

Retracing the Birth of Air Travel:
A Creative Project

by
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A thesis presented to the Honors College of Middle Tennessee State University in partial
fulfillment of the requirements for graduation from the University Honors College

Fall 2016

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Acknowledgements

To Dr. Paul A. Craig: you have been a most gracious mentor on this project. Thank you for the time you have spent and the effort you made to assist in any way necessary as I planned and completed this trip. It was your idea to use the *Vin Fiz* as a creative project so much of the credit for this trip goes to you.

To Dr. Philip E. Phillips: It has been a privilege to work with you during this thesis process. I am greatly indebted to you for the suggestions and support you gave through the entirety of the project.

To the donors and supporters: thank you for your financial support. I can honestly say you were the ones who made this project a reality for me. Without your support, I could not have afforded to complete this daunting trip.

To the Honors College Staff: thank you for your encouragement and support both physically and financially. If it were not for the confidence you all had in me to push myself and complete this challenge, I may have chosen an easier yet less rewarding option for my thesis.

To the many strangers who became friends: thank you for opening your doors to me as I flew across the country. Your generosity saved me hundreds of dollars and provided for fellowship as I traveled across the nation.

To my family, friends, and Katie McCoy: Thank you all for the many prayers that were said while I was on this trip and the encouragement I received daily as I flew and worked on this project. I could not have completed it without your love and support.

Abstract

Today's modern aviation industry is a byproduct of events—both positive and negative—that have molded flight over its century of existence. Yet one historical flight altered the course of aviation's history more drastically than any other since the Wright Brother's initial conquest into the skies: Cal Rodgers' *Vin Fiz* flight. This flight was the very first successful transcontinental flight and proved that aviation could be used as a means of transportation. The author of this thesis researched the first flight, planned a modern replication, and successfully retraced the flight from New York to Los Angeles as a creative project for the Honors College undergraduate thesis requirement. This gave him the unique privilege to experience Rodgers' trip as a pilot. This thesis contrasts and compares the two flights and discusses the changes that have taken place since Rodger's trip in 1911.

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CHAPTER I – INTRODUCTION

General Aviation is a broad grouping including “all civilian flying except scheduled passenger airlines” (AOPA, 2014). The student pilot, flight instructor, and private pilot are all part of General Aviation. General Aviation contains over 90% of the 240,000 certificated aircraft in the United States (AOPA, 2014). In 2014, the Federal Aviation Administration (FAA) predicted that General Aviation would sharply decline over the next 10 years (Moore, 2014). The main factor for the decline in General Aviation is a decline in private pilots (Moore, 2014). A private pilot is the initial certificate an individual receives once he or she has satisfactorily demonstrated an adequate amount of knowledge, skill, and attitude for acting as the commanding pilot of an aircraft. The decline is due to several factors including expense, lack of interest, availability of training locations, and even a lack of advertisement to captivate the interest of young people.

Several organizations have attempted to address this problem. The Civil Air Patrol is an organization in which young people can participate while still in high school. Young men and women are allowed to gain basic skills and knowledge of aircraft mechanics and flying through completing “missions” with volunteer pilots (Civil Air Patrol, 2016). The nonprofit organization FlyQuest located in Huntsville, Alabama utilizes a state of the art simulator and private donations to provide flight training to local high school students interested in aviation (FlyQuest, 2015). They hold numerous aviation camps and host school field trips allowing students to experience aviation at a young age in hopes to persuade them to choose one of the multiple options aviation offers for a career. These are just a couple of the many organizations that have found a way to give back to aviation and seek to address the issue of a pilot shortage.

For my undergraduate thesis project, I wanted to address the issue of pilot shortages in General Aviation. Several options were considered, but ultimately flying a historical route was selected to showcase the progression of aviation and the possibilities even a college-aged student has in aviation. After consulting with Dr. Paul Craig of the Aerospace Department at Middle Tennessee State University (MTSU), it was concluded the *Vin Fiz* flight would be selected for the project. This flight was flown in 1911 by Calbraith Perry Rodgers and was the turning point for aviation in America because it demonstrated that air travel was impractical at the time but could one day be a major industry if the research and development of aircraft was pursued (Taylor, 1993). The goal of flying this route was to showcase the feasibility, accessibility, and practicality of aviation to young adults and to encourage them to become involved with aviation.

