduled to self-land on a carrier in 2013 and perform autonomous air refueling in 2014.

LEMV (Long Endurance, Multi-intelligence Vehicle): 300' long airship to stay aloft 3-4 weeks up to 20,000 feet. **In development**, to be deployed to Afghanistan in 2011

Raytheon Co. Waltham, MA.

Cobra surveillance/reconnaissance: 9' long, 10' span, 100 lbs. Flies 60-70 mph for three hours.

Raytheon Corp. (Tucson) is also developing the *Griffin*, a lightweight guided air-to-ground missile for the Predator and smaller combat drones. A Predator can carry three Griffins for each 100-lb. Hellfire missile.

Communication Systems West, Salt Lake City, UT, makes the Predator Reconnaissance System, or Kuband Satcom Data Link (KuSDL).

One Predator System consists of four Predators, a Ground Control Station (GCS), and the Predator Primary Satellite Link (PPSL).

According to one report, live surveillance video travels via satellite to Europe where it is sent across the Atlantic by fiber optic cable to stateside communications centers at Creech AFB, NV, and Beale AFB, CA, and then on to the other drone controller bases in the U.S.

The Human Cost

The drones are fomenting hatred against the government and turning people against America." -a doctor in Waziristan



Kathy Kelly sits with an Afghan girl who lost her arm in a drone strike in Afghanistan.

<u>AFGHANISTAN</u>

The fundamental logic of unmanned drones is to carry out military actions without risking American lives. The flaw in this logic is the risk of killing innocent civilians is increased by *bad intelligence*, *mistakes*, *data overload*, *and plain old technological arrogance*.

In a "60 Minutes" segment on Creech AFB in May 2009, a Predator pilot, Lt. Col. Chris Goff, was asked: "What if you get it wrong?"

Col. Goff replied, "We don't."

On Feb. 21, 2010, based on inaccurate information from a drone flightcrew at Creech AFB, a Kiowa attack helicopter fired Hellfire missiles at three vehicles in Oruzgan province in Afghanistan killing 23 civilians. The drone flight crew had misidentified the civilians as insurgents. Gen. McChrystal apologized for the incident and called civilian deaths "heartbreaking."

This was not the first heartbreaking accident in Oruzgan Province. In July 2002 an AC-130 gunship fired on a wedding party killing 48 Afghans, including many women and children. In July 2008, an air strike on another wedding party in eastern Afghanistan killed 47 civilians, including 39 women and children. One month later, on Aug. 22, another AC-130 gunship attacked the village of Azizabad killing 76-90 civilians, including 60 children.

According to the United Nations and Human Rights Watch, by 2009 the United States air war in Afghanistan had killed or wounded more than **1,000** civilians. These accidental civilian deaths are the inherent contradiction in the \$2 billion a week military occupation of Afghanistan and undermine any successes gained against the Taliban adversary.

"People were in the gardens to water their plantings.

The plane without a pilot targeted them and they were killed."

-Agha Jan, a resident of Lashkar Gah

Directly or indirectly, unmanned *Predator* and *Reaper* drones are usually complicit in the killing of innocent civilians. Hundreds of civilians are killed by bombs and Hellfire missiles from drones targeting Taliban and al-Qaeda fighters. Hundreds more civilians are killed by air attacks and ground troops using surveillance information from drones.

A Human Rights Watch report in 2008 concluded that

"High civilian loss of life during air strikes has almost always occurred during the fluid, rapid-response strikes, often carried out in support of ground troops after they came under insurgent attack."

On May 4, 2009, American air strikes in Farah Province killed 117 to 147 civilians, including 26 women and 61 children, in what human rights workers called the worst civilian loss of life in eight years of war in Afghanistan. Defense Secretary Robert M. Gates said, "I believe that the civilian casualties are doing us an enormous harm in Afghanistan, and we have got to do better."

Following the Farah tragedy, Afghanistan President Hamid Karzai told CNN,

"We believe strongly that air strikes are not an effective way of fighting terrorism."

Nevertheless, on Dec 27, 2009, an air strike in Kunar Province killed 10 civilians, 9 of them school-age boys. A few days later, on Dec 30, another missile strike in Lashkar Gah, the capital of Helmand province, resulted in the deaths of eight more civilians, including three children.

The New York Times reported in Feb 2010 that Predator and Reaper drones launched at least 250 bombs and missiles in 2009. News reports cite **129** air attacks in Afghanistan between Jan 2009 and May 2010.

