

Aerial eyewitness:
A pilot study of drone use in journalism

by
Nick Homburg Jr.

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Major Professor
Dr. Tom Hallaq

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Abstract

Unmanned Aerial Systems (UAS), or drones as they are commonly known, could allow journalists to report the news like never before. A drone is a tool with great potential, yet fraught with controversy as the result of its military past. In 2012, the Unmanned Aerial System had become domesticated and could have become the hottest new technology since the cell phone. The first unmanned systems came to service gathering intelligence and in the delivery of lethal and non-lethal payloads for the military. With the domestication of UAS technologies, not only have numerous commercial uses been revealed for the UAS, the drone has made it to the hands of the general public, raising concerns of how this technology is to be used. At the time of this thesis, in the United States, the only legal use of UAS was by hobbyists. Also, at the time of this thesis, the Federal Aviation Administration (FAA) had not provided comprehensive regulations or guidelines regarding the commercial use of UAS platforms (FAA, 2015).

Of the many uses purposed for UAS platforms, one use of interest for journalists is the increased potential for newsgathering and surveillance. With UAS/drone technologies becoming increasingly more available, concerns are raised about safety, privacy, context, and the integrity of news source or (conflict of interest).

The researcher interviewed working journalists from four major networks with stations located in states mandated as test sites by the FAA. The journalists were asked about their concerns pertaining to the ethical uses of drone for journalistic newsgathering. The interviews revealed that with proper training, regulations, and common sense the concerns about safety, privacy, context, and conflict of interest could be moderated.

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Author

Nick Homburg Jr.

Chapter 1 – Introduction

A new high-tech device could soon be added to the journalist's newsgathering toolkit. The Unmanned Aerial System (UAS), or drone as it is commonly known, could allow journalists to report the news like never before. A tool with great potential yet fraught with controversy as the result of its military past, the Unmanned Aerial System has been domesticated and could become the hottest new technology since the cell phone. The first unmanned systems have a long history of service in the gathering of intelligence and in the delivery of lethal and non-lethal payloads for the military (Apsell & Yost, 2013). With the domestication of UAS technologies, more commercial uses have been revealed than ever imagined (KUASS, 2015). However, currently in the United States, the only legal use of UAS is by hobbyists. At the time of this thesis, the Federal Aviation Administration (FAA) had not provided regulations or guidelines regarding the commercial use of UAS platforms (Section 333, 2015).

Of the many uses for UAS platforms, one interest to journalists is the potential for increased surveillance. However, such an increase raises concerns about safety, privacy, context, and the impugning of news source integrity (conflict of interest).

Through interviews with broadcast journalists, this master's thesis will explore Mill's utilitarianism theory and draw impressions from ethical theorists Immanuel Kant and Aristotle to determine if journalists use of UAS technologies can justify the means in the ethical regard to safety, privacy, context, and integrity of source.

Purpose of study

A high-tech—high flying—surveillance device, the Unmanned Aerial System (UAS) or drone as it has come to be known, has created a new market of aerial surveillance and eye-witnessing. The UAS, a military designed device formerly used for high-altitude reconnaissance

and lethal payload delivery, has become domesticated. These domesticated UAS range in weight from a few ounces up to 55 pounds. They are limited to an altitude of 500 feet and can fly at speeds up to 100 miles per hour (FAA, 2015).

Drones can carry payloads consisting of any number of high-definition surveillance devices from multi-spectral and infrared sensors to photographic and video cameras. A new drone with a camera can range in price from a few hundred dollars to tens of thousands, however, it is still far less expensive than using a helicopter or fixed-wing aircraft for similar activities. The affordability, small size, and user-friendly design make the drone both a convenient and fundamental tool as well as a source of entertainment for journalists and hobbyists alike.

Retailers in the United States are marketing drones as family friendly toys that allow users to capture fun photographs and video of their adventures. With the allure of this new technology, it was estimated that over a million drones would be sold during the 2015 Christmas season, according to FAA expert Bill Carey (Murphy, 2015).

On the commercial side, the domesticated drone is portrayed as a tool with too many uses to count. At the time of this research there were more than 270 identified uses, ranging from agriculture, structural inspections, law enforcement, search and rescue to news gathering and cinematography. Currently commercial drone use is highly regulated and, to date, is illegal in the United States without proper permits and licensing, which will be discussed in detail in Chapter 2.

Drones in the news are anything but positive. On any given day, there is a news story about someone flying a drone into the White House, or a sporting event or around some airport, putting people's safety and privacy in jeopardy. These reports are in addition to the

unforgettable news stories of military drone strikes that have damaged property, destroyed villages, and killed civilians overseas.

Legislators at the local, state, and federal levels along with agencies like the Department of Transportation (DOT) and the Federal Aviation Administration (FAA) are trying to decide what to do with the domesticated drone. Should drones be licensed? Who should be allowed to fly a drone and at what age? Should the commercial use of drones even be allowed? How should the FAA regulate commercial drone use?

Because of the newness of domesticated UAS technology, little research has been done and from the articles reviewed for this study it appears that what research has been done addressing drone use by journalists, has focused on ethical issues. Journalists are given the job of reporting the news, which places them in environments where they must survey and record the movements and actions of people. Scholars see this action as problematic. Within the literature reviewed for this research, the primary focus has been on the ethical questions of safety, privacy, conflict of interest, and contextual accuracy.

This study will take the questions and concerns of scholars one step further. Instead of using models and hypothetical scenarios to investigate the ethics of drone use, questions will be taken to the source—the end user, primarily professional broadcast journalists. This approach will be used to ascertain their thoughts, concerns, and ideas about using drones as a news gathering tool. The focus for this research is how the commercial user perceives the ethical use of drones, primarily the perceptions of broadcast journalists. Starting with the commercial user, certain questions arise such as: How do journalists perceive the overall use of drones? Do they see any ethical problems with drone use? How do journalists think about ethical themes such as

safety, privacy, conflict of interest, and context? More importantly, this study considers whether a balance can be obtained on which lawmakers, hobbyists, and commercial users can agree.

Research questions

RQ1: Can a mutually beneficial balance of safety in drone use be defined that is equitable for both the journalist and the participants of a newsworthy event?

RQ2: How can journalists and lawmakers define what constitutes an invasion of privacy by drones in the pursuit of gathering news?

RQ3: How will context be preserved when using drones for surveillance?

RQ4: How will journalists using drones be able to maintain the integrity of a news source regarding conflict of interest?

Research design

The commercial application of drone use is so new there is little data available on how it will be perceived. The primary focus of this research is to investigate how the end user (primarily broadcast journalists) will perceive the ethical use of drones. To ascertain these perspectives, this study utilized a qualitative research method comparing the thoughts, perceptions, and concerns of professional journalists with that of ethical concerns raised in the articles reviewed by this author. One-on-one interviews were conducted with selected journalists from major news organizations based in the six states currently listed with the FAA as official drone test sites using other localities to dispel any potential regional bias. During the interview process, an open discourse on the ethical themes of safety, privacy, conflict of interest, and contextual accuracy was utilized.

The theoretical models used for this study included the Golden Mean, developed by Aristotle, coupled with the Utilitarianism model developed by John Stuart Mill. These models were used as platforms to establish common ground between the participants and will be used as to understand the perspectives gleaned from the interviews. It is hoped that the findings will provide aid to lawmakers and government agencies in the formation of regulations concerning the commercial use of drones.

Participants for this study consisted of broadcast news directors, producers, and reporters currently working in the media industry. This sampling was chosen based on the assumption that news directors and producers are primarily responsible for understanding journalistic codes of ethics, producing newsworthy content, and assigning the personnel and equipment used to gather information.

The interviews were conducted from Kansas State University using teleconferencing technology as a platform to bring individuals from different parts of the United States together in a real-time atmosphere conducive to open conversation. By involving persons outside the local area, a variety of perspectives were observed and used to dispel any potential regional bias. The data collection process involved one researcher interviewing five participants using Zoom teleconferencing technologies. Zoom conferencing recorded both the audio and video of the dialogue along with the reactions of the participants. The teleconferencing technology was also used to aid in the transcription and analysis of the discussion.

Limitations

“Limitations are factors, usually beyond the researcher's control, that may affect the results of the study or how the results are interpreted” (Baron, 2008). The list of limitations for this study is as follows:

- The overwhelming lack of research on journalistic uses of drones primarily due to the novelty of drone technology.
- The perceptions of the potential applications of drone usage by journalists due to the lack of real world cases.
- The available research is, at best, speculative in nature with commercial use of drones prohibited except in a limited capacity.
- Journalistic drone use is prohibited in many communities in the United States.
- Limited personal interactions between participants due to geographical distance between the researcher and the interviewee.
- The current illegality of commercial drone use.