Cal Rodgers' flight was the first transcontinental flight ever completed. It took 49 days and covered over 4,200 miles from New York City to Los Angeles (Lebow, 1989). Rodgers would not only have to overcome primitive aircraft but also the personal setback of deafness to complete this trip successfully. He was chasing a monetary reward offered by William Randolph Hearst for the first successful transcontinental flight taking less than 30 days to complete. More importantly (and unknown to him at the time), he was making the most significant trip flight since the first successful powered flight occurred less than a decade earlier in 1903 (Taylor, 1993). This trip was perfect for my goal of captivating young peoples' hearts with aviation.

The major part of this project was completing the flight itself. On 19 May 2016, I departed the Murfreesboro Airport around 11 A.M. and headed eastbound to the coast starting this project. I would fly northward along the coast upon reaching Beaufort, North

Carolina, stopping at Kitty Hawk (the site of the first powered flight of the Wright brothers) and visiting the National Air and Space Museum where Rodgers' *Vin Fiz* aircraft is on display. Once reaching Long Island, New York, I followed Rodgers' original flight path out to Los Angeles. That portion of the flight following Rodgers would account for 20 days out of the 28-day voyage, less than half the time it took Rodgers a century ago. Along the way, I would meet friends and family, get to experience America from the air, discuss aviation with everyone who would listen, overcome various struggles and trials, and ultimately complete the trip of a lifetime.

This thesis consists of three chapters and two appendices discussing the history of the first flight, the story of my flight, and my experience writing the thesis. The first chapter of this thesis is the "Introduction" and discusses the problem of a pilot shortage, how this project addresses that issue, and a basic overview of the project itself. Chapter 2 is entitled "The Vin Fiz Flight" in which I discuss Rodgers' flight and the history behind the original *Vin Fiz* Flight. The events leading up to the first transcontinental flight and the sad incidences following its completion are included as a vital part of Rodgers' story in this chapter. The final chapter of the thesis is a discussion of the planning, flying, and writing of this project entitled "Reflection." This chapter recounts the positive events and challenging scenarios that were encountered during the flight and writing the thesis.

The first appendix (Appendix A) is entitled "Journal Entries from the *Vin Fiz 2* Flight" and directly quotes the Wordpress blog that was kept as a daily journal while completing this trip. These are the personal accounts of preparing and flying this project. The blog contains pictures but for space's sake these were excluded from the appendix. The blog can still be viewed in its entirety at www.vinfizflight.wordpress.com. The only

changes made to these accounts were the grammatical edits that were unable to be completed while on the trip due to time restraints. This post outlined the daily events surrounding the trip and are, in my opinion, the most accurate details concerning the flying of the project.

Appendix B is entitled “Standard Operational Procedures Manual” and was written prior to the flight and addressed the safety of the trip. This manual discussed various aspects of the flight and listed parameters for daily flights. These parameters were agreed upon by Dr. Paul Craig and the Aerospace department as sufficient, legal, and safe for the successful completion of this project. The manual would be used on multiple occasions during the flight and was considered vital to the project’s success.

My Honors College thesis provides a thorough background of the reason for this project, the history behind the original flight, the process of preparing for the flight, and the completion of a major personal and academic achievement. This project will continue to encourage young people to pursue aviation long after this thesis has been completed through lectures and other speaking engagements for various organizations with both aviation and non-aviation backgrounds.

CHAPTER II – THE VIN FIZ FLIGHT

Every day, multiple airline flights depart New York City for the West Coast safely and comfortably transporting thousands of passengers in a matter of hours (Rust, 2007). This is an incredible logistical feat involving pilots, dispatchers, controllers, and other critical individuals who are not directly involved with the flight itself, such as ticket sales representatives, maintenance technicians, and aircraft manufactures (Rust, 2007). The modern commercial aviation industry is the result of the evolution of aviation since the Wright brothers' first flight in 1903 (Taylor, 1993). Many events, such as grueling wars, chasing records, and sobering accidents, have molded aviation over the years. For the first decade of its existence, the airplane was not considered a practical method of transportation (Taylor, 1993). Yet one event would change not only how the public perceived aviation but also the future of aviation—it would change the world forever.