"Tragedy should never have happened."- General Petraeus, referring to the May 1, 2011 killing of nine

Afghan children by NATO helicopter gunships

"Civilian casualties are no longer acceptable. Apologies are not enough."

Afghan President Hamid Karzai

In 2011 the civilian death toll in the U.S. air war in Afghanistan continues to grow. On Feb. 19 an air strike in Kunar Province killed 65 people, including many women and children. One day later, another air strike in Nangarhar Province accidentally hit the house of an Afghan soldier killing him, his wife and four children.

On Mar 1, 2011, another accidental air strike killed nine children gathering firewood on a hillside in the Nangalam District of Kunar Province. Gen. Petraeus apologized and said the accident "should never have happened," but the incident brought hundreds of protesters into the streets of Kabul. On Mar 7, Defense Secretary Robert M. Gates said the Nangalam accident was "a setback for our relationship with the Afghan people."

According to UN reports, U.S. air strikes in Afghanistan killed **357** civilians in 2009 and **171** civilians in 2010. NPR reported that civilian casualties from helicopter gunships tripled in 2010. In 2011, **80** civilians have already died in air strikes. From 2006 to 2011, an estimated **1,245** civilians have died in U.S. air attacks in Afghanistan.

The United Nations annual civilian casualty report in March 2011 says **8,830** Afghan civilians were killed in the four year period 2007-2010. The **2,777** civilian deaths in 2010 was 15 percent higher than 2009 and 45 percent higher than 2007. While 75 percent of civilian deaths are attributed to the Taliban, it must be asked: how many suicide attacks and IEDs are revenge for the victims of drone attacks? How many enemies are we creating?

Former Pentagon official Pierre Sprey points out the fallacy of drone strikes:

"What happens on the ground is for every one of those (bomb) impacts, you get 5 or 10 times as many recruits for the Taliban as you've eliminated. The people that we're trying to convince to become adherents to our cause have become rigidly hostile to our cause."

PAKISTAN

Called a "brilliant intelligence tool" by the CIA, Predator drones had been flying over the tribal areas of Pakistan tracking Osama bin Laden in the 1990s. After 9/11, armed Predators also became "sophisticated killing machines" used for the first time in 2002, blowing up a SUV and killing six suspected al-Qaeda members in Yemen.

According to Pakistani reports, 60 drone air strikes during 2006-2008 killed 14 al-Qaeda leaders and **700** civilians, a ratio of 1 to 50, the loss of 50 innocent civilian lives to kill one suspected terrorist. On "60 Minutes" on Aug 31, 2008, Marc Garlasco of Human Rights Watch said 30 civilian deaths are acceptable to the military to kill one "high value asset."

"Their bodies, carbonized, were fully burned. They could only be identified by their legs and hands. One body was still on fire when he reached there. Then he learned that the charred and mutilated corpses were relatives of his who lived in his village, two men and a boy aged seven or eight. They couldn't pick up the charred parts in one piece."

-Told by Pakistani Journalist Safdar Darwar to Kathy Kelly and Josh Brollier (commondreams.org, May 18, 2010)

After taking office, President Obama escalated the secret drone war in Pakistan's northwest tribal areas adjacent to Afghanistan, mainly in North Waziristan. Drone air strikes averaged one a week, to 53 in 2009 that reportedly killed **400-500** people. In 2010 the number of drone attacks increased to **104**.

On Mar 17, 2011, a drone air strike killed up to 40 people in Datta Khel, North Waziristan, sparking anti-American demonstrations around Pakistan. A top Pakistani general claimed the Predator targeted "a peaceful meeting of tribal elders" and said that attack was a "flagrant violation of all humanitarian rules and norms."

Since the U.S. does not comment on the covert CIA war in Pakistan, news organizations must rely on Pakistani sources. The CIA has been conducting clandestine operations in Pakistan since 2004. According to an NPR report on Mar 22, 2011, **2,000** people have been killed since 2006. According to pakistanbodycount.org, drone attacks have claimed **2,257** victims.

The Resistance

"Who has given the license to kill and in what court?...

What kind of democracy is America where people do not ask these questions?"

Safdar Darwar, Pakistani Journalist

Peace activists are asking why so many people are dying in U.S. air attacks in Pakistan and Afghanistan, and why the American people are not demonstrating outrage at such deplorable loss of life. More than **10,000** civilians have lost their lives, either directly or indirectly attributable to the U.S. military occupation of Afghanistan and air war in Pakistan. More than **1,400** U.S. GIs are dead.