Delimitations

Delimitations have been imposed on this study to validate the responses of the focus groups by regimenting the participants of each group. “Delimitations are factors that affect the study over which the researcher generally does have some degree of control. Delimitations describe the scope of the study or establish parameters or limits for the study” (Baron, 2008).

The delimitations are as follows:

- This study was restricted to potential use of drones by broadcast journalists in the act of surveillance to gather newsworthy data and information.
- Journalists approached for this study were employed by stations owned by one of the eleven broadcast companies listed by the FAA as official drone testers affiliated with one of the four major national networks.
- The search for journalists was restricted to the six states and the three unofficial states listed by the FAA as official test states for drone research.

- The geographical area for this study was limited to the U.S.

Definitions of terms

In this study, there are several terms and acronyms used for the different users' titles of the Unmanned Aerial Systems that require definition. Those definitions are as follows:

Drone: Drone is the non-technical term used most commonly by the media and the general public when referring to an Unmanned Aerial System. In this thesis, drone is used to describe UAS platforms used in a domestic application for gathering audio and visual recordings.

Hobbyist: A hobbyist is an individual who operates a drone primarily for entertainment and recreation with no commercial intent.

Journalist: The journalist is an individual who is directly affiliated with an established broadcast or news organization and whose primary function it is to gather and report information on newsworthy events.

UAS: UAS is an acronym for Unmanned Aerial System.

Unmanned Aerial System: Remotely controlled vehicle operated from the ground by remote radio signal by a person or persons within line-of-sight of the craft.

Significance of the study

The significance of this study is to add to the scholarly body of work that is developing on the commercial use of drones. Prior to this thesis, there were only a handful of articles written that targeted drones and how they might be used by journalists. Most of these articles discussed potential ethical scenarios that may or may not happen in a given circumstance. By interviewing working journalists to discover their concerns about drone use, it is hoped the research would

reveal a more concrete view of the ethical concerns of journalists. Subsequently, this research hopes to aid lawmakers and government officials in developing mutually beneficial regulations and guidelines for the commercial use of drones both in general and for journalists.

Chapter 2 – Literature Review

History of drone development

To fully understand the potential of the Unmanned Aerial System (UAS), a look into its past is required. The UAS of today has been around since the early 1990s. However, unmanned remotely controlled vehicles have a long history of service to the military. The earliest versions of remotely controlled vehicles were used both to gather intelligence by way of surveillance and to deliver lethal and non-lethal payloads. It is from these beginnings that the modern UAS has taken flight. (Apsell & Yost, 2013)

The first recorded use of unmanned systems was during the U.S. Civil War. Union and Confederate forces loaded explosive devices onto hot air balloons and sent them aloft to deliver their payloads to the unsuspecting enemy in an effort to destroy ammunition dumps and supply compounds (Tremayne & Clark, 2014). A sophisticated Unmanned System using a radio receiver to trigger the delivery system was developed during World War I. The first test for this device was over the battlefield (Taylor & Munson, 1977). During World War II, the Japanese tried an approach similar to that used in the Civil War. After discovering that high-altitude winds could carry balloons across the ocean to the United States, the Japanese military launched munitions-laden balloons at the U.S. (Garamone, 2002). Although most fell into the ocean before reaching their destination, four balloons did find their way to the coasts of Washington and Oregon states (none of which detonated) (Apsell & Yost, 2013). By the end of World War II, the U.S. Army Air Corps retrofitted B-25 Mitchell bombers with radio controls, allowing multiple planes to be flown and crashed into their targets (Apsell & Yost, 2013).

In the 1950s, the U.S. was well into the Cold War with Soviet Union. In an effort to keep track of the Soviet military, the U.S. began the use of high altitude UAS to conduct surveillance

missions while remaining undetected (Longino, 1994). The UAS program intensified in 1960 after pilot Captain Francis Gary Power was shot down in his U-2 spy plane by the Soviet Union. Within 18 months of Captain Power's capture, the United States had photographed nearly all-Soviet installations as the stifled drone program was restored and the drone became a working part of the Cold War surveillance program (Apsell & Yost, 2013). The UAS of the Cold War era closely resembled modern military drones (Longino, 1994). Cold War drones went on to be used in Korea and Vietnam (Tremayne & Clark, 2014).

Aeronautics Engineer Abraham Karem designed and developed the first modern drones in 1980. Karem's primary goal was to prove Unmanned Aerial Systems could be dependable and fly for extended periods without crashing. Until this time, one of every three drones crashed or was lost (Apsell & Yost, 2013). Karem built the Albatross in his California garage in 1980. The Albatross not only demonstrated Karem's hypothesis of dependable drones but also went on to become a prototype for the now famed Predator drone used by the U.S. military (Apsell & Yost, 2013). The Albatross broke all records as it flew for 56 consecutive hours and landed safely, later going on to make a remarkable 500 flights with no crashes (Apsell & Yost, 2013).

On August 5, 1990, the United States and its allies engaged Iraqi forces in response to Iraq's invasion of Kuwait. A small team of highly-trained airmen was sent with what was one of the first Predator Drones (Brock, personal communication, October 15, 2015). The first Gulf War, or Desert Storm, was one of the most technologically advanced battlefields in human history (Tremayne & Clark, 2014).

The modern UAS is an autonomous vehicle that can reach altitudes of 30,000 feet and conduct not only high-level surveillance of a target by returning live streaming, high-definition video to its pilot, but it can also deliver a number of lethal payloads providing cover fire in

support of ground troops. The Predator is credited with flying over 50,000 missions to date. Predator drones can deliver two AGM-114 Hell-Fire missiles with pinpoint accuracy to destroy a target anywhere in the world (Apsell & Yost, 2013).

At least 14 different countries are currently using drones, each with unique acronyms and designations for unmanned systems (Colomina & Molina, 2014). For example, in the United States, there are a dozen or more acronyms in use. Among the most popular are: (RPV) remotely piloted vehicle, (UAV) unmanned aerial vehicle, (UAS) unmanned aerial system, and the list goes on. (Colomina & Molina, 2014)

No matter the name, UAS all have similar capabilities and purposes. When referring to UAS, the term “drone” has become synonymous with military operations, yet in recent years there has emerged a new use for this technology. Journalists, law enforcement, search-and-rescue teams, agricultural experts, and ordinary citizens are using drones to gather information through surveillance to assist in news reporting, emergency services, research, and recreation. Detailed information can now be gathered with the assistance of high-definition photography and streaming video from a first-hand eyewitness perspective. Drone technology has made gathering information that was not otherwise possible without the use of fixed and rotor wing aircraft. Images, video, and sensor data can be streamed live to a control center, satellite truck, or to a forward ground crew, which could save time, money, and even lives. (Gynnild, 2014a; Tremayne & Clark 2014)

The domestication of drone technology came early in 2002 and was used by only a few hobbyists and designers. By 2012, UAS platforms had become more sophisticated using Global Positioning Systems (GPS) and spatial recognition sensors, high-definition cameras, and infrared sensors (Apsell & Yost, 2013). The modern drones have spread to a global market by industry

leaders such as DJI of Shenzhen China; Parrot of Paris, France; and 3D Robotics of Berkley, California; they are estimated to hold a combined \$1.5 billion in inventory that would be sold by the close of 2015 (Castillo, 2015).

Domesticated drone usage and the law

At first glance, domesticated drones could be mistaken for just another toy. Although some platforms are built for this purpose, the vast majority are far more sophisticated. High-definition cameras and GPS positioning can be found in UAS, weighing less than four pounds (FAA, 2016). Platforms fully capable of recording data from elevations well over 500 feet can be purchased from the local hobby shop. With UAS technologies built into such a convenient, compact size, the commercial uses have become endless. Concerns of how UAS will be used, a topic discussed later in this chapter, are on the minds of developers, lawmakers, and scholars alike.

