

The Use of Drones in Surveillance and Killing

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Introduction

The foundation for protecting privacy (and lives) and (attempting the) limiting of government's power to intrude on an individual is the Fourth Amendment's prohibition of "unreasonable searches and seizures," including the "seizure" of a person's body. Subject to a few narrowly drawn (by virtue of judicial criminal court) exceptions, at least prior to the FISA (Foreign Intelligence Surveillance Act) and USA PATRIOT (Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001) Acts, the Fourth Amendment permits an investigative search or seizure only when it is supported by probable cause and a warrant or during "exigent" circumstances (relatively 'extreme' and unusual events which do not normally allow the time it would take for the request and acquisition of a search warrant). Under normal circumstances government agents must have "a substantial basis" to believe that a search will reveal evidence of criminal activity, and a neutral judicial officer, concurring in that official assessment, must authorize the search in a court order "particularly describing the place to be searched, and the persons or things to be seized."¹ One of the major ideas central to this constitutional concept includes the idea that those who are in fact engaged in criminal activities have no claim to be shielded from governmental intrusion; once probable cause exists (leading, usually, to a signed search warrant), or after a legal arrest has been made, their houses, papers and effects are fair game for any search that could yield evidence of past or ongoing offenses. The point of the probable cause requirement, therefore, is *not* to shield those who "have something to hide" but rather to ensure that searches will focus on individuals who are likely offenders and will not subject innocent, law-abiding citizens to disruptive, frightening, and/or intrusive search and surveillance procedures. At least, that's the idea.

The current war we are fighting is unlike any war this country has fought, in the past. Hoffman, referring to the War on Terror, points out "there's no specific battlefield and the enemy isn't an army."² Political theorist Richard Jackson uses a slightly more expansive definition when he describes it as "simultaneously a set of actual practices—wars, covert operations, agencies, and institutions—and an accompanying series of assumptions, beliefs, justifications, and narratives—it is an entire language or discourse."³ In other words, to attempt to define the "War on Terror" is to understand that, for all practical (governmental agency) purposes, it is a general fluidity designed to provide the government with the most flexibility in response to its goals; it is an artificial paradigm created by those in government to allow themselves the latitude to act without adherence to previously court-upheld restraints. In doing so, it puts everyone on the planet at risk, especially the citizens of the United States as it leaves open the possibility of an individual arbitrarily being labeled an *enemy combatant* and, subsequently, him or her being targeted as fair game for all the tools of surveillance and war, which in the case of this chapter are drones (also known as unmanned aerial vehicles, UAVs, or unmanned aerial systems, UAS, or Remotely Piloted Vehicles, RPVs). Basically, the so-called War on Terror has, for current intents and purposes, seemingly reversed the inherent foundation of the Bill of Rights: that individuals are *assumed innocent* until proven guilty; the new paradigm apparently is that we are *all* presumed guilty until evidence (or surveillance) "indicates" that we are "innocent," or at least, not "guilty," either subjectively, or objectively. And absolutely no one seems to be completely sure what the evidentiary level is, on either of those, at the moment.

History of UAVs (Unmanned Aerial Vehicles)

Unmanned aerial vehicles, or drones, or UAS, have been around for a long time. Although it seems that they originated with the invasion of Iraq, they have actually been with us, in one form or another, since 1849. In July of that year, Austrians launched approximately two hundred unmanned balloons filled with explosives against the city of Venice.

The concept of military aerial surveillance dates to the American Civil War, when both sides used manned balloons to spy on their respective enemies, to obtain visual information on troop movements, strengths, and help direct artillery fire. The first use of an unmanned aerial surveillance occurred in 1898, during the Spanish-American war, when the U.S. military put a camera on a kite, producing the first aerial reconnaissance photographs.

A man named Elmer Sperry was hired by the U.S. Navy during World War I to develop what were ambitiously referred to as “air torpedoes,” which were basically unmanned Curtis biplanes launched by catapult to fly, theoretically, toward and then over enemy lines, and then to fly vertically downward, loaded with TNT. The war ended before the system could be put into operation, but, according to Navy reports, the planes typically either crashed shortly after being launched, or simply flew out over the ocean, eventually lost at sea.