After the Wright brothers achieved their momentous flight during the winter of 1903, aviation struggled to take hold in the American people's minds as a practical form of transportation due to its unproven capability (Taylor, 1993). The "aeroplane," as it was called, was seen as more of a daredevil hobby for the brave or foolish (depending on who you asked) (McCullough, 2015). This was partially because in 1908, the Wright brothers themselves still struggled to master the machines of their invention with both Orville and Wilbur having multiple accidents, one leaving Orville with broken legs and ribs taking over 4 months to recover from (McCullough, 2015). Furthermore, the advent of "airshows" in which aviators took to the skies to perform death defying and sometimes fatal stunts before thousands of wide-eyed spectators caused the public to have apprehensions of flying (Lebow, 1989). At the Chicago Airmeet of 1911 there were

numerous accidents and incidents and even two fatalities among the two-dozen aviators who participated in the event (Wendell, 1999). While the crowds still flocked to the airfield by the hundreds of thousands, they only wanted to see the daredevils of the sky and their crafts; the majority of those who had thoughts for the future of aviation were only considering the militaristic or entertainment purposes (Lebow, 1989).

One of the spectators at the Chicago Airmeet was prominent newspaper owner, William Randolph Hearst, who had already gained attention in the aviation world (Lebow, 1989). Hearst, being a visionary, looked past the issues and shortcomings of aviation at the time believing it could become a feasible means of transportation. In October of 1910, Hearst thought the “general thrust of aviation was misplaced” (Lebow, 1989, p. 71) and the effort should be focused on developing better, more reliable craft. He announced he would reward a \$50,000 cash prize to the first aviator who flew from one coast to the other passing through Chicago (location of Hearst’s newspaper) in 30 days or less. The offer was made in October of 1910 and would expire one year later on the October 10 per Hearst’s stipulations. It was Hearst’s goal not only to promote research and development of the airplane, but also to prove its capabilities (Lebow, 1989).

One of the many competitors at the Chicago Airmeet was Calbraith Perry Rodgers. Rodgers was born in January of 1879 in Pittsburgh, Pennsylvania to a widowed Maria Rodgers (Wentz, 2011). His father, assigned the protection of settlers in the Wyoming Territory, was killed 4 months prior to his birth by a lightening strike. Cal’s lineage included famous Naval Commodores such as Matthew Perry Rodgers and Oliver Hazard Perry. His cousin, John Rodgers, would become a Naval aviator after graduating from the Wrights’ Flying School and set the record for the longest seaplane flight in 1925.

Rodgers would have followed in the family career path, but a bout with scarlet fever in 1885 left him entirely deaf in one ear and partially deaf in the other. His hearing loss caused significant issues in his academic training but did not prevent him from becoming a star guard for his school's football team (Wentz, 2011).

Rodgers benefited from a family fortune and never would need to work a day in his life (Stein, 1985). An adventurer at heart, he moved to New York after graduating from Mercersburg Academy and join a yacht club (Wentz, 2011). After a few years of membership, Rodgers joined the yacht racing team and became a fan of many of the female members with his dashing looks and shy personality. On a race to Bermuda in 1906, he rescued a lady who had fallen into the ocean after losing her footing while boarding a yacht. The daughter of the woman, Mabel Graves, would become his wife less than five months later. The two would live in New York for the next half-decade and sadly never have a child (Wentz, 2011).

Rodgers visited his cousin John in April of 1911 at the Wright Brothers' School of Aviation in Dayton, Ohio (Lebow, 1989). He went up for a pleasure flight and soon began flight training in that same month. He was a natural pilot and soloed (flew without instructor supervision) with less than 90 minutes of flight training at Huffman Prairie (Stein, 1985). He became the forty-ninth certificated pilot by the Wright brothers on August 7, 1911 (Stein, 1985). Three days later, Rodgers arrived in Chicago where he would make a name for himself as an aviator by winning the Endurance Prize at the 1911 Airmeet (Lebow, 1989). During the nine-day event, Rodgers would fly over 29 hours to take home the largest single prize of the Airmeet—\$5,000. His total purse was just over \$11,000 and he caught the eye of many with his deftness and skill surviving an

emergency that could have taken his life (Lebow, 1989). While still at the Airmeet, Rodgers casually mentioned to his wife Mabel he was considering the Hearst Prize. Her response was, “I think you should do it. It’s a great idea!” (Lebow, 1989, p 59). Neither Cal nor Mabel broached the topic for the remainder of the contest.