In 2015, several conferences and summit meetings were held to discuss the future of domesticated UAS platforms. Two such conferences were the Association for Unmanned Vehicle Systems International (AUVSI) held at the Georgia World Congress Center in Atlanta, Georgia in May 2015 and the Kansas UAS Summit (KUASS) held at the National Center for Aviation Training in Wichita, Kansas in October 2015. At these two summit meetings, among the popular topics discussed included the many uses for the domesticated UAS platforms and the regulation that would govern them. At the AUVSI conference, 25 different commercial uses for UAS were identified. That list includes:

- Advertising
- Agriculture
- Border Patrol
- Cinematography/Motion Picture
- Climate Monitoring
- Construction
- Damage Assessment
- Event Filming
- Golf Course
- HAZMAT Inspection
- Infrastructure Inspection
- Meteorology
- Newsgathering and Reporting
- Package Deliveries
- Pipelines
- Real Estate
- Resort Marketing
- Search and Rescue
- Security
- Surveying and Mapping
- Telecom and Airborne Wi-Fi
- Traffic Monitoring and Flow
- Analysis
- Transportation (Railroads, Highways)
- Utilities
- Wildlife Migration and Preservation

By October 2015 at the KUASS summit, the list had grown to over 250 different uses for UAS platforms. The list continues to expand daily as industry continues to develop new, innovative uses for UAS technologies. However, as of July 2016, the Federal Aviation Administration (FAA) had yet to develop comprehensive guidelines for the commercial use of UAS in the U.S. It is considered illegal to operate any UAS commercially without a government Section 333 Exemption and Certificate of Authorization (COA) allowing the holder to conduct particular operations in a specific location for a specified amount of time. (Section 333, 2016)

Currently there are three classifications for operating a UAS in airspace regulated by the FAA in the U.S. (Section 333, 2016). Of these classifications, the least restrictive is that of the hobbyist. This classification is described as operators who are flying UAS for the sake of recreation and are in no way engaged in or attempting to make money by the commercial use of UAS platforms. The rules governing hobbyists are the same as those established for operators of radio-controlled model aircraft. These rules include:

- Fly below 400 feet and remain clear of surrounding obstacles.
- Keep the aircraft within visual line of sight at all times.

- Remain well clear of and do not interfere with manned aircraft operations.
- Do not fly within five miles of an airport unless contact has been made with the airport and control tower before flying.
- Do not fly near people or stadiums.
- Do not fly an aircraft weighing more than 55 pounds.
- Do not be careless or reckless with an unmanned aircraft – fines are in place for endangering people or other aircraft (Section 333, 2016)

For civil or commercial operations, the same rules apply, with the addition of a Section 333 exemption, COA, and an altitude limitation of 200 feet. To be eligible to receive a Section 333 exemption and COA, the commercial operator must have a commercial, private, sport, or experimental pilot's license in good standing with the FAA and must file a flight plan with the local airport prior to engaging in any commercial operation detailing the scope and duration of the operation. The last classification is public operations. Public operations includes any government agency from forest service to law enforcement and search and rescue teams who will use UAS platforms to conduct operations. For the public operations classification, all the above rules apply in addition to a limited time COA, which restricts public operations from six months to two years. From a journalist's perspective, commercial operations were not only restrictive at the time of this research, they were also illegal. There are only a few news organizations holding FAA exemptions; the Turner Broadcasting Company (owner of CNN) being chief among them. One thousand commercial exemptions had been awarded as of December 13, 2015. (Section 333, 2016)

Therefore, the further discourse of this thesis draws possible outcomes and ethical perspectives from articles authored by scholars, philosophical applications, and hypotheses

relevant to the introduction of new surveillance technologies, and information on how UAS can and should be employed by journalists as they gather news.

Surveillance

Surveillance is a natural activity that all people participate in daily, whether they are observing others as they move through their day or innocently listening to parts of a nearby conversation. This passive surveillance, for the most part, can be perceived as a positive activity, as it keeps people attuned to what is going on around them. (Tremayne & Clark, 2014) In the use of UAS technologies, the range of surveillance greatly increases, bringing the rest of the world into a sharper focus by making the act of surveillance more deliberate in nature. With new advancements in digital technologies, governments, and powerful entities can track the movements of private individuals in much the same fashion as drones are used to track movements of enemy troops on the battlefield (Tremayne & Clark, 2014). With drone technologies, the act of surveillance has become more ominous, used evermore by those in power as a tool to track associations among the populous (Lyon, 2001). An example of high-tech surveillance is found in organizations that use drones to secretly observe activities of the masses by flying at 10,000 feet and higher – well out of sight. Scholars in the Internet age are becoming concerned about the capabilities of surveillance technologies in the hands of these powerful entities (Lyon, 2001; Tremayne & Clark, 2014).

Assistant Professors of communications and broadcast communication at the University of Texas Arlington Mark Tremayne and Andrew Clark (2014) asks the question, “What happens when camera-equipped UAS are employed by journalistic organizations and private citizens?” (pg. 233). The *watched* now become the *watchers*. As drone technologies become more domesticated and less expensive, nearly everyone can engage in this type of surveillance.

Scholars characterized the surveillance of the many by the few and powerful as panoptic surveillance. When the role of surveillance is reversed and the many watch the few, it is called synoptic. (Yesil, 2009; Tremayne & Clark, 2014) A prime example of this phenomenon is citizen journalists and onlookers who record the actions of police as they interact with demonstrators (Huey, Walby, & Doyle, 2006). With the domestication of UAS and the development of surveillance technologies, journalists, and civilians are now in possession of tools that can instantly record and publish events that previously relied on the recollections and testimony of eyewitnesses (Huey, Walby, & Doyle, 2006; Yesil, 2009; Tremayne & Clark, 2014).

Another variation of surveillance is the act of sousveillance, which is defined as observation from below. An example of sousveillance is the general public using mobile phones to record events that may otherwise go unrecorded by people who in no way consider themselves journalists (Yesil, 2009; & Tremayne & Clark, 2014). This public involvement has led to the ideal of the “democratization of surveillance” (Huey, Walby, & Doyle, 2006). Public involvement then begs the questions: as drone technology becomes less expensive and more readily available to the general public, 1) will it be easier for those who were once the watched to become the watchers, and 2) can this keep officials and governments in check?

The eyewitness

Eyewitnessing, as defined by Astrid Gynnild, professor of media studies University of Bergen Norway (2014b), implies the ability to subjectively account for events, actions, or practices seen with one’s own eyes (pg. 340). Traditionally eyewitness accounts gain credibility by the witness being physically present at an event (Gynnild, 2014b). Today’s digitized world has brought the eyewitnessing notion into flux as more surveillance cameras are employed and

once unseen events are permanently recorded. For the modern-day eyewitness, the act of gathering news can be achieved simply by pushing the record button on a cellphone or other such device. However, even this simple act does not come without risk. The very act of eyewitnessing can be a hazardous endeavor. Gynnild's (2014b) article "The Robot Eye Witness," points out that eyewitnesses or journalists, because of their close proximity to an event, can find themselves not only observing and witnessing but also possibly becoming an unwitting participant (pg. 335). Per the International Press Institute, between 1996 and 2015 more than 1,500 news media personnel were killed while reporting in the field – an average of more than 76 deaths per year. In 2012, 152 journalists were killed, most while covering conflicts. (International Press Institute, 2015; Gynnild, 2014a) Live eyewitnessing can occur anywhere, by anyone, at any time an event unfolds, contributing to a visual transparency in society, and providing visual disclosure of issues and events that may otherwise go unseen (Gynnild, 2014a). Zelizer (2007) states,

Eye-witnessing in today's news consists of unedited, unmanned, live content reported by those not considered to be journalists, but by unidentified third parties, activists, technonerd, and citizen reporters placing themselves in harm's way to be the first to post to some form of social media (pg. 418).

Just being there can put the journalists and eyewitnesses in harm's way should they find themselves in a hazardous environment.

Digitalization has brought the world closer while at the same time making the act of surveillance easier. Surveillance and eyewitness reporting is now almost an effortless endeavor. Coupled with inexpensive devices such as drones, the playing field has been leveled between the watchers and those who were previously the watched (Gynnild, 2014a; Zelizer, 2007).

Drones in journalism

UAS could become the newest addition to the journalist's toolkit. The domestication of this high-tech marvel would allow journalists to report the news and gather information from locations that would not be possible by any other means—streaming high-definition video and images in real time to a receiver or satellite truck for global distribution. The UAS of today not only has the capability to record and translate data, it can also be instrumental in keeping journalists, soldiers, and emergency personnel out of harm's way while performing their jobs or conducting operations in hostile environments (Tremayne & Clark, 2014; Aspell & Yost, 2013).

In the literature reviewed for this study, four main themes stand out. The four themes are addressed in descending order according to frequency and the order in which they appeared in the online search.

Safety

The first theme is safety; this theme comes in two parts. First is the safety of a journalist sent to cover a conflict or natural disaster. Second is the safety of people under surveillance by the journalist. Covering a news story can become a major concern for a news organization and the journalist alike. In an effort to capture the story, journalists can find themselves on the front lines of an armed conflict or at ground zero of a natural disaster; in both cases the journalist's life can be at risk. (Gynnild, 2014a)

As previously mentioned, the International Press Institute (2014) reported more than 1,000 journalists lost their lives while reporting from the field from 1996 to 2005, with an additional 152 killed in 2012 alone (para. 3). Although drones may not eliminate this concern, they could go a long way in reducing this number (Finn & Wright, 2012; Gynnild, 2014a). By

using a drone, journalists could remain at a safe distance, not only out of harm's way, but also out from underfoot of military, police, and rescue personnel.