During the Second World War, Nazi scientists experimented unsuccessfully with radio-controlled missiles during the bombardment of England. The U.S. Navy’s own version of this concept, called Operation Anvil, or Operation Aphrodite (U.S. Army version), targeted German bunkers using remotely-guided B-24 bombers filled with explosives, designed to crash at selected targets in Germany and France. That was the concept, but the actual application had problems. As a new technology, radio control was limited, at the time, so human pilots were needed for takeoffs, as well as part of the actual flight of the B-24. After the plane reached cruising altitude and a pre-designated location, the pilot would parachute to safety, and another pilot in a following plane would theoretically take control of the TNT-loaded plane, and guide it to the selected target in Germany or Nazi-controlled France, where it would crash and blow things up (hopefully important enemy things). Similar to the “air torpedo” concept, however, things did not always go as planned. Joseph Kennedy, John F. Kennedy’s older brother, was one of the initial pilots of Operation Anvil/Aphrodite. He was killed when his B-24 exploded prematurely over Suffolk, England, in August 1944. In one of the ironies of the war, Kennedy’s target that day was a site in Germany where Nazi scientists were working on the remote delivery of explosives: the first military rocket program.

During the 1950s, military and private expertise was concentrated on the space program and rocket development (we were in a race with the USSR to get to the moon). And, in the late 1950s, in addition to ballistic missiles, scientists developed cruise missiles, small unmanned aircraft, with short wings to provide lift, designed to deliver an explosive payload to a specific target. Precursors to modern weaponized UAVs, some carried cameras and were capable of mid-flight corrections and guidance. Of course, not really designed for surveillance missions, they could not hover over a battlefield for hours, and return to base. So, Air Force engineers, in the 1960s and 1970s, continued to develop unmanned aerial vehicles specifically for surveillance flights.

The first use of what the military calls ISR (intelligence, surveillance, and reconnaissance) drones came in Vietnam. By the end of the war, drones had flown approximately 3,500 reconnaissance missions in Vietnam. During the war, the Air Force had developed two attack drones—the BGM-34A and BGM-34B, but never used them in actual combat. The problem, at the time, was the sensors—they were not capable of identifying camouflaged targets with the accuracy the military required.⁴

Advances to American surveillance drone technology in the 1980s were primarily due to improvements in computing and electronic controlling systems. Drone surveillance at the time was relatively simple—basic coverage patterns of areas of interest, with multiple drones and overlapping patterns (at least, in American military planning). After the end of the Vietnam War, many of the direct advancements in UAV technology were made by Israel, which used them to monitor the Gaza strip. During this period, Israel sold several drone models to the Pentagon, including one called the Pioneer, which could be launched either from a ship or from a military base, and had a range of up to 115 miles. The American military used the Pioneer extensively (over 300 missions) during the first Gulf War. At one point during the conflict, history was made, as a group of Iraqi soldiers surrendered directly to a Pioneer, waving white bedsheets and t-shirts at the drone, while it circled overhead.⁵

At some point in the 1990s someone in either the Air Force or the CIA, or both, realized that if a UAV could carry a camera, then (if it were large enough) it could carry a weapon. The CIA became directly involved with the effort to arm drones officially after the 9/11 attacks (probably much earlier), although the agency had used them for surveillance prior to that date. The agency had been authorized to “support” military operations prior to 9/11, but the legal parameters governing its involvement in military operations, particularly covert operations, is murky, at best.

Currently, the two most commonly used drones in Afghanistan and Pakistan are the MQ-1B Predator and the MQ-9 Reaper. These drones are equipped with color and black and white TV cameras, image intensifiers, radar, infra-red imaging for low-light conditions and lasers for targeting.⁶ The Predator drone was originally created for intelligence-gathering, surveillance and identifying targets and reconnaissance. Since 2002, it is now equipped with two Hellfire II missiles along with munitions and is extremely accurate. Hitting the designated target (a person, not a location, which is relatively new) isn’t really the problem. Making the subjective decision that the selected target is actually doing something (or has done something) worth dying for is what is (relatively) difficult. Of course, if someone else has already made that decision, it becomes moot.