The Chicago Airmeet would be a memorable event boasting multiple world records, but most impressive was an altitude record of 11,642 feet set by Lincoln Beachey (Lynch, 2003). It was an optimistic time for aviation with daily record breaking and everyone anticipating the next great feat of flying (Lebow, 1989). When Rodgers attended a dinner after the Airmeet and mentioned to J. Ogden Armour he was considering Hearst’s transcontinental challenge, Armour broached the topic of sponsorship for the flight. Armour owned the Armour Meat Packing Company in Chicago and saw this as a business venture (Lebow, 1989). Eventually they would come to agree that Rodgers would be compensated \$5 per mile as he crossed the country and have a special train with railcars for personnel, an automobile, maintenance equipment, and spare parts (Noel, 1911). In return, Rodgers would pay for his own fuel, oil, maintenance, and personal staff; he also would be required to provide his own aircraft with a specific paint scheme promoting the newest endeavor of the company—a new grape soda called “Vin Fiz.” By September 14th, Rodgers, who had only 3 months of experience as a pilot, was traveling to Long Island, New York with his newly modified Wright Model “B” biplane to begin a flight that would change the world (Noel, 1911).

The Transcontinental Flight

The sun broke bright and clear on September 17th. Early that afternoon, Cal departed Sheepshead Bay, New York (modern day John F. Kennedy Airport) (Lebow, 1989). The

only way to navigate was following the support train that had been outfitted with white sheets on its top for increased visibility (Groom, 2011). As Rodgers departed the horse track that doubled as his runway, he turned up the Hudson River towards the train station (Lebow, 1989). He over took the train and landed at Middletown, New York before it arrived (Lebow, 1989). He boastfully anticipated to be in Chicago in 4 days and slept well after a successful but short first day (Stein, 1985).

The second day of flying was slightly less productive. After preparing for a full day of flying, he narrowly survived what could have been a crash (most likely fatal) into electric wires (Bruno, 1942). He landed so abruptly that the aircraft veered off course and smashed into a chicken coop, splintering the aircraft and causing 4 days of delay. The next flight would be on September 21st when the weather broke enough for Rodgers to make the flight from Middletown to Hancock where a soft patch of ground broke the right skid on the *Vin Fiz* (Bruno, 1942). The lack of modern runways required Rodgers to land in fields that might have unforeseen problems such as high grass or standing water (Lebow, 1989). Charles Taylor, the Wright brothers' mechanic, joined the support train at Hancock and was able to assisting in the maintenance of Rodgers' aircraft for much of the remainder of the transcontinental flight (Lebow, 1989).

By the sixth day, since leaving Long Island, the *Vin Fiz* had been repaired and was ready to depart Hancock (Lebow, 1989). Despite a fog delayed, Rogers would hope to make it to Elmira that day (Stein, 1985). The trip would cover nearly 150 miles (Stein, 1985). While Rodgers wooed the town, Charles Taylor and a few mechanics replaced the engine on the *Vin Fiz* with the one on Rodgers' personal aircraft (also a Wright model B) (Lebow, 1989). This provided for a fresh engine for the *Vin Fiz* while the mechanics

overhauled the fairly new four-cylinder engine. His takeoff the next morning was almost disastrous but he deftly avoided a tree by mere inches before aborting the flight. The eager crowd assisted in transporting his aircraft to a clear field, and the few wires that had been broken were repaired hastily. He would land near Hornell, New York that evening and only cover 59 miles (Lebow, 1989).

Rodgers, who wanted to be in Chicago in 4 days, would not even be clear of New York by the end of the first week (Lebow, 1989). His flight that Sunday interrupted several church services and, as one writer put it, “the Lord waited for Rodgers” (Lebow, 1989, p.120). The first landing of the day was successful. Rodgers hastened to get airborne again desiring to make up for lost time in the previous accidents. He cut the next flight short after having ignition problems on the engine (a common issue in the early days of aviation) and found himself unexpectedly at Salamanca, New York. The special had to work its way back to assist in the repair since it was already waiting at Rodgers’ next planned stop. The wait was too much for Rodgers and he, satisfied with his own repair of the engine, attempted to depart from the tall, grassy field. The result was catastrophic; instead of finding a simple ignition problem when the train arrived, Charles Taylor found the aircraft severely damaged (both propellers and wings destroyed) by a barbed wire fence. The airplane would not be ready until 3 days later but the weather would prevent Cal from leaving till the September 28th (Lebow, 1989).