"Ground the Drones"

On April 9, 2009, Creech AFB was surprised when 14 peace activists walked through the main gate to "break bread and dialogue" with drone flightcrews inside. On April 22, 2011, 37 protesters were arrested in a peace action against drone warfare at Hancock Field in Syracuse, NY. Nonviolent resisters want the drone controllers to think about the horrific death and destruction they are raining down on people thousands of miles away and to contemplate that their bombs do not prevent or eliminate terrorism, but instead incite more hatred, revenge and retaliation, and make more recruits for the Taliban.

At a trial that took place in Las Vegas, NV, the "Creech 14" made the point that unlike the robust public debate around the A-bomb after 1945, the insidious creep of robotics into warfare was going generally unnoticed in the arena of public discussion. Yet, drones have become a devastating new weapon resulting in a deplorable loss of life in Arab countries under U.S. military domination. The Creech 14 and Syracuse 37 have good reason to resist drone warfare as neither legal nor moral, and their nonviolent direct action is witness that people of good conscience have a duty to raise public awareness about drones. In the spirit of Martin Luther King, the Creech 14 and Syracuse 37 intend to dramatize the issue so that it can no longer be ignored.

Colonel Khadafy "violates international norms and every standard of human decency"

-President Obama, Mar 23, 2011

The U.S. air war is "unacceptable and contrary to fundamental humanitarian laws."

-Pakistani Gen. Kayani, Mar 23, 2011

President-elect Obama disappointed peace activists when he not only doubled the number of drone air strikes in Pakistan , but also embraced the policy of *targeted killing*, the extrajudicial execution of specific persons, or "high value assets." State-sponsored assassination was illegal since the 1980s but was renewed after 9/11. Drones were the perfect assassins, capable of finding and then striking a human target with a "precision" bomb. Since the Hellfire missile leaves a crater 15 feet wide and 2 feet deep, the claim that drones minimize civilian casualties is somewhat overstated, especially when drone strikes occur in urban areas near civilian populations.

As drone strikes intensified in North and South Waziristan in 2009, two studies from the New America Foundation and the Brookings Institutions found between 33% and 90% of deaths in drone attacks were civilians. Even more disturbing, peace activists noted that news reports often mentioned that, disproportionately, civilian casualties were women and children. It is reasonable to conclude that the number of civilians killed in drone air strikes is much higher than is usually reported because any military aged male is most likely considered to be a militant.

Peace activists have a reasonable belief that the well-documented and grievous loss of human life from targeted killing by drones is a war crime explicitly prohibited by international and humanitarian law. Attacks against civilians are war crimes according to the *Geneva Conventions*, the *Nuremburg Tribunal*, and the *War Crimes Act* adopted by Congress in 1996. Yet, no U.S. court has ever ruled on the legality of targeted killing by drones.

Peace activists are reasonable to believe that individuals have the right, the responsibility and the duty, under the Nuremburg principles, to resist crimes against humanity. It was important to deliver the

message to drone flightcrews at Creech AFB that they also have the right and the duty to disobey orders to carry out targeted killings that could cause innocent people to lose their lives.

"It is our responsibility to escalate the level of risk

we're willing to take in nonviolent direct action to confront

the militarists." -Kathy Kelly

Drones are the frontline in confronting militarism today. Military technology is speeding headlong toward autonomous weapons systems on land, sea, air, and in space. From mini-bots and micro air vehicles to combat drones, high altitude airships and self-landing spacecraft, generals predict that future wars will be fought with "tens of thousands of drones."

Peace activists understand the fallacious reasoning of robotic warfare: Drones make it politically convenient to order military actions without risking American lives, thereby making it easier, and more tempting, to start wars. Allowing drones to set international norms for military conflicts is a dangerous precedent.

Nonviolent direct action campaigns to raise public awareness about drones began at Creech AFB in 2009 and at General Atomics in San Diego and Ft. Huachuca, AZ, in 2010. In 2011 drone resistance actions took place at Davis-Monthan AFB, AZ, and Hancock Airfield in Syracuse, NY. As drone air strikes continue to escalate with a mounting civilian death toll, and by expanding the Predator into direct combat in Libya, drone protests could be expected to spread to other drone bases at Cannon AFB, NM, March AFB, CA, Ellington Field, TX, and Fargo, ND.