On the flip side, how journalists conduct drone operations could affect the public. Concerns over safety have been raised by scholars (Gynnild, 2014a; Finn & Wright, 2012; Apsell & Yost, 2013). One developer described the launching of a UAS as putting a flying lawnmower into the air—a twenty-pound mass with multiple rotors spinning at the speed of sound that could cause severe or even fatal injuries should it crash (Culver, 2014). Drone manufactures could face product liability risks should a drone malfunction. In such an incident, drone operators and even news organizations could be sued for injuries to people and property. An ethical concern for journalists is justifying the use of drones where public safety comes into question (Culver, 2014). Journalist safety is a major concern when they must cover dangerous news stories like conflicts, riots, or disasters. The drone provides a safe platform to record footage, keeping the reporter from harm. (Clark, 2014a).

For those on the ground, a power failure in a drone could cause major injury or even death. Reporters flying drones over a crowd to capture footage must decide if the story is worth taking the risk.

In both conditions, the story must be reported; the journalist will need to establish a balance between safety and getting the story. In the category of safety, the use of a drone can keep reporters safe by extending their reach and eliminating the need for them to be placed in harm's way while still gathering news. On the other side, the act of reporting the story could place newsmakers in danger of the drone itself (Clark, 2014a and Culver, 2014).

Privacy

The second theme, and probably most contested, is the issue of the potential for invasion of privacy (Clark & Moses, 2014). Privacy issues raised by drone usage bring to light a set of problems for journalists. Not only can the journalist capture high-definition video and still photographs using a drone, drones are also capable of recording thermal and multi-spectral imagery that can be directly uploaded to the Internet. So not only is the invasion of private space a concern, so is what is known as behavioral privacy (Clark & Moses, 2014). The invasion of private space takes on a whole new meaning when behavioral privacy is also at risk. Behavioral privacy is the right for individuals to behave as they wish in the privacy of their home. With drones overhead, this fundamental right could be jeopardized. Drones have been referred to as flying cameras with few restrictions (such as fences) governing their flight path. (Clark & Moses, 2014) Tremayne & Clark (2014) ask, “At what point is a drone invading privacy and how can boundaries be defined?” (pg. 240).

Clark (2014a) provides two scenarios to help clarify this concern. In the first, a mapping company uses a drone to map the progress of a strip mine that the mining company has assured will be placed back to its original state within ten years. However, as a result of mapping, the citizens living in the area have their every day comings and goings recorded. In the second scenario, a movie star hosts a party at her home. A journalist (paparazzi) wants the story and flies a drone over the fence of the rising young star’s house and records the activities of the starlet and her guests, then broadcasts the images to a waiting public (Clark, 2014a). In the given scenarios for privacy, when officials used a drone to map the mine reclamation, the privacy of the residents living there was not violated because they were not the focus of the surveillance and their movements were within clear view of the public. However, in the case of the actress, her

privacy is violated, since she is within the safety of her home and has a reasonable assumption of privacy (Clark, 2014a, pg. 281).

Context

The third theme is the matter of accuracy in context. Reporting requires not only precise imagery, it also requires context. Although drones can retrieve and relay a large amount of data, they do not always supply an intimate context; the overview they provide must be coupled with old-fashioned journalistic inquiry. Culver (2014) illustrates this concept by taking pictures to illustrate the size of a crowd rioting in protest of an unjust law. No context is provided for what measure the protestors are for or against; it only illustrates the size of the crowd. The third theme addresses the idea of accuracy in context. How does a journalist maintain contextual accuracy of a story from a birds-eye perspective? For example, during a demonstration protesting some law, the journalist could cover the event with a drone from aloft, thus showing the size of the crowd but failing to show the number for or against the law or whether the protest was violent or peaceful (Tremayne & Clark, 2014). Drones can provide high-quality images and high-definition streaming video of the overall scene and although this is of great benefit, this alone is not enough to tell the whole story. Reporters should provide other images, facts, and details to build a viable story if they are to maintain accuracy and give context to the account (Tremayne & Clark, 2014).

Conflict of interest

The fourth theme is conflict of interest. As of 2015, 35 states introduced legislation prohibiting aerial surveillance without a warrant by law enforcement and government agencies (Culver, 2014; Clark & Moses, 2014). There is a concern that government and law enforcement

agencies could theoretically establish partnerships or piggyback off the transmitted signal sent out by a drone to obtain footage of persons of interest (Culver, 2014; Clark & Moses, 2014). Journalists must develop guidelines for the use of drones as they have for other forms of surveillance. They must not allow themselves to fall prey to officials as a means to circumvent civil liberties (Clark & Moses, 2014).

Practical advantages for the uses of drones are too many to count. As a tool for the journalist, a drone will open new levels of reporting by giving reporters the ability to record video footage of events, which was otherwise impossible to capture without placing the reporter in harm's way. However, for all the benefits associated with drone usage, counter arguments exist involving the concerns of safety, privacy, accuracy of context, and conflict of interest. Once news organizations develop a code of conduct and a means to do business, the sky is the limit, as drones become an irreplaceable component of the journalist's toolkit. (Clark, 2014a; Culver, 2014)

As drones are put into service, news organizations may find it necessary to re-evaluate their ethical codes and protocols to avoid potential conflicts. As to conflict of interest, it is difficult to imagine—as highly regarded as sources and information are to news organizations—that those organizations would willingly release footage shot by a drone any easier than they would release video shot by traditional cameras. After all, the drone is just another tool for the reporter.

Once commercial drone use becomes legal, news organizations may need to build operational criteria to address the issues of safety, privacy, accuracy of context and the potential for conflict of interest and then use these criteria to determine if their audience is best served by the use of drones to gather newsworthy information. When it comes to deploying a drone to

gather information for a news story, a judgment call is required. Reporters and their affiliated news organization need to ask if the benefit of drone use outweighs safety and privacy concerns as it flies over the news scene. In both instances, two sides of each issue are revealed, each contrary to the another. The questions asked by this thesis are based on theoretical instances of situations that may occur. As of the date of this study, the Federal Aviation Administration (FAA) had not made any decision on the commercial use of UAS platforms. More research is needed to not only find the answers to questions posed by this thesis but to evaluate the findings in the literature. A wait-and-see approach is necessary until the FAA can provide regulations for the use of UAS in commercial ventures. Until drone use becomes commonplace and researchers can analyze it, research will be limited to reviewing the potential usage for the drone and the perceptions of the ethicality of their use.

This study investigated perceptions held by professional journalists and those of the general public to validate the current literature. The research proposed will add to the body of knowledge and bring a better understanding of how drones should be used by journalists. One-on-one interviews were conducted with professional journalists to answer the research questions developed from the literature.

Chapter 3 – Methodology

Article analysis

Analysis of the articles reviewed for this study utilized an inductive qualitative approach, modeling the recent study by Tremayne and Clark (2014) “New Perspectives from the Sky.” The following terms, keywords, and phrases were entered into search engines, databases, and archives to find articles and narrow the results.

- UAS in journalism
- Drone journalism
- Drones
- Unmanned aerial systems
- Remotely operated vehicles, ROVs
- Unmanned aerial vehicles
- Unmanned aerial vehicles in journalism
- Remotely piloted vehicles
- Remotely piloted vehicles in journal

The above keywords and phrases were entered into the following databases and archives.

Google: The most widely used search engine on the web (Krawczyk, 2014).

Google Scholar: Highly recommended by professors and one of the best sources for peer-reviewed articles.

LexisNexis: According to, LexisNexis (2015), its database has over 45,000 news sources, including 6,500 international sources and 2,380 daily newspapers.

Kansas State University Library: This database is connected to libraries worldwide and is paired with LexisNexis and Google Scholar.

The result of entering keywords and phrases yielded 120 articles with the most relevant articles listed first in the search engines. Keeping with the research model of Tremayne and Clark (2014), the most current articles in each search engine were chosen for the analysis, omitting any that had been duplicated. Of the 120, 30 articles remained that were reviewed and

used for the literature analysis. From the literary analysis, patterns demonstrating ethical concerns quickly developed aligning with the four themes presented in this thesis.