Early Thursday morning (September 28th), Rodgers found the weather suitable for flying (Stein, 1985). His goal for the day was the town of Meadville, Pennsylvania. Just after noon, he would land at the racetrack in the town and have covered an impressive 104 miles in 106 minutes. The aircraft was refueled and briefly tuned by the mechanics

while Cal ate lunch. In less than an hour, he was in the air again. The train station at Meadville was slightly complicated with a convergence of four different tracks. He luckily guessed the right one to follow. He would land in Warren, Ohio that day with only a fractured skid damaged on landing. Once the repairs were made, Cal would depart and make the best day of flying yet: 203 miles. The night would be spent in Kent, Ohio (near Akron) and a day of rest would be taken when a storm settled in the next morning (Stein, 1985).

The next morning (September 30th), Rodgers had no difficulties on takeoff and would leave a boisterous crowd at Kent (Lebow, 1989). Mansfield was the next stop and the flight was abnormally uneventful. After a refueling, the aviator was off Marion, Ohio (Lebow, 1989). The reason for landing at Marion was purely a monetary one; several cities attempted to lure Rodgers to them with a cash prize for the aviator as he traveled westward should he stop at the town (Villard, 1987). After a short stay, Rodgers departed and found his way to Rivarre, Indiana (near Huntington) and 178 miles from Chicago (Lebow, 1989).

At the end of the second week, Rodgers had yet to reach Chicago and was less than two weeks from the deadline set by Hearst for the \$50,000 cash prize (Taylor, 1993). The weather would not cooperate with Rodgers on this day. By nightfall, Rodgers was only on the other side of Huntington, Indiana covering a meager 36 miles that day. He realized his chances of making it to Los Angeles were becoming more unlikely by the hour as he waited on the ground for the storm to dissipate enough to continue (Taylor, 1993).

On October 2nd, Rodgers faced even more delay in the form of a catastrophic crash on takeoff from Rivarre (Lebow, 1989). Everywhere Rodgers went, a crowd was sure to

follow. On takeoff, a gust of wind blew Rodgers sideways towards the crowds and a tree line (Lebow, 1989). Without hesitation, Rodgers turned towards the trees knowing his hopes of meeting Hearst's stipulations for the prize were dashed (Winchester, 2013). The aircraft sustained the worst damage it had received so far on the trip and required replacement of both the upper and lower left wings. The aircraft would be carried by spectators to a nearby garage where Taylor and crew would work feverishly to have the *Vin Fiz* ready for the next day: an impressive feat in and of itself. Due to the mechanics not finishing till late the next day, Rodgers had to remain another night in Huntington before pressing onward (Winchester, 2013).

The next morning marked 19 days that the trip had been in progress (Stein, 1985). Rodgers' dismal pace caused others to begin to wonder why the "birdman" continued his flight. The three other contestants who had been attempting the flight had already resigned from the competition. Rodgers alone was chasing this goal (Stein, 1985). The day's total flying was 137 minutes putting him only 20 miles from Chicago in Hammond, Indiana (Lebow, 1989). The desire to make it to the Windy City caused Rodgers to press on just as night began to fall. The result could have been catastrophic, but he found the *Vin Fiz Special* (the support train) waiting and a cornfield lit by the train for his landing. Strong winds out of Canada would prevent flying for two days. Rodgers, impatient with the delay, would take the train to Chicago the next day with his mother and wife to make all the social calls he was required to while waiting on the weather (Lebow, 1989).

Exactly three weeks since departing the Sheepshead Bay racetrack, Rodgers landed at Grant Park in Chicago with over 8,000 spectators watching (Winchester, 2013). He already had met with both Armour (the trip sponsor) and Hearst while waiting for the

winds to subside (Lebow, 1989). The stay in Chicago was a short one only allowing for minor repairs to the engine and Rodgers to acquire a hardy meal at a nearby hotel. The course turned southward towards Texas at this point due to the lower elevations on the southern boarder of the nation which would make flying much more reasonable. As Rodgers departed for Joliet, Illinois he became disoriented and lost the train for nearly an hour. He picked it up again only 13 miles outside of Chicago (Lebow, 1989).