Government attorneys were worried back in 2001, about the legality of CIA officers using lethal force against terrorists, with UAVs. They don’t apparently worry nearly as much, today. Relatively few people seemed to be concerned, except for some academic types and activists who worry that the CIA operatives are much less accountable than the military for both their targeting and their mistakes (one of which is covered, in detail, in the next section). Drones are just one method of killing, however. What is it about *drone* targeting that seems to be so troubling, at least to some people? Perhaps it has to do with the naming conventions the UAV manufacturers use. The first major operational drone developed after 2001 was called *Predator*, a name which invokes unthinking, inhuman characteristics, and which implies that the enemy is not human, but prey, and that the operation is not combat, but a hunt. General Atomics, the Predator’s manufacturer, subsequently developed its larger brother, the *Reaper*, a name which implied the United States was fate itself. And, of course, the payload weapon is *Hellfire* missiles, which fits the ideology perfectly. To paraphrase the Blues Brothers, we are on a mission from God. Or, apparently, based on our UAV nomenclature, we think we are.

U.S. Drone Implementation and Policy

The hottest technology in the War on Terror (or the activity, whatever you want to call it, along the borders) is the Unmanned Aerial Vehicle (UAV), or drone. The unmanned Predator drone was first used in a targeted killing by the Central Intelligence Agency (CIA) on February 4, 2002.⁷ The CIA targeted “civilians/suspected terrorists” at a location known as Zhawar Kili near the town of Khost, in the Paktir province of Afghanistan. Whether the victims were “civilians” or “enemy combatants” or “suspected terrorists” depends on whose definition one accepts. The person the CIA intended to kill with the strike was Osama bin Laden. Shortly after the drone strike, journalists were collecting accounts from local Afghans that the dead men were poor non-combatant “civilians” trying to gather scrap metal left over from exploded American ordnance. Zhawar Kili, the site of the drone strike, was a mujahedeen complex originally built with CIA and Saudi support. During the 1980s, CIA officers used to visit the base, and it was the site of two major battles against the Soviets in the mid-1980s. President Clinton ordered Tomahawk cruise missile strikes on the area in 1998 after the African embassy bombings, and the U.S. military hit it with multiple airstrikes in 2001. In 2002 several military search and demolition teams were sent in to gather potential intelligence and to blow up the caves in the surrounding area.⁸

The CIA drone observers initially reported seeing three men at the former mujahedeen base, including a person they later described as a “tall man” to whom the other two men were “acting with reverence.” After the strike, military officials quickly agreed that the “tall man” was not actually bin Laden, but that the targets were “legitimate.” Pentagon spokesmen noted that there were no “initial indicators that the men were innocent locals,” although there were no reports that any of the three men were carrying any weapons. This seems to reflect an initial presumption of guilt, and begs the question of what the “initial indicators” of either “innocence” or “guilt” might have been, in the eyes of the drone operators, since it obviously was not related to actual weapons. The real question is not (or shouldn’t be) whether or not the President (and, by extension, the CIA) has the legal authority to use deadly force (by way of drone strikes) against those someone has made a subjective judgment that they are (or were, at some point) guilty of acts of terrorism, or acts of war. The real question should be by what subjective or, hopefully, objective means is someone *deciding* that a certain person or persons is guilty (enough) and should be exterminated?

By the time of the drone strike in February of 2002, Zhawar Kili had been deserted by the militants. After the strike, journalists (including John Burns, a reporter from the *New York Times*), spoke with local Afghans and confirmed the identities of the three men: Daraz Khan, the “tall man” (actually 5 foot 11 inches tall), about 31, from the village of Lalazha, and two others, Jehangir Khan, about 28, and Mir Ahmed, about 30, both from the village of Patalan. Burns spoke with the local people, saw the mens’ graves, and confirmed their extreme poverty. The men had climbed to the mountainous area to search for scrap metal from the earlier airstrikes—they could obtain the equivalent of about *fifty cents American* for a camel-load. Daraz Khan, the “tall man,” was six inches shorter than bin Laden.⁹

According to various sources, to date the death toll attributed to drone strikes by the United States has reached at least 2,400 people including men, women, and children.¹⁰ The Obama administration claimed on July 1, 2016 that it has killed “up to” 116 civilians.¹¹

Former President Bush initially authorized their use in Afghanistan to provide direct tactical support to troops on the ground and to deliver ordnance against human and physical targets. Their increased use under the Obama administration, particularly in countries outside the designated combat zones of Afghanistan, to target suspected terrorist suspects and kill them has been condemned under international law.¹² One of the arguments associated with drone targeted killings is that the *risks* (to innocent civilians) outweigh the *reward* (of killing suspected terrorists). There have been numerous occurrences where the intended target was terminated, but other “innocent” citizens were killed as a result of the bombing. The first time this happened was in 2002 when a hellfire missile fired from a drone struck a car in the Mar’ib province of Yemen, which killed the intended al Qaeda senior leader, and six others in the car.