Following the model developed by Tremayne & Clark, this researcher used discourse analysis, a method without strict guidelines, allowing themes to emerge from the text. By using Tremayne & Clark's model the researcher was able to discern latent meaning and detect emerging patterns. The researcher then reread and analyzed the articles a second and third time, noting the predominant themes and patterns. As in the study by Tremayne and Clark, there were four distinct themes that developed from the 30 articles reviewed. These were then compared and evaluated before any conclusions were drawn. (Tremayne & Clark, 2014).

For the sake of comparison and to gain understanding of how the end user would perceive the use of UAS to gather news, the researcher conducted one-on-one interviews with individuals working in broadcast journalism. This comparison was conducted primarily to understand the interpretations, attitudes, opinions, and perspectives of those participating in real world applications of drones. Furthermore, the aforementioned comparison was conducted to check if the ethical themes that developed in the literature were consistent with the ethical concerns of the end user, i.e. broadcast journalists.

Procedure

Recruitment of the participants was a three-part process that identified individuals who could bring insight and value to the discussions. In the first step, names were gathered from the contact listings of the four major national networks affiliated with the 11 news organizations that have been granted permission to test drones by the FAA (see Appendix A). These networks ABC, NBC, CBS, and Fox are based in the six states listed as UAS test sites (see Appendix B).

Secondly, individuals were contacted by telephone and then by email. The telephone

contacts were to establish a firsthand and personal introduction with the individuals desired as respondents for this thesis and to make them aware the researcher would be contacting them by email. In the emails, the researcher explained the scope and relevance of the study. Lastly, for all those who could and who were willing to participate, a follow-up email containing a description of the data collection process for the study was included along with a schedule and release forms. To define the ethical perceptions of journalists and explore the research questions asked by this study, the researcher convened one-on-one interviews with professional journalists regarding their perceptions on drone use. The questions written for the interviews were designed to determine if the ethical concerns of broadcast journalists compared with the four themes found in the literature.

One hundred phone calls with one hundred follow up emails were directed to the general managers, news directors, assistant news directors and various reporters at the four major national networks affiliates, (ABC, NBC, CBS and Fox), in the 10 states currently on the FAA's list of drone test sites (see Appendix C). Most of the phone calls were either answered by staff or some form of automated answering system and proved to be the most ineffective means of contact. Of the emails sent out 12 respondents replied to the request and were willing to participate in the interviews conducted for this thesis. Of the 12 respondents, five declined the invitation due to scheduling conflicts. Seven of the 12 respondents were available to schedule times to participate, however, only five of the seven were able to keep their appointments and participate in the interview process. The remaining 88 individuals contacted, 84 did not respond and four replied through their legal departments by stating that, due to the potential for unforeseen legal issues surrounding UAS regulations and operation, they could not allow for any representative from their organization to participate in this research.

Participants

The five participants interviewed for this thesis were professional journalists employed at major network affiliates (ABC, NBC, CBS and FOX) as news directors, producers, and reporters working in the six states listed as UAS test sites by the FAA. Only two of the participants were affiliated with any of the news organizations given permission to test UAS for newsgathering. Participant 1 worked as a station manager and had been working in the news industry for the past 35 years. He was affiliated with one of the 11 news organizations with FAA approval and was from a test state on the East Coast. Participant 2 had been in the industry for one year. The station that he worked for was one of the 11 FAAs approved news organizations located in the Midwest. Participant 3 had worked for the previous four years as the digital media producer for one of the four major networks in a test state located in the Northwest. Participant 4 also worked from a test state located in the Northwest, producing new programs for the previous two years. Participant 5 worked as a reporter for one of the four major networks and had worked there for three years in a state that is listed as an unofficial test site for UAS. The reasoning for such strict recruitment criterion is that news directors, producers and reporters have both the experience and an understanding of the protocols and logistics of gathering newsworthy stories from the field.

This select group of people had a working understanding and extensive training regarding journalistic codes of ethics and how those codes should be applied. By focusing on media professionals from the 11 news organizations with FAA approval to test UAS located in states listed by the FAA as test sites, there was an expectation that the chosen participants would have at least some knowledge, or awareness of how UAS can be used to gather news. When trying to discover how the use of drones may be perceived in journalism, it stands to reason to involve the individuals who will be using the technology. As a footnote, at the time of this thesis, in the

United States it was illegal to use UAS for any commercial endeavor, including news gathering without special permissions, Section 333 exemption and COA. (Section 333, 2016)

Strategies of inquiry

A consequentialist approach was used to evaluate the responses and to give structure to the methodology. Mill's utilitarian theory provided a framework for evaluating the responses given by the participants. In Mill's essay "Utilitarianism," he asserts that good consequences increase utility or the pleasure of happiness produced by actions, and weighing actions and the results of those actions can maximize the happiness for the greatest good (Culver, 2014).

Utilitarianism is a theory in normative ethics holding that the best moral action is the one that maximizes utility. Utility is defined in various ways, but is usually related to the well-being of sentient entities. Utilitarianism is the idea that the moral worth of an action is solely determined by its contribution to overall utility in maximizing happiness or pleasure as summed among all people. It is, then, the total utility of individuals that is important here—the greatest happiness for the greatest number of people (Malpas, 2012).

In 1873, Mill stated, "Utility, from the Greatest Happiness principle, holds that actions are right in proportion, as they promote happiness; wrong, as they tend to produce the reverse of happiness. Through happiness comes intended pleasure and the absence of pain, but by unhappiness, pain and the privation of pleasure" (Malpas, 2012). Consequentialism states whether an act is morally right depending only on the consequences of that act (Malpas, 2012).

Data collection procedures

The interviews were conducted from Kansas State University's Media Convergence Center in Dole Hall on the Manhattan campus. The interviews were not done in person primarily due to the geographical distance of the participants from Kansas State University. Zoom technology was used to conduct the interview and record both the visual and audio components. Participants taking part in the interviews did so from the comfort of their homes or offices. The audio and video of each interview session was recorded to ensure accuracy of the discourse. Each participant was encouraged to voice his or her opinion, perspective, and insight regarding the uses of drones by journalists. Eleven questions were asked in the interviews to each of the participants and in the same order. These questions were designed to inspire dialogue relevant to the four ethical themes that had become apparent in the literature reviewed for this pilot study. Upon the conclusions of the interviews, the recorded data was transcribed, analyzed, and separated into themes in the same fashion as the literature review.

Question design

A total of five journalists agreed to participate in this study with job titles as mentioned earlier, one general manager, one producer, one director of digital media, and two reporters – one of which is in his first year.

To keep the identity of the participants confidential they are referred to as Participant 1, 2, 3, 4, and 5. To properly address the research questions in this pilot study, participants were asked to answer all questions to the best of their ability based on their experiences working as a broadcast journalist. Their responses were transcribed and compared to ascertain any

commonalities and then compiled into ethical themes using the consequentialist approach described earlier regarding the analysis of the literature review.

The participants were each asked 11 questions (see Appendix A) beginning with inquiring about their names, job titles, and length of employment in the field of broadcast journalism. Next, they were asked about their familiarity with drones and how drones were being used in newsgathering. For questions 3, 4, and 5, participants were asked their thoughts on drones used for surveillance to gather newsworthy stories, whether they thought journalists would be crossing any ethical boundaries, and what concerns they had with using drones for surveillance. These questions were designed as probes to get the participants' perceptions on the themes of safety and privacy. In Question 6, participants were asked their options on steps that could be taken to fix concerns established in questions 3, 4, and 5. Questions 7 and 8 dealt with what the participants would like to see happen with drone use by journalists, if they thought drones should be regulated, and why. Finally, the participants shared their thoughts about the themes covering context and the potential conflict of interest. Questions 9, 10, and 11 dealt with how the FAA should regulate commercial and non-commercial drone use and if journalists could regulate themselves by using their own ethical codes when using drones for surveillance and newsgathering. The last question asked if a news story captured by a drone could be shown in its rightful context.

Instruments

The video conferencing technology used was a Zoom telecommunications system which allowed participation to take part in long-distance video conferencing. Zoom is equipped with audio and video recording capabilities, allowing researchers the opportunity to revisit the session and ensure accuracy of the content that can be recalled at a later date and time. The data

collection process involved one researcher interviewing five participants from six different states. The recorded audio and video of the dialogue, along with the reactions of the participants, was transcribed and then compared to the findings from the reviewed literature.

Zoom technologies combine cloud video conferencing, online meetings, group messaging, and software-defined conference room solutions into one platform. Their solution offers video, audio, and wireless screen-sharing experience across Windows, Mac, Linux, Chrome OS, iOS, Android, Blackberry, Zoom Rooms, and H.323/SIP room systems (Zoom.US, 2016).