The Hearst Prize now would expire in two days (October 10) (Bruno, 1942). Rodgers was attempting to beat the distance record set previously by Harry Atwood (Lebow, 1989). He also showed his stubborn streak with his comments to the press: “I’m going to do this [complete the trip] whether I get \$50,000 or fifty cents or nothing. I am going to cross this continent simply to be the first to cross in an aeroplane” (Lebow, 1989, p 144-5). Rodgers’ tenacity was lacking in the other competitors and was more than likely the key to his tenacity even in the face of numerous setbacks (Lebow, 1989).

One of the other areas Rodgers would spearhead in aviation was mail transportation (Holmes, 1981). As a means of funding the trip, he would deliver mail along his route to the other cities (Glines, 1968). His wife actually suggested the idea around this time on the trip since Rodgers was already carrying ceremonial letters from the several Atlantic-based naval officers to the Pacific-based ones (Wentz, 2011). Rodgers carried these personally on the flight, but soon the special had the many bags of mail Rodgers would carry at some point while airborne. His wife would attest to the fact every piece of mail bearing the “Rodgers Aerial Route” or “1911—Aerial Rodgers Post—1911” stamps would have been carried by the airman (Wentz, 2011). Consequently, these stamps are among of the most coveted by philatelists today (Cindy, 1999).

The day's journey was completed near Lockport, Illinois—less than half the way to Joliet (Lebow, 1989). The special would have to make the all too familiar maneuver of retracing its route back to find Rodgers who yet again fell short of the proposed distance for the day. Fred Howard, a friend of Rodgers who had been giving briefings on the landings spots for various cities, had stayed behind in Chicago. This loss would be tremendous to the pilot, but his cousin John who had completed his flight training at Dayton was now scouting the cities and topography between the proposed landing sites for Rodgers. The aircraft magnetos were repaired before the entourage retired for the evening (Lebow, 1989).

October 9th was a beautiful day for flying (Stein, 1985). Cal was airborne by 8:30 that morning and would press towards Springfield as the day's final destination. Rodgers landed for fuel at Streator, Illinois before heading to his first scheduled stop at Peoria where he was met with a surprise (Stein, 1985). Prominent airman Cliff Turpin was also in Peoria (Lebow, 1989). Turpin was one of the pilots who had competed with Rodgers at the Chicago Airmeet early that year. He was more than courteous towards the flight Rodgers was making and provided advice and personally drawn maps of the area. The crowds watched in amazement as the two pilots took off in their respective aircrafts and gave a brief aerial demonstration for the town. Rodgers then turned southbound as Turpin landed back at Peoria (Lebow, 1989).

Rodgers landed at Springfield, Illinois just after 5 o'clock that evening and was relieved to have completed the day's projected flight for a change (Lebow, 1989). Rodgers made a major adjustment in his routing at this point. With the Hearst prize expiring the next day, St. Louis retracted its purse of \$1,000 for the aviator if he would

land at the local fairgrounds. He contacted Kansas City and was met with warm gratitude for choosing the city as a stopping point. He would also be bypassing the chance to meet many pilots who had been competing in an airmeet at St. Louis the week before but his mind was set (Lebow, 1989).

The sun rose on Tuesday, October 10th after Rodgers did (Stein, 1985). He was anticipating making as much distance as possibly on this last day of competition for the Hearst Prize. He departed Springfield and headed southwest bound for Nebo, Illinois. Fuel would be the only requirement for stopping and soon Rodgers was airborne once again. Near Thompson, Missouri though he began to have issues with a spark plug requiring him to land (Stein, 1985). He would back track and fly a brief demonstration for a cash prize over the town of Mexico, Missouri (Lebow, 1989). After the demonstration, Rodgers set his sights towards making Kansas City. A stiff wind blew at his back and he soon caught up to the special. His pace of more than 60 miles an hour across the ground allowed him to make Marshall, Missouri totaling the day's mileage to 214. The total distance flown on the trip was 1,398 miles surpassing Henry Atwood's distance making Rodgers the distance champion for the contest. The news soon arrived from Hearst in a dismal two-word telegram: "No extension" (Lebow, 1989, p. 204).