New York Times journalist Scott Shane questioned the ethics affiliated with the use of UAVs and accused former President Obama and his administration of unethical behavior regarding the legality of the decision to use drones for targeted killing. In addition, Shane sought justification for killing American citizens using drones without due process, as the Constitution requires. Shane argued that the Obama administration was depriving citizens of Constitutional rights under the Fifth and Fourteenth Amendments. The most extreme power any leader can possess is the ability to target citizens for execution, without any charges. Not only is this power unprecedented, it is also done in secret.

The Death of Anwar Al-Aulaqi

In April 2010 the Obama administration authorized the targeted killing of radical Muslim cleric Anwar Al-Aulaqi, a U.S. citizen suspected of terrorist activities. This decision resulted in a great deal of debate concerning the legality of such actions. When Al-Aulaqi was targeted and killed by a UAS missile in Yemen on September 30, 2011, civil libertarians denounced the (apparent) lack of due process by the government in taking such extrajudicial measures against an American citizen, albeit a suspected terrorist. Two weeks later when additional persons in Yemen were killed on October 14, 2011, by another drone strike, the situation became more complicated. According to the government, the alleged target of the strike was Ibrahim Al-Banna, an Egyptian national. However, the resulting explosion killed seven other individuals including 16-year-old Abdulrahman Al-Aulaqi, the son of Anwar Al-Aulaqi, and, like his father, an American citizen. No explanation was ever given by an official representative of the U.S. government for Aulaqi’s son’s death.

The killings of the two American citizens in separate UAV strikes suggests two possibilities: either the targeting of two American citizens for killing without “judicial authorization” was a violation of the Constitutional right to due process afforded to each U.S. citizen by the Fifth Amendment, or the killings were legally acceptable, based on the authority granted to the executive and legislative branches to wage war and provide for the national security. NBC obtained a confidential memo from the White House that stated “the U.S. government can order the killing of American citizens if they are believed to be “senior operational leaders” of al-Qaida or “an associated force” -- even if there is no intelligence indicating they are engaged in an active plot to attack the U.S.”¹³

What seems to make the process worse, if possible, is the alleged “secrecy” with which the process is carried out. According to an article in the Guardian, the former president selected who should die from a list compiled by his subordinates each week: “there is zero transparency and zero accountability. The president's underlings compile their proposed lists of who should be executed, and the president - at a charming weekly event dubbed by White House aides as “Terror Tuesday” - then chooses from ‘baseball cards’ and decrees in total secrecy who should die.

The power of accuser, prosecutor, judge, jury, and executioner are all consolidated in this one man, and those powers are exercised in the dark.”¹⁴

Targeted killings On U.S. Soil?

If the U.S. government is willing to terminate its own citizens, overseas, and is legally authorized to do so, then what is preventing it from doing so on U.S. soil, if it is determined (by the appropriate person, that the target is deemed “acceptable”? If the target of a drone strike is engaging in a terrorist operation or even associated with the operation within U.S. jurisdiction to kill innocent Americans, then why wouldn't the American government act? It seems as though the U.S. accepts the collateral damage when it is in a “war zone” in another country such as Pakistan, Yemen or Afghanistan, but this is probably not the case when it comes to U.S. soil. It would probably be more beneficial if law enforcement agencies such as the FBI or CIA apprehended the individual(s), however. According to Ryan Reilly, a journalist of The Huffington Post (2013), “The Obama administration, [Attorney General] Holder said, rejected the use of military force where ‘well-established law enforcement authorities in this country provide the best means for incapacitating a terrorist threat.’ But in theory, it would be legal for the president to order such an attack under “certain circumstances,” according to (then) Attorney General Eric Holder, who further explained that: “The president could conceivably have no choice but to authorize the military to use such force if necessary to protect the homeland in the circumstances such as a catastrophic attack like the ones suffered on December 7, 1941, and September 11, 2001.”¹⁵