Chapter 4 – Findings

Findings

The primary purpose of this study was to discover the ethical perceptions of broadcast journalists regarding the use of drones for gathering news-worthy stories. The secondary purpose was to discover if the findings in the literature corresponded to the concerns of the journalists. The following discourse shows that although there is some agreement with the literature on the themes of safety and privacy, there is disparity over the themes of context and conflict of interest. In addition to the four themes discussed here there is an underlying theme that manifested itself, this being the concern over liability. Participant responses and concerns are as follows:

Questions 1 and 2 determined the demographic of the interview group and the level of knowledge they had about drone use and regulations. Questions 1 and 2 revealed that although the group was small, it was diverse with varying levels of experience. Participants were aware of drones and some of the controversy affiliated with their use.

Question 3 asked participants their concerns about journalists using drones for gathering newsworthy content. This question was a probe designed to discover which concerns topped participants' lists for drone usage. Here the group was almost perfectly split with two participants expressing concerns over safety, two over privacy, and the last concerned about context as it applies to privacy.

Immediately, Participant 1 expressed his concerns about safety saying, "I think there are a lot of safety issues and from my perspective, there are some serious liability issues." When asked to elaborate, Participant 1 went on to say, "If you're using a drone to record content, that drone comes down and hits an innocent bystander, you automatically have a serious problem

there; we're concerned every day when reporters or even salesman pull off the lot. The issue for people in my line of work is the liability." Participant 5 found drones to be a conundrum, stating, "Drone usage is both fascinating to me and as far as dealing with it on an ethical level, that's something I've done a lot of thinking about and I would love to have more journalists using drones, but at the same time, there are a lot of questions about safety and the privacy of it." Participant 5 went on to say, "The big concern is about how to keep people on the ground safe should the drone have some kind of malfunction." Participant 2 liked the idea of using drones, saying, "Drones can give you great perspectives you can't get from the ground, like wildfires and such, but I can understand the pushback from the public as far as privacy goes. Overall, I think they're a great tool for journalists, but how do we determine what is a violation of privacy." Participant 3 was more worried about what drones would be used for, and in what context. Participant 3 stated, "Will we use drones in an everyday occurrence, or would it only be for special events? Will people know they have a drone flying over them, and if so, will we need special permission to do so?" Participant 4 was more concerned about privacy, commenting, "I think just like anything else, in journalism there is a way to use it and not to use it. Getting drone video of a weather event, that's fine; going into someone's backyard to get drone footage, that's not OK."

Question 4 was intended to directly address the participants' concerns about privacy. Participants were asked their thoughts concerning journalists crossing ethical boundaries when using a drone for surveillance and gathering news. The consensus was that professional journalists should follow their code of ethics in the same way they do with any other piece of newsgathering equipment. Participant 4 did, however, say that internal regulations should be put in place to ensure the proper ethical use of drone technology. One idea that permeated the

discussion, and something all the participants wanted to emphasize, was that for the most part, “professional journalists” would not intentionally violate their own established personal codes or those of news groups for which they worked. They did agree that non-professional journalists such as citizen journalists, yellow journalists, and the paparazzi would be more likely to overlook or even knowingly violate ethical codes of conduct with a drone.

From Participant 1’s perspective, the answer to the question on privacy was a resounding “No.” Participant 1 said, “There is always room for people to abuse it (drones), but I don’t see any issues regarding privacy, maybe if you ran one into someone’s house, but we don’t do that now”. Participant 2 was indifferent to this question stating, “I understand the pushback over privacy but do not see a problem concerning ethical boundaries.” Participant 2 went on to say, “The big thing is that people are just not used to seeing them (drones). I guess you could get into a private area, but we don’t do that now.” On the point of privacy and crossing ethical boundaries, Participant 3 stated, “I sure hope not. My methods are, when in doubt leave it out, I want to be ethically right with whatever I do, and hope we never get to the point, where we get so comfortable with drones or any other tech that we potentially do something ethically wrong without realizing it.” Participant 3 added that, “So long as a journalist stays true to their ethics there should not be an issue with privacy.”

Participant 4 thought issues over privacy could be avoided with communication, saying, “I think as with everything there is going to be that gray line, so, for every story, if we’re pulling out the drone, there needs to be a conversation. What are we going to do with the drone? Is this a proper use of the drone? There just needs to be a discussion before using a drone.” Participant 4, added “It could be as simple as getting permission, if the homeowner isn’t ok with it then we could be crossing ethical lines”. Participant 5 was concerned about where the lines are drawn.

Basically, how high does the fence reach? Participant 5 stated, “People seeing a drone flying over their house could feel as if their privacy is being violated, but is this the truth? I would like to see drones being used more, but there needs to be some laws that protect residential homes. If you’re at a business or public place, there is no expectations of privacy. As journalists, we need to be able to access private areas to report our story, but we need to be respectful of those private situations as well.” Participant 4 mentioned, “That permissions from the homeowner or permission from officials responding to a disturbance or crime scene could be a solution pertaining to the use of drones over private residences.”

Question 5 asked what steps could be taken to fix their concerns. All the participants agreed that rigorous training, licensing, and regulations governing drone operations for commercial users and for hobbyists, or anyone considering operating a drone is necessary. Regulations would address many of the concerns of the public. As Participant 1 put it, “Commercial users, especially those in the journalism field go through a rigorous training period with every piece of equipment used for gathering, reporting, and transmitting news and drones should be no different.” The group also held that adherences to all regulations mandated by the FAA, USDOT and local agencies was paramount to safe and ethical operation. Participant 2 maintained that “Drones are expensive; all operators should get some sort of training before they fly a drone.”

Question 6 asked participants what they would like to see happen with the commercial use of drones by journalists. For the most part, all the participants agreed. They would like to see the commercial use of drones evolve to the point that with proper training, an operator could receive a certificate allowing him or her to operate a drone without specialized COAs and

exemptions. The group also agreed that all operators, commercial and non-commercial, should be trained and licensed before flying a drone for any endeavor.

Participant 4 answered the question of what they would like to see happen with the commercial drones by stating, “Unlimited use so long as regulations and codes of ethics were in place to govern that unlimited use.” Participant 1 said, “I am in favor of [the FAA] pushing ahead. I really think [drones] can play a big part in newsgathering.” Participant 3 said, “I am not sure, the regulations are so new, I guess with what I have seen so far just keep going.”

For Question 7, the participants were asked if they thought commercial drones should be regulated. The group as a whole would like to see the FAA establish parameters that would determine at what altitude a drone could fly over private property without violating a private citizen’s right to privacy. Furthermore, the group thought that all operators should be required to receive training on the safe, ethical, and proper flight etiquette of drone operation.

Participant 1 simply said, “I think we should wait and see. The FAA will have to come up with something that works.” Participant 3 said, “I think communication is paramount; we need regulations, but not too much. As journalists, we need to ask the right questions; we have to work and collaborate; we all need to be on the same page when it come to the regulations.” Participant 4 thought there should be a large communal conversation about the regulations, saying “I am not a big fan of regulation, but we do need regulations to make sure drones are not being flown in locations or in a manner that can put people in danger.” From Participant 5’s perspective, regulation is favorable. Participant 5 said, “The company I work for has purchased a drone and they are very serious about adhering to the FAA’s regulations and have even imposed some of their own additional regulations for their operators, including the freelancers.”

Question number 8 asked: “What measures should be taken by the Federal Aviation Administration (FAA) on regulating the commercial use of drones by a journalist?” All the participants agreed the FAA should continue to develop regulations and take whatever measures necessary to develop equitable regulations. Participant 1 stated “It’s not for me to say, but I am sure the FAA will decide on regulations that will benefit most commercial drone users. Participant 3 mentioned, “It would be nice if they hurried up and decided on the regulations, because right now the whole thing is up in the air.”

Question 9 asked: “Do you think journalists can regulate themselves in lieu of FAA regulation?” The group as a whole agreed that professional journalists already regulate themselves when it comes to ethical behavior by means of personal and professional codes of conduct. However, Participant 1 answered, “No, I don’t think they can regulate themselves. As far as content, yes. As far as operating the drone, no.” Participant 2 felt market size plays a role in journalists’ self-regulation stating, “I think it depends on the market. In a big market, some boundaries could be crossed. As competition increases some journalists will do whatever it takes to get the story.”