On October the 11th, Rodgers finished his plans to make the short flight to Kansas City (the half way point of the trip by his calculations) (Carroll, 1961). His determination was immovable and he was going to assure his place in history regardless of the prize. He landed to repair another spark plug before pressing on to Kansas City before noon (Carroll, 1961). Kansas City was a menace to flyers with odd currents flowing over the city built on a knoll (Lebow, 1989). "Aviation fever" would consume the city and spill

over into the next few decades with visits from Charles Lindberg and *The Spirit of St. Louis* and the relocating of Trans World Airlines in the 30s to the local airport (Karash, 2001). Rodgers would land just south of Kansas City at Overland Park and be treated as royalty by all (Lebow, 1989). The next day's flight (October 12th) would be delayed by rain much to the city's excitement. Because of Cal's burst of popularity, crowds of people made it impossible for the Rodgers family to see any of the sights the city offered. Rodgers' height singled him out and made him the target of nearly everyone's congratulations. The excitement was a slight disturbance to Rodgers, on account of his deafness; he would spend the day in his room resting (Lebow, 1989).

Friday the 13th was a weather delay (Lebow, 1989). Cal's mother would be somewhat grateful even though she considered herself only slightly superstitious. The aircraft received a thorough inspection and was ready for the next flight on Saturday. Cal departed Overland park and headed southwest towards Parsons, Kansas. Stiff wind brought him down near Moran, Kansas due to fuel needs. The next stop was at Parsons where Rodgers flew over 7,000 people but opted not to land. Due to a thunderstorm moving in behind him, Rodgers flew on south towards Vinita, Oklahoma where he would spend the evening (Lebow, 1989).

The following day, Rodgers was grounded at Vinita due to high winds threatening to damage the aircraft while even on the ground (Stein, 1985). Cal spent the extra day as the special guest to the local fair and a boxing match (Villard, 1987). Since his loss of the Hearst Prize, Rodgers had been receiving even more promotional visits and purse offerings from cities (Carroll, 1961). This funding showed the American peoples' love for the aviator, who was pursuing a goal not for money but for the adventure and the shear

love of doing it. The crowds awaiting him would grow into the tens of thousands as the story of Rodgers spread across the coast (Carroll, 1961).

It had been 31 days since Rodgers left the east coast (Lebow, 1989). Rodgers departed Vinita for Muskogee, Oklahoma (a routine fuel stop) and then was on to McAlester. The magneto flooded from a rain shower and required clearing before making the trip. Charles Taylor noted that everything was going from “bad to worse” (Lebow, 1989, p. 157) since the party had left Kansas City and the repairs became a daily task. The flight would end five miles short of McAlester due to a water leak on the liquid cooled engines. A cracked cylinder caused the leak keeping the aviator from flying the rest of the day (Lebow, 1989).

Tuesday was a promising day for Rodgers. The engine had been overhauled by Charles Taylor and the team of mechanics overnight and was ready for the task that lay ahead (Lebow, 1989). From McAlester, Rodgers would press towards Durant, Oklahoma and land there prior to 9 o’clock in the morning (Taylor, 1993). The aircraft crossed into Texas and pressed on toward Denison and then Pottsboro (Lebow, 1989). After fueling up at Pottsboro, Cal would make a time-consuming error in navigation. He had run ahead of the *Vin Fiz Special* and found the train station lined with sheets but accidentally picked up a freighter headed westbound instead of south. He did not realize his mistake for 30 miles, but by then was too far off course to come back. The town he landed in was Bonita (just past Gainesville, Texas). After fueling up and retracing his path to Gainesville, Rodgers would follow the track to Fort Worth, Texas for the last flight of the day (Lebow, 1989).

Dallas was a major stop for Rodgers because the Texas State Fair was being held when he arrived (Carroll, 1961). The short trip from Fort Worth to Dallas took only half an hour and brought the total trip distance to an impressive 2,131 miles. The next day would include visits with the mayor and other dignitaries of the city. Although Rodgers was the star at the fair, his deafness caused him a great deal of trouble communicating with the crowds and reporters (Carroll, 1961). Rodgers left Dallas and arrived at Waco before noon the next day (Lebow, 1989). The flight from Dallas to Waco showed the improvement Rodgers was making as a pilot from the experience of his trip. Rodgers flew an impressive hour and forty minutes before landing in Waco without refueling or issues (Lebow, 1989).