There exist arguments that the use of drones for these targeted missions is lawful within the context of “war” operations. There are a number of relevant factors that support the legality of this position. First, in 2001, Congress granted the president (George W. Bush at that time) “Authorization to Use Military Force (AUMF)” that specifically authorized the “use [of] necessary and appropriate military force against al-Qa’ida and affiliated forces.”¹⁶

Second, Anwar Al-Aulaqi was identified as a key leader of Al-Qa’ida in the Arabian Peninsula (AQAP) and designated as a Specially Designated Global Terrorist by the U.S. government pursuant to Executive Order 13224 and Global Terrorism Sanctions Regulations.¹⁷ The AQAP was (and remains) widely recognized as an “affiliated force” of al-Qa’ida. Al-Aulaqi was designated as a global terrorist based on his activities supporting AQAP, and was also tied to former U.S. Army Major Nidal Malik Hasan, convicted of murdering thirteen people at Ft. Hood, Texas, in a terrorist attack in November 2009.

Third, the Office of Legal Counsel in the U.S. Department of Justice allegedly completed a draft “white paper” dated November 8, 2011, that concluded:

[I]t would be lawful for the United States to conduct a lethal operation outside the United States against a U.S. citizen who is a senior, operational leader of al-Qa’ida or an associated force of al-Qa’ida without violating the Constitution or the federal statutes discussed in this white paper under the following conditions: (1) an informed, high-level official of the U.S. government has determined that the targeted individual poses an imminent threat of violent attack against the United States; (2) capture is infeasible, and the United States continues to monitor whether capture becomes feasible; and (3) the operation is conducted in a manner consistent with the four fundamental principles of the laws of war governing the use of force.

Then-Attorney General Eric Holder sent a letter to Senator Patrick Leahy dated May 22, 2013, asserting that: (1) Anwar Al-Aulaqi posed a continuing and imminent threat to the United States; (2) it was not feasible to capture him; and (3) that the decision to target him with lethal force underwent rigorous interagency legal and policy review and had the prior approval of congressional oversight committees. Using the above, the argument can be made that the appropriate laws and procedures were followed in targeting Anwar Al-Aulaqi, a global terrorist intent on bringing his version of “jihad against America” and who took an active part in leading AQAP to attempt just that. Using the above reasoning, it can also be argued that his killing did not violate Constitutional guarantees of due process in this particular instance. The Global War on Terrorism has resulted in unintended deaths of bystanders as does any war. Abdulrahman Al-Aulaqi was, unfortunately, one of those bystanders, as was another U.S. Citizen, Samir Khan, killed at the same time.

Drone Reconnaissance and Surveillance

Reconnaissance: A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.¹⁸

Surveillance: The systematic observation of aerospace, surface, or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means.¹⁹

Also, The continuous watching or listening (overtly or covertly) of people, vehicles, places, or objects to obtain information concerning the activities and identities of individuals.²⁰

Due to the fact that law enforcement routinely adopts military technology and weaponry in domestic policing operations, there is increased concern over privacy issues, particularly with a new technology which can directly invade individual privacy. The routine (and increasing) use of unmanned drones by civilian law enforcement agencies with the ability to remotely hover and record intimate details of our lives has many privacy advocates worried about the (possible) potential for government abuse. Existing case law (below) seems to provide adequate Fourth Amendment protections from future excessive government surveillance; however, as technology rapidly develops the law needs to respond quickly to any potential privacy infringements the new technology creates, either directly or indirectly.

U.S. v. Jones

The *U.S. v. Jones* (132 S.Ct.945 (2012)) case involves the use of a Global Positioning System (GPS) device installed by the government, without a warrant, to track a drug suspect. The government used the GPS device to monitor the respondent's movements for 28 days. The Court asked the parties to resolve several questions, including "Whether the warrantless use of a tracking device on respondent's vehicle to monitor its movements on public streets violated the Fourth Amendment." ²¹

The decision partially answered the above question, but not completely, which is not unusual for the Court. Although a majority of the Court held that the installation of the GPS device and its subsequent tracking for 28 days was in fact a *search*, under the Fourth Amendment, it declined to say whether the stated search was unreasonable, and whether it required a warrant. The justices split 5-4 on both the reasoning and extent of the decision.