Protest actions should also focus public attention on the drone profiteers: *AAI Corp*. (Hunt Valley, MD), *AeroVironment* (Monrovia, CA), *Aurora Flight Sciences* (Manassas, VA), Boeing Defense, Space and *Security* (St. Louis, MO). *General Atomics AeronauticalSystem* (San Diego, CA), and *Honeywell Aerospace* (Phoenix, AZ).

Public education about the legality and ethics of drone warfare might also be organized with university UAV programs at *Kansas State University* (Salina, KS), *University of North Dakota Department of Aviation*, and *Embry-Riddle Aeronautical University* in Florida.

Drone-Speak

Autonomous - Self-operating, without a ground controller.

BAMS - Broad Area Maritime Surveillance.

CAP - Combat Air Patrol

HALE - High-altitude, Long-Endurance.

ESR - Intelligence, Surveillance, Reconnaissance.

LEMV - Long-Endurance, Multi-intelligence Vehicle.

MALE - Medium-Altitude, Long-Endurance

MAV - Micro Air Vehicle

NAS - National (civilian) air space.

Payload - The information gathering, photography and communications electronics "eye" of a drone, mostly contained in the "Skyball" turret under the drone's "chin".

Persistent - Able to remain airborne for long periods of time, even days or weeks.

ROA -Remotely Operated Aircraft.

RPA - Remotely Piloted Aircraft.

UAV -Unmanned Aerial Vehicle.

UAS - Unmanned Air System, a more inclusive term for UAV.

UCAV - Unmanned Combat Aerial Vehicle

Bigger, Smaller, Faster, Higher

"We're going to make more, we're going to make them better, and we're going to employ them more.

That's the future."

-Gen. Robert Behler, USAF

Operational experience in Afghanistan is driving development of new military-related drones. All manner of remote-control flying machines are rapidly filling the air, from robotic flapping wing insects to 300-foot airships. Combat drones will be "longer-loitering" while "robo-flies" will send surveillance video from inside a room. Solar-powered reconnaissance craft will be peering down from near space.

Midget flying spies are mimicking the flight of birds and even insects, able to fly into small spaces with miniature cameras. The *Wasp III* is 1.25 ft. long and can fly 40-60 mph to 1,000-feet for 45 min. The 6 inch *Black Widow* can fly for 30 min. up to 600-feet and send back high quality video from a camera the size of a penny. The 6.5 inch *Hummingbird* is the world's smallest flapping—wing drone.

The Air Force wants an MQ-X combat drone that flies twice as fast as a Reaper with a range of 800 miles and can carry 5,000 lbs. of munitions. The *Orion* is the next likely Predator-type drone with a range of more than 9,500 miles (compared to 675 miles), able to stay aloft 120 hours (compared to 24 hours), and can carry 1,200-lbs of weapons under each wing. Technologies are being developed that would allow combat drones to "negotiate" with each other so a group of drones could be assigned a target and then coordinate themselves.

Northrup Grumman's X-47B Navy combat drone and Boeing's Phantom Ray (X-45) both look like hyper-drive starships in Star Wars. The X-47B UCAS will be self-landing on an aircraft carrier in 2013 and demonstrate autonomous aerial refueling in 2014. A Global Hawk "tanker" will also demonstrate autonomous aerial refueling of another Global Hawk in 2011.

Northrup-Grumman's 300-foot long hybrid-airship is under development to stay aloft 3-4 weeks up to 20,000 feet. The Long-Endurance Multi-intelligence Vehicle (LEMV) a 3,500 lb. payload of surveillance sensors, including radar to detect and track roadside bombers. The airship is scheduled to be deployed to Afghanistan at the end of 2011.

The 72-foot span, 110-lb. solar powered Zephyr is designed to stay aloft three months up to 60,000 feet. Boeing and the Defense Department are designing the solar-powered *Vulture* to stay aloft in the stratosphere for five years.

The X-37B *Orbital Test Vehicle* (OTV) is a reusable spaceplane that is launched into orbit and then *autonomously* re-enters and lands itself. The first X-37B spy drone was in orbit 224 days and landed in Dec 2010. A second X-37B OTV will be launched in the spring of 2011.

The U.S. Air Force envisions "human performance augmenting technology" to keep pace with autonomous aircraft that fly themselves. "Brainwave coupling" will speed up the interaction of human and machine using eye readers to measure activities in the brain that tells computers what the operator *subconsciously* wants to see or do (from "*Technology Horizons*" a 150 -page report envisioning what technologies the Air Force will be funding in 2010)

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