Question 10 was: “Do you think there is a potential for conflicts of interest when using drones?” When directly asking the participants about conflicts of interest, no one saw this as a problem, stating professional journalists adhere to, if not their own code of ethics then to those laid out by the company. They also stated that integrity is paramount to being successful in this business. Participant 4 replied, “The most important thing for a journalist is his integrity and that integrity depends on the journalists’ reputation, to tell the truth.” Participant 4 went on to say that “A journalist with integrity will always regulate himself, and never allow himself to get involved in any conflict of interest. Without guidelines, I can’t see any company taking that

risk.” Participant 5 said in response, “When it comes to professional journalists we operate, at least at some level, with a sense of integrity. When it comes to how we present content, we already self-regulate. Sure, there are those who practice yellow journalism, but they don’t last very long because the viewer learns quickly they can’t be trusted.” Participant 3 indicated journalists need to work with the FAA stating, “Professional journalists go out of their way to avoid conflicts of interest, but also incidents of ethical misconduct—including the misuse of any journalistic tool, be it a drone, a camera, or any other recording device.

Question 11 asks, “With the high-altitude perspective of a drone, whether a news story could be shown in its rightful context.” The consensus for this last question was that drones are simply another tool and that the context of a story is determined by those who are telling it and that professional journalists never rely on only a single tool to tell a story. Participant 1 answered, “Well of course, the drone will only give us a different perspective, not tell the story.” Participant 3 stated, “A drone is just another tool in the toolkit. It is no different than any other piece of equipment we use. We never tell a story from just one perspective.” Participant 2 mentioned, “I feel the drone is just an extension of the reporter, kind of like the telephoto lens. Drones will give us a new perspective.”

In the first theme, safety, scholars saw it in two parts. The first part was the benefits of using drones to keep reporters and journalists out of harm’s way. Gynnild (2014b), asserted the use of drones may not stop completely the loss of life among journalists, but it could significantly reduce the number (pg. 338). Participant 3 agreed with Gynnild, saying, “There are times when even as a journalist, police won’t allow us to get close enough to a scene because it’s too dangerous for some reason. With a drone, I could launch it, be able to see and capture what was going on and still stay safe.” Culver (2014), on the other hand, was concerned about the

individuals being observed by a drone, arguing, that a drone is a twenty-pound mass with spinning rotors capable of doing extensive damage should it fall into a crowd of people (pg. 59). Participant 1 also was concerned about the public's safety, maintaining, "If you're using a drone to record content, that drone comes down and hits an innocent bystander you automatically have a serious problem." For the most part, on the topic of safety, the participants in the research supported Culver's concern about the public's safety and Gynnild's (2014) concern over the safety of the journalist. Participants 2, 4, and 5 thought that with the proper training, safety concerns could be minimized. Of all the articles reviewed for this thesis, safety appeared to be the main concern of the scholars, and for that reason, safety became the first theme for this thesis.

In the second theme of privacy, although still high on the list of concerns for scholars, three of the five participants saw privacy as their top concern. In Clark's (2014b) article, he gives two scenarios that of the starlet whose party is interrupted by a drone and that, of a reclamation site being surveyed by a drone. He concluded that the invasion of privacy was all a matter of perspective as to what the drone's intent was and whether there was an expectation of privacy. Participant 3 stated, "So long as journalists stay true to their ethics there should not be an issue with privacy."

Participant 4 thought issues over privacy could be avoided with communication. Participant 4 stated, "I think as with everything there is going to be that gray line, so for every story, if a company is thinking about pulling out the drone there needs to be a conversation." Participant 5 stated, "People seeing a drone flying over their house could feel as if their privacy is being violated, but is this the truth? There needs to be some laws that protect residential homes, but if you're at a business or public place, there is no expectation of privacy. But as

journalists we need to and be respectful of those private situations as well.” Participants 1 and 2 perceived no concern with privacy, asserting as journalists they don’t go out and intentionally invade people’s privacy now, so why would they do it with a drone.

For the themes of context and conflict of interest, the scholars, and the journalists did not agree. The scholars contended there is a potential for both context and conflict of interest to be corrupted.

Culver (2014) offered an example for context. By taking pictures to illustrate the size of a crowd rioting in protest of an unjust law, no context is provided for what measure the protestors are for or against; it only illustrates the size of the crowd.

For conflict of interest (Culver, 2014; Clark & Moses, 2014), there is a concern that government and law enforcement agencies could theoretically establish partnerships or piggyback off the transmitted signal sent out by a drone to obtain footage of persons of interest. The fear is this action could violate people’s civil rights leaving states like New York and California to pass laws prohibiting law enforcement from using drones for surveillance without first obtaining a warrant. The journalists interviewed held fast to the idea that a journalist’s integrity is paramount and that no responsible journalist would get involved in conflicts of interest. As far as context, the group was decisive in their statements that journalists never only use one source to tell a story and that a drone is simply another tool.

The underlying fifth theme of liability seemed to permeate the discussion even from the beginning. As with the other themes, liability comes in two parts, the first part was made clear even before the interview process had started. The journalists who declined to participate were concerned they could possibly be held liable by the FAA or other government agencies for divulging information or by participating in this study. And in the second part, the journalists

who did participate expressed concerns of potential liabilities should an accident happen while using a drone to gather news worthy stories.

Research questions and answers

Responses given by the participants in the one-on-one interviews were transcribed and compared to ascertain any commonalities and themes to answer these research questions. The answers given for the research questions are an amalgamation of the participants' responses to the questions asked in the interviews.

RQ1: Can a mutually beneficial balance of safety in drone use be defined that is equitable for both the journalist and the participants of a newsworthy event?

A1: Before deploying a drone to cover a news event, conversations should be had to assess the costs and gains of using a drone. As with any assignment, the journalist should pick the right tools for the job. The deployment of a drone should only occur if it can be done in a safe and responsible fashion, taking into consideration the safety of the journalist and the observed.

RQ2: How can journalists and lawmakers define what constitutes an invasion of privacy by drones in the pursuit of gathering news?

A2: There are concerns about how to tell the story of an active shooter, car chases or a lost child should the airspace over residential areas become a no-fly zone and how high is a fence line. One option presented was for the journalist to gain permission before flying from either the homeowner or from officials on the scene. Most of the participants agreed as the public becomes more aware of drones, they will become commonplace, relieving apprehensions of drones being used for spying. Everyone felt conversations with the

FAA, local authorities, and emergency services need to be conducted to ascertain privacy boundaries.

RQ3: How will context be preserved when using drones for surveillance?

A3: Context will be preserved by using multiple perspectives to tell a news story when told by trained, reasonable, and professional journalists. The drone is simply another tool in the journalist's toolbox and should never be the only source of content. Context of a story will be preserved as it is currently with good reporting and diligent gatekeepers.

RQ4: How will journalists using drones be able to maintain the integrity of a news source in regard to conflict of interest?

A4: The integrity of a news source and avoidance of conflicts of interest will not change regarding drone use. Trained, responsible, and professional journalists are bound by a code of ethics, and the importance of their integrity, and the responsibility to their viewers to always be truthful.

Summary

In summary, the journalists participating in the interview process liked the idea of using drones for gathering news stories. They did, however, have concerns over safety and privacy, but felt that with proper education and training on the part of the drone pilot and the reporter, these concerns can be mitigated. The participants agreed that most professional journalists take their code of ethics and the jobs very seriously and don't see the last concerns of conflict of interest and context to be any problem. As for liability concerns, again they felt that with proper training this too could be lessened.

Chapter 5 – Conclusions

The original design of this thesis was to use focus groups to answer the research questions generated by concerns developed by the themes revealed in the reviewed literature. However, due to limiting circumstances the focus group design was abandoned and replaced with one-on-one interviews with a small group of professional journalists from around the United States who agreed to participate. This research also sought to answer the one big question that bothered this researcher: “How do working journalists perceive the ethical concerns of safety, privacy, context, and conflict of interest when using drones as a tool for gathering newsworthy stories?” Before any conclusions can be evaluated, it is only prudent to revisit the limitations and delimitations in this study so that the conclusions can be viewed in the proper context.

Limitations

The two focus groups from the original design were to be made up of working broadcast journalists employed with the four major national broadcast networks NBC, CBS, ABC and FOX affiliates of the eleven media groups that have been granted permissions by the FAA to conduct drone tests. This researcher hoped the focus groups would encourage a rich dialog between members and draw out any ethical concerns that might not be readily apparent through means such as surveys and questionnaires.

The objective was to invite 18 to 20 journalists to participate in two separate groups to gain a good cross section of the industry. However, due to an extremely low response rate and news organizations who either refused to or were not able to take part, the focus group concept was abandoned. Subsequently, the focus group concept was replaced by conducting one-on-one interviews with a small group of five journalists willing to participate in the study.