Justice Scalia authored the opinion of a majority of the Court, and based it on a long list of cases dating from 1886, arguing that trespass/physical intrusion was (until the *Katz* case in 1967) the basis for deciding whether a "search" had actually occurred relative to the Fourth Amendment, and that the decision in *Katz* had not materially affected that legal basis. Scalia conceded that the decision in the *Katz v. U.S.* case (389 U.S. 347 (1967)) essentially changed the legal (Fourth Amendment) parameters of a search, from (prior to *Katz*) a physical intrusion, or trespass, to a violation of an individual's "expectation of privacy." However, he argued, citing several subsequent cases, that a reliance on trespass to make a determination of whether the Fourth Amendment had been violated had not been completely abandoned, after *Katz*, contending that, at a minimum, the Fourth must provide this level of protection, but that consideration of trespass does not and should not preclude a consideration of an individual's expectation of privacy. (Note: In a situation where there is no governmental trespass, consideration of an expectation of privacy is usually considered. Since the government clearly trespassed, in the *Jones* case, when it installed the GPS tracking device on the respondent's vehicle, the consideration of the reasonable expectation of privacy was not considered necessary, by the Court.)

Justice Alito, along with four other justices, agreed with the majority decision, but not with the reasoning. Alito argued against the reliance on physical trespass of the majority opinion, stating that the trespass-based "search" no longer applied to modern, electronic applications, such as the one in the *Jones* case, and that *technical* trespass was no longer necessary or sufficient to prove a constitutional violation.

According to Alito and the four judges aligned with him, the majority viewpoint failed to address the more pressing privacy issue presented by the relatively long-term monitoring (28 days) resulting from the use of the GPS device attached to the respondent's vehicle. Justice Sotomayor's concurrence adopted Justice Alito's privacy rationale but also sought to extend the reach of Fourth Amendment protections in the digital age by re-considering the third-party records doctrine as developed from the cases of *U.S. v. Miller*, 425 U.S. 435 (1976) and *Smith v. Maryland*, 442 U.S. 735 (1979).

Under the third-party records doctrine, a person cannot invoke Fourth Amendment protections from information that is knowingly provided to a third party, such as a telephone company.

Florida v. Riley

The *Florida v. Riley* case, 488 U.S. 445 (1989), involved law enforcement use of a helicopter to confirm the presence of marijuana plants and thereafter obtain a search warrant for the property based on that aerial surveillance. Deputies from the sheriff's office, after the search warrant was issued, searched Riley's home and seized the plants. Riley was subsequently convicted of growing marijuana. He appealed, arguing that the helicopter surveillance constituted an illegal "search" of his premises and therefore a warrant was required to conduct it. The Court held that this was not, in fact, a violation of the Fourth Amendment of the U.S. Constitution. Writing for the majority, Justice White noted that the accused did not have a reasonable expectation that the greenhouse was protected from aerial view and therefore the helicopter surveillance did not meet the definition of a search pursuant to the Fourth Amendment. Limiting its ruling, the Court stated that it was "of obvious importance" a private citizen could legally have overflowed the property in the same airspace: "Any member of the public could legally have been flying over Riley's property in a helicopter at the altitude of 400 feet and could have observed Riley's greenhouse. The police officer did no more." Also key to the Court's holding was that the normal use of the property had not been interfered with by the aerial surveillance: "As far as this record reveals, no intimate details connected with the use of the home or curtilage were observed, and there was no undue noise, no wind, no dust, or threat of injury. In these circumstances, there was no violation of the Fourth Amendment."²²

Kyllo v. United States

Compare the opposite result in *Kyllo v. United States*, 533 U.S. 27 (2001), wherein the Court held that the use of a thermal imaging device from outside the Appellant's home to determine there was a much higher than normal thermal signature from the roof and walls of the garage consistent with the use of "grow lamps" typically found in the indoor cultivation of marijuana plants. The thermal scan was the basis for a search warrant and the subsequent seizure of the illegal marijuana. *Kyllo* appealed, arguing that the observations made with the thermal imaging device constituted a search under the Fourth Amendment. Writing for the majority, Justice Scalia concurred, finding a reasonable expectation of privacy within one's home, and that a warrant must be obtained by law enforcement officers before conducting a search, even if that search is conducted using technology that does not physically enter the home itself. Since there was no warrant obtained before using the thermal imaging equipment, not commonly available to the public, the search was unreasonable and therefore unconstitutional. Justice Scalia expanded the holding beyond this case by noting that technology continues to advance, but that any technology that intrudes upon the privacy of the home requires that a warrant first be obtained.

