Part One

The world of aviation is one riddled with many feats of human bravery, ingenuity, and the pursuit of the furtherance of human ability. The short history of aviation, although influenced by the touch of human hands, has been always been aided by the colder helping hands of technology. Whether it be the simple piston firing away on the sandy dunes of Kitty Hawk in the early 1900s or the self-landing jumbo jets of the twenty-first century, technology has always been an integral part in the world of flight that I love so very much.

I began my career in flying at the young age of fifteen on the runway of my hometown airport, instructor to the right of me, ready to soar into what would become a lifetime love of mine. This interest was initially peaked by my father’s fascination with flying, a hobby that easily transferred to me. Early on in life I was exposed to flying from a perspective different than most, behind the controls. Whether or not I was actually in control (I wasn’t), I was the happiest grade-schooler on the planet. The world of flight is often one of mystery to many, but to me it could not have been clearer, I was going to be a pilot. By the age of sixteen, the youngest legal age, I had taken my first solo flight (a flight without an instructor in the plane with you). The following year at the age of seventeen, again the youngest legal age, I was being handed my pilots license. Although intense, these years of comprehensive training are definitively the best years of my life.

Although it may have taken many years before I was able to hold my actual pilots license, one thing, rather a piece of technology, remained constant: GPS. Sarina Houston described this relationship between the Global Positioning System and all aviation as ‘invaluable’, and she could not be more correct. The world of aviation has been dramatically changed by the prospects of this new-fangled technique of finding one’s location in a three or four-dimensional space. Having such a location has
allowed pilots to fly with more confidence in their safety, efficiency, and overall effectiveness as the
captain of any airplane.

The origins of GPS, as described by the Federal Aviation Administration’s account, began as
many technologies do; within the Department of Defense. This mid 1970s invention allowed for the
precise placement of ordinance on a target as well as providing accurate location services for anyone
anywhere on the planet. Later, in the 1990s and early 2000s, the technology was released to the public for
use, finding its ways into people’s cars, phones, and most relevant to this subject: planes. The technology
was immediately seized upon by many people within the aviation community, from airlines to general
aviation. Flashing forward to present day, GPS has been fully absorbed into the protocols and procedures
for guidance and directional awareness by the Federal Aviation Administration. This means that if you’re
a pilot, you are going to end up using GPS at some time or another.

Flashing back again to a time before satellites in space could find your location anywhere on the
planet, pilots relied upon systems based on the ground such as VOR radio beacons and just plain
landmarks to pick their way toward a destination. I also had to make use of these techniques when
training to become a pilot, for the aviation industry is still on the tail end of the transition to the more
modern digital age. Although these archaic techniques are effective, they often provide nowhere near the
accuracy and reliability of the Global Positioning System. GPS has provided pilots with the ability to find
their altitude, quadrants, track, and much more instantly, all pros to the system. This is not to say that the
system is without flaw, a fact the FAA is quite aware of. Aviation safety is all about redundancy, and the
sole reliance on a handful of satellites in space makes many regulators nervous. This is why there are
many people at work every day to improve the reliability of the system so that aviation can transfer all of
its needs to the service.

Although slight flaws are evident in GPS, I believe that the system will carry the aviation industry
into a new era of safety that is undeniably important to the survival of the industry as a whole. GPS can
and will carry aviation into a new golden age, even beyond the self landing airliners that you may be
boarding for your next flight.
Works Cited Part One


“The Machine knows!” screams Michael Scott as he pilots his vehicle into the lake after following the instructions of his in-car GPS, all to the dismay of his right-hand man Dwight Schrute. This hilarious outtake from the famous American television show *The Office* is one that inspires the laughter of the millions of viewers tuned into NBC.

The show, following the escapades of the employees of the paper company Dunder Mifflin’s Scranton, PA office is often regarded as one of the best sitcoms ever to be published. The particular episode series referenced above traces the story of the office acclimating to the new environment presented by newfound technology. Michael, the driver of the car in the scene, is seeking to prove that they do not need technology to be successful in the business world, traveling around to their clients in an effort to prove the merits of face to face interaction over technology. Ironically, during their travels to the clients, Michael swears by the directions given by his GPS, blindly driving into the lake.

The technology item scrutinized within this scene is the Global Positioning System (GPS), specifically applied to the in-car navigation application of this broad service. This GPS guidance technology is now more widely available than ever before to people of all classes and social status. A strong example of this is the phones we all carry in our pockets every day. Dan Radak references this in his article *How GPS Technology Can Improve the Modern World* saying, “GPS innovations are playing a significant role in the way we organize our daily lives. From gadgets to vehicles, to different security systems, positioning people and objects is becoming an important feature of modern technology.”

GPS is not only allowing for all people to find where they are going on the ever more complicated roadways of the world, but is also allowing for innovations and improvements in almost all aspects of the technology of today. Applications span from improving the navigation systems on ships
and airplanes carrying people and goods all across the world to the increased accuracy of weapons on the battlefield that in turn reduce tragic loss of innocent lives. Other ways that GPS is solving issues in society involves the curbing of crime. Radak also references this, discussing how car theft and abductions of persons has been effected greatly by the ability for authorities to track vehicles and people using the Global Positioning System. It is interesting to think that the small computers in our pockets, known as cell phones, have the power to save your life when in a bind.

Although the Global Positioning System has helped solve many different problems, it also has created a few. Many people have become concerned with the privacy of the Global Positioning System’s network. Although it is convenient to always have your own precise location, it can be creepy to think that the government or any clever hacker could access that data at any time. An example of this could involve the authorities falsely considering you a suspect in a crime and tracking you down, without a public warrant, to see what you were up to. This is also an example of how the Global Positioning System could be used unethically.

Although there are examples of the unethical use of the Global Positioning System, I believe that the system as a whole maintains a standard that I consider ethical. The Office’s showing of the technology in use is, although comedic, an example of ethical use. The technology is having a clear influence on the characters, for it is showing them their way on the road, even if they misunderstood it’s commands. Everyday, countless amounts of people use this technology to find their way walking, biking and driving on their way to their destinations all over the globe. This is just a short list of the many different everyday uses of the Global Positioning System’s advanced technologies. It is also likely, as referenced by Radak in his article, that this list of uses will continue to expand and diversify in coming years, possibly extending the reach of humanities ingenious technologies to every man, woman, and child the world over.

Overall, the Global Positioning System is put under an interesting comedic spotlight in The Office’s episode *Dunder Mifflin Infinity*. The characters are making use of a technology that is changing the way humans direct their everyday lives. It is fair to state that the Global Positioning System is an
ethical application of human ingenuity, applicable to many activities and previous technologies spanning from the simple to the incredibly complex. There could not be a better platform to show this ever expanding system in action than the hilariously endearing comedy sitcom, The Office.
Works Cited Part Two

_The Office "Dunder Mifflin Infinity"_. Dir. Craig Zisk. By Michael Schur. NBC, 2007. DVD.