With one hundred phone calls and emails directed to the general managers, news directors, assistant news directors and various reporters, less than 20 percent of the individuals contacted responded. Of this 20 percent, eight respondents replied through their legal departments who simply stated that, due to the new and uniqueness of UAS/Drones technologies being used for the purposes of collecting news, their organization did not want to go on record in any fashion, at this time, with any information concerning UAS/Drone operations. Twelve individuals did however agree to participate in the interview process. Five of the twelve had to decline the invitation due to scheduling conflicts. Seven did schedule times to participate, however, only five of the seven, were able to keep their appointments

Five respondents comprise a very small sampling of the journalistic community, so making an informed comparison between the ethical themes found in the literature review and the ethical opinions of journalistic community became problematic. The thoughts, concerns, and opinions of the five respondents did show enough promise, however, to consider this project a pilot study capable of answering, to some degree, the research questions.

As was previously stated, at the time of this study, the commercial operation of drones was strictly prohibited in the United States, which severely limited this study. Anyone, including news organizations, wanting to operate a drone to further business in any fashion needed a Section 333 exemption and COA detailing the scope of the operation and a licensed pilot was required to use a drone (Section 3332016). Of the broadcast organizations contacted for this study, many did not have anyone qualified to legally operate a UAS/drone at the time. This circumstance may have led, at least in some cases, to the less than desirable response rates from potential participants in the research being conducted for this thesis study.

Delimitations

With the heavy restrictions on commercial drone usage by means of Section 333, COAs, and licensed pilots required for use drones, this researcher focused on broadcast companies that had FAA approvals (see Appendix A) and their affiliates located in states already cleared by the FAA as test sights (see Appendix B). Focusing on the companies seemed to be the most logical, considering these organization would be among the first to use drones to gather newsworthy content.

Future studies

Baring the above limitations, journalists must stay optimistic that the FAA will come to a consensus on regulations to make the use of drones by journalists accessible. Other studies could be done using focus groups and even surveys of journalists who would be currently using drones in real world application. These studies could be constructed to see if the concerns over safety, privacy, conflict of interest, and context have changed. It is most likely as drones become common place in the journalist's tool kit, that records will be kept on how efficient and effective drone use will become as well as how safe they are to operate and if concerns over privacy are valid, how prevalent conflicts of interest are, and how well drones maintain context in storytelling.

Conclusions

Of the five participants that contributed to this study, there was a good cross section of newsroom responsibilities represented, ranging from a general manager to a first-year reporter. Each of the five participants agreed there is reason for concern when it comes to the issues of safety and privacy and that steps should be taken to address these concerns.

The journalists however, asserted that as professionals trained in journalistic codes of ethics and who prize integrity above all, the concerns over context of a story and the incidents of conflict of interest are unfounded.

Not surprisingly, though, both journalists and scholars felt there should be strict guidelines and training put in place, not only to regulate how drones would be used by commercial entities such as news organizations, but for all users, including hobbyists and non-commercial users. Participant 3 made the point that for every new piece of equipment or tool adopted by his news organization, there should be an extensive training period and certification process before anyone is allowed to operate the equipment and drones would be no different. Perhaps this practice should be adopted for all drone users, commercial and non-commercial alike as a way to reduce some of the concerns discussed in this study.

Although there will always be potential for the misuse of drone technology by unscrupulous, untrained individuals, the majority of professional journalists will use drones as just another news gathering tool as pointed out by the participating journalists in this study. They felt that with proper training, adherence to regulations, and common sense, the ethical concerns regarding the use of drones by journalists could be minimized and could provide a much needed and wanted perspective.

In the literature reviewed for this study, four themes came to light: safety, privacy, context, and conflict of interest. The concern for the safe operation of a drone came through as paramount both in the literature review and from the participants of this pilot study. Finn and Wright (2012) and Gynnild (2014a) discussed how simply gathering news stories could be hazardous to the well-being of journalists and how using drones could keep them out of harm's way. Counter to the perspective of these authors, Culver (2014) raised a concern over how safe

drone operations are for the people under surveillance when he quoted an unnamed developer who said, “The launching of a UAS is like putting a flying lawnmower into the air” (pg. 58). Of the five journalists interviewed for this pilot study, two of them saw safety as a primary concern. These concerns were based on the issue of liability to the station and the operator should a drone malfunction, potentially damaging property or injuring someone on the ground. The remaining three participants, recognizing safety as a concern and thought, as did all the participants that with proper training, adherence to FAA regulations, and pre-flight inspections, safety concerns could be minimized. Participant 3 and 5 did recommend, that pre-flight discussions take place to determine if the deployment of a drone is warranted or even necessary, taking into consideration the number of people on a given location and if there were any other means available to gather the same information.

For Clark and Moss (2014) and Tremayne and Clark (2014), privacy also comes at two levels. These authors are concerned with the invasions of private space and invasion of behavioral privacy. When the concern over privacy was addressed with the journalists, most saw privacy as an issue, but agreed privacy issues would most likely be violated by the paparazzi, citizen journalists, and misguided hobbyists. As Participant 1 stated, “As professionally trained and responsible journalists we do not now knowingly invade people’s privacy nor shall we when using drones. Drones are simply another tool, just like any other camera.”

For the third theme of preserving the context of a news story when using a drone, examples were given by Tremayne and Clark (2014) and Culver (2014) who expressed concerns of how scenes would be perceived if the footage acquired by a drone is the only perspective presented. In response, participants were quick to point out that professionally trained,

reasonable journalists rarely if ever (“never” according to Participants 1 and 3) present news stories with only one source, or one singular perspective.

The final theme from the literature was that of conflict of interest. The concern is based on the idea that a government agency might try to or could possibly intercept the data stream from a drone or attempt to coerce a journalist to relinquish data that could be used to incriminate a criminal (Culver, 2014; Clark & Moses, 2014). Participating journalists stood unanimously in their responses, expressing that conflicts of interest are not an issue now nor should they become an issue in the future just because journalists are using drones. The group pointed out that a drone is a tool no different from a satellite truck or a camera with a telephoto lens and the information gathered with a drone would fall under the same class as all the other journalistic tools. Participant 4 stated that, “A journalist with integrity, will always regulate himself, and never allow himself to willingly get involved in any conflict of interest. Thus, not only will professional journalists go out of their way to avoid conflicts of interest, but also incidents of ethical misconduct—including the misuse of any journalism tool, be it a drone, a camera, or another recording device.” However, their concerns about hobbyists, citizen journalists, and paparazzi who may not respect codes of ethical conduct and their potential to sell recorded data to the highest bidder were reaffirmed.

So how do journalists find that middle ground or that Golden Mean, where concerns over safety, privacy, context, and conflicts of interest can be addressed and even avoided? Aristotle might say, “This end is realized through continuous acting in accordance with virtues which, like happiness, must be desired for themselves, not for the short-term pleasures that can be derived from them” (Golden Mean, 2007). This sentiment encompasses what both the scholars and journalists cited in this study. That through communications, collaboration, and training liability

can be reduced and regulations can be forged that will be mutually beneficial for the commercial user [journalist] and the public, but only if the operator maintains ethical integrity.

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Appendix A – Interview Questions

1. To start, can you please introduce yourself and state your current title?
2. How familiar you are with the subject of commercial use of drones in broadcast journalism?
3. What do you think about journalists using drones for surveillance purposes to gather newsworthy stories?
4. What concerns do you have about journalists using drones to gather newsworthy content?
5. As journalists, do you think we are crossing any ethical boundaries by using drones for surveillance and newsgathering?
6. In your opinion, what steps could be taken to fix these concerns?
7. What would you like to see happen with the commercial use of drones by journalists?
8. Do you think the commercial use of drones should be regulated? And why?
9. What measures should be taken by the Federal Aviation Administration (FAA) on regulating the commercial use of drones by a journalist?
10. Do you think journalists will regulate themselves by using their own ethical codes when using drones in lieu of FAA regulations?
11. Do you think there is a potential for conflicts of interest when using drones to gather newsworthy stories?
12. With the high-altitude perspective of a drone, can a news story be shown in its rightful context?

Appendix B – Federal Aviation Administration Approved Drone Testing News Organizations

- Advanced Publications
- A.H. Belo
- CNN
- E.W. Scripps
- Gannett
- Getty Images
- NBC Universal
- New York Times
- Sinclair Broadcast
- The Associated Press
- The Washington Post

Appendix C – Federal Aviation Administration Drone Test Site

- Alaska – University of Alaska
- Nevada – State of Nevada
- New York – New York’s Griffiss International Airport
- North Dakota – North Dakota Department of Commerce
- Texas – Texas A&M University – Corpus Christi
- Virginia – Polytechnic Institute and State University (Virginia Tech)