The takeaway from these cases would appear to allow warrantless UAS surveillance in the very limited circumstances of *Riley*: The UAS is at or above an altitude of 400 feet; is in airspace where any member of the public has the legal right to be; and that there is no interference with the normal use of the property being surveilled. Conversely, per *Kyllo*, if the UAS were to be utilized to surveil inside a location where there is a reasonable expectation of privacy, (e.g., a private residence) the courts would be expected to require that a warrant based on probable cause be acquired prior to the search.²³

Increased drone use by law enforcement, the Department of Homeland Security, emergency management and emergency response agencies is rapidly approaching. This will prompt the Court to one day address the "dragnet-type law enforcement practices" it alluded to in *United States v. Knotts*, 460 U.S. 276, (1983).

Conclusion

Drones have played a beneficial role in military warfare since 1849. Drones have become an essential component of warfare whether used solely for military intelligence or as a highly accurate weapon that can take out threatening enemy targets with no risk to the operator. Drones have changed the war game as far as our military being able to take immediate action against a threat. However, the use of military drones has become a double edged sword; while it saves American pilot lives a drone hit can inflict high collateral damage, both literally and figuratively. This can cause conflict and strained relationships between the U.S. and other countries that are affected by the collateral damage and loss of civilian lives.

Appendix A:

A lawsuit brought by the American Civil Liberties Union (ACLU) and the Center for Constitutional Rights (CCR) on behalf of the families of Anwar Al-Aulaqi, Samir Khan, and Abdulrahman Al-Aulaqi, was dismissed in April 2015 in U.S. District Court for the District of Columbia. Judge Rosemary M. Collyer, in her opinion granting the Government's motion to dismiss the Complaint, wrote that:

(1). Contrary to the Government's position that the case presented a nonjusticiable political question, Judge Collyer held that a U.S. Citizen's "interest in avoiding the erroneous deprivation of [his or her] life uniquely compelling" that must be balanced against the executive and legislative branches' powers to "wage war and provide for the national security" and does present a justiciable issue.

(2). There is no viable claim that the government violated the plaintiffs' Fourth Amendment rights because the plaintiffs did not allege that the government "seized" the decedents (captured them), but, rather, killed them. The Fifth Amendment due process claims of Abdulrahman al-Aulaqi and Samir Khan were likewise dismissed because "[m]ere negligence does not give rise to a constitutional deprivation" of due process and that Abdulrahman and Khan "were not targeted and their deaths were unanticipated." As to Anwar al-Aulaqi, while finding that the plaintiffs stated a "'plausible' procedural and substantive due process claim" it is not sufficient to survive the motion to dismiss. Judge Collyer noted that there is "no available remedy under U.S. law for this claim" as no court has ever found, or even discussed, the availability for the type of remedies sought by claimants (*Bivens* remedies) for the killing of a U.S. citizen designated as an enemy combatant overseas by U.S. officials. Judge Collyer went into a lengthy legal analysis of the various factors and applicable case law that led her to this conclusion. *Al-Aulaqi v. Panetta*, Civ. 12-1192 (D.D.C, April 4, 2014).

Endnotes:

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- 3 Jackson, R. (2005). *Writing the war on terrorism: Language, politics and counter-terrorism*. Manchester: Manchester University Press.
- 4 Hastings, M. (April, 2012). The Rise of the Killer Drones: How America goes to war in secret. <http://www.rollingstone.com/politics/news/the-rise-of-the-killer-drones-how-america-goes-to-war-in-secret-20120416#ixzz4DplyB6kb>
- 5 Ibid.
- 6 Shaw, I. G. (2014). *The Rise of the Predator Empire: Tracing the History of U.S. Drones*. Retrieved from Understanding Empire: understandingempire.wordpress.com/2-0-a-brief-history-of-u-s-drones/
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- 8 Ibid.
- 9 Ibid.
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