Proposal Project

Annotated Bibliography

Justin VanIperen

Southwest Minnesota State University

Osborne, T. (2014). War on Words. *Aviation Week & Space Technology,* 176(3), 20-22. Retrieved from [www.aviationweek.com](http://www.aviationweek.com/)

The British Defense Ministry attempts to alter public opinion in regards to UAVs. The article cites US use of drones against suspected terrorist the source of negative opinion. This article appears in a reputable trade journal with strong reliability. The author has 9 years of journalism experience with 6 of that in the aerospace industry. This article will help give my proposal credibilty by showing how this issue is a global concern.

Horgan, J. (2013). The drones come home: unmanned aircraft have proved their prowess against al Qaeda. Now they're poised to take off on the home front. Possible missions: patrolling borders, tracking perps, dusting crops. And maybe watching us all? *National Geographic*, 223(3), 122- 125. Retrieved from [www.nationalgeographic.com](http://www.nationalgeographic.com/)

This article explores the possible uses of UAVs in the US that are not military related. It also discusses the political side of these uses. The author has received two Science Journalism awards and has written for Time and Newsweek. He also write the blog “Cross Check” for ScientificAmerican.com. This article will be used to demonstrate current domestic uses as well as explore the political implications.

Ehsnai, R., Maja, J.M. (2013). The Rise of Small UAVs in Precision Agriculture. *Engineering & Technology for a Sustainable World,* 20(4), 18. Retrieved from [www.asabe.org/](http://www.asabe.org/)

The use of small UAVs in agriculture and on farms in the US is presented in this article. Reza Ehsani is a professor of agricultural and Biological Engineering at the University of Florida. The journal where the article appears is published by The American Society of Agricultural and Biological Engineers. This article will help me relate this technology to the rural areas of the US.

Drones as Lifesavers. (2014). *The Science Teacher,* 81(3), 18. Retrieved from [www.learningcenter.ntsa.org/](http://www.learningcenter.ntsa.org/)

This article discusses the disaster and emergency uses of UAVs. The author is not listed, however, research by the University of Cincinnati and quotes from professors there are the primary source of information. This article has given me additional information regarding the capabilities of UAVs in emergency situations.

Lucieer, A., Jong, S., Turner, D. (2014). Mapping landslide displacements using Structure from Motion (SfM) and image correlation of multi-temporal UAV photography. *Progress in Physical Geography,* 38(1), 97-116. doi: 10.1177/0309133313515293

This paper presents a way to use low cost UAVs to make 3D models of landslides. This in conjunction with on site 3D reconstruction provides accurate modeling and prediction tools concerning large scale land slides. The three authors are affiliated with Universities in The Netherlands and Australia. The publishing journal is also an international peer reviewed journal. This article will give me more examples of positive UAV uses.

Kuroki, Y., Young, G., Haupt, S. E. (2010). UAV navigation by an expert system for contaminant mapping with a genetic algorithm. *Expert Systems with Applications,* 37(6), 4687-4697. Retrieved form <http://dx.doi.org/10.1016/j.eswa.2009.12.039>

The monitoring of gas contaminants in the air is the focus of this article. The authors discuss the logistics of using UAV's to accomplish this task. All authors are associated with major universities and the journal is peer reviewed. The obstacles of private users regarding autonomous flight discussed in this article will be of use.

Urbahs, A., Jonaite, I. (2013). Features of the use of unmanned aerial vehicles for agriculture applications. *Aviation,*17(4), 170. Retrieved form <http://dx.doi.org/10.3846/16487788.2013.861224>

This article covers micro-UAVs that can monitor agricultural land as well as survey fields. Environmental impacts are part of the monitoring. This article was written within the last year and published in reputable trade journal. The sources used are also listed for this article. I will use the information pertaining to environmental issues from this article.

Mann, A. (2014). The Age of the Drone. *Canadian Business,* 87(2), 21-22. Retrieved from [www.canadianbusiness.com](http://www.canadianbusiness.com/)

This article discusses the marketing of civil and commercial drone use. It specifically cites cases using drones to monitor ice conditions in shipping lanes through the Bering sea. The author has many works published in multiple Canadian media sources. This article briefly discusses a number of UAV uses that I did not think of. I will use these examples to strengthen my position.

Wong. B. (2012). Are safe robot swarms possible? Before we can enact Asimov's three laws of robotics, we need better hardware like sensors and software that knows how to react to the unexpected. *Electronic Design,* 60(5), 38-43. Retrieved from [http://electronicdesign.com](http://electronicdesign.com/)

This article discusses the challenges of close robot and human interaction. It considers both stationary industrial robots as well as mobile robots working autonomously or in a swarm. The author has a masters degree in computer science from Rutgers and has been in the computer and publishing industry for 40 years. The swarm technology mentioned in this article will help me explore the use of multiple drones working autonomously.

von Wodtke, C. (2013). Droning On. *Aviation History,* (24)1, 22. Retrieved from [www.historynet.com](http://www.historynet.com/)

This article mentions some of the political sides of the drone debate. The integration and potential economic stimulus provided by the drone industry is also discussed. Aviation History is a low end trade journal published with a number of other history magazines. I will use this information sparingly, however, it has led me to some additional research leads.

Sluka, J. (2013). Death from Above. *Military Review,* 93(2), 89-95. Retrieved from <http://usacac.army.mil/cac2/militaryreview/index.asp>

The negative side of UAVs is presented in this article. Drone use in middle east is the primary focus. This is a reprint of the original article from 2011. The publication is the premier military journal and the author is a professor in New Zealand. The voice of the opposition will come from this article. The author covers the majority of the broad arguments against drones.

Boyle, M. (2013). The Costs and Consequences of Drone Warfare. *International Affairs,* 89(1), 1-29. doi:10.1111/1468-2346.12002

The political decisions concerning drone strikes are discussed in this article. The opposition has a strong voice in this paper. The author is a professor of political science at La Salle University in Phildelphia. I will use this article to discuss the political components of my paper.

Rogers, K., Finn, A. (2013) Three-Dimensional UAV-Based Atmospheric Tomography. *Journal of Atmospheric & Oceanic Technology,* 30(2), 336-344. doi:10.1175/JTECH-D-12-00036.1

This article discusses using drones to monitor 3-D atmospheric temperatures wind velocity profiles. This could be used to predict atmospheric turbulence and wave propogation. This journal is published by the American Meteorological Society and the authors are affiliated with the University of South Australia. I can use this as an example of drones being used as a research platform for low cost compared to current methods.