From Waco, Rodgers would travel south towards San Antonio (Carroll, 1961). He hoped to make the 188-mile flight in one day (Lebow, 1989). Rodgers required Taylor to restring the cables that controlled the aircraft after harrowing news of a fellow aviator's death came the previous evening. The delay kept him grounded till just prior to noon when he departed for Granger. After a quick fuel stop and less than an hour on the ground, Rodgers was on his way to the capital of Texas. The Waco-to-Austin flight was another impressive leg of just under two hours of flying with no issues. Rodgers enjoyed a lunch with no rush to make the next flight (Lebow, 1989). Once the aircraft was inspected and fueled, Rodgers departed for the city of San Antonio (Carroll, 1961).

The good flying and luck both would end for Rodgers while over Kyle, Texas (Stein, 1985). The engine of the *Vin Fiz* suddenly began thrashing about during flight. Rodgers reacted instinctively and shut off the engine while turning towards a field to land in. Once on the ground and with the mechanic crew, Rodgers realized the engine mount had

broken in flight causing the engine to vibrate violently (Stein, 1985). While replacing the bracket, the mechanics noticed a valve had also completely seized up (Lebow, 1989). The engine was ultimately removed and replaced with the fresh one while the mechanics overhauled the old engine for another time. The flight would be delayed another day due to weather; but by October 22th, Rodgers was able to fly again (Lebow, 1989).

The *Vin Fiz* had been flying for 37 days now and covered over 2,400 miles (Stein, 1985). Rodger and his aircraft both showed signs of wear from the tedium of the flight. The flight was still mostly southbound following the railroad to San Antonio before turning west towards the ocean. The first flight of October 22th was to San Marcos, Texas (Stein, 1985). The storm from the previous day left a lingering coolness in the air that was amplified when Rodgers climbed up to 2,000 feet for his flight (Lebow, 1989). Rodgers would have to put on a coat before leaving San Marcos and making the flight to San Antonio (Lebow, 1989).

San Antonio was less than an hour flight from San Marcos (Lebow, 1989). The town was ecstatic to see the dauntless airman. The police found it difficult to contain the crowd. Eventually they would request the assistance from the local Cavalry regiment to ensure Rodgers and the *Vin Fiz* would be unharmed. Rodgers made his way to the hotel where the rest of the party had already arrived. He hoped to leave the following morning (Monday), but the aircraft was in need of major mechanical attention (Lebow, 1989). Charles Taylor replaced most of the control cables again as well as overhauled the engine before the aircraft ventured into the more barren western portion of the trip (DeFour, 1997). The extra time in San Antonio gave Rodgers a chance to see the city and talk to his cousin John about the terrain between San Antonio and Del Rio (Lebow, 1989). The

press also observed that Rodgers had lost 15 pounds since the beginning of the trip and appeared somewhat weathered from exhaustion (Lebow, 1989).

Rodgers would continue the trip on Tuesday but not depart till midday due to some last-minute mechanical adjustments (Stein, 1985). Rodgers now was dealing with another unknown for the trip: the great American Desert. No one had ever ventured into that area with an aircraft before. Those who had attempted the flight from west to east had been stopped by the barren vastness (Stein, 1985). The first sign of trouble came soon; the engine completely died less than an hour into the flight, forcing Rodgers to land at Lacoste (Lebow, 1989). The ultimate cause was the magnetos, and the fix was a quick one. Soon Rodgers was at 4,000 feet westbound to Del Rio (Lebow, 1989).

There were only two stops between Lacoste and Del Rio: Sabinal and Uvalde (both contract stops for cash prizes) (Lebow, 1989). The prizes from these stops were gained at the expense of daylight; Rodgers landed short of Del Rio at Spofford just as the sun was setting (Carroll, 1961). The trip's total distance was 2,700 miles with about 1,500 more miles ahead. Yet more delays lay in Rodgers path. The next morning, a clod of dirt would nick the propeller causing a crash destroying both the propellers and damaging the wings. The aircraft sustained the worse damage since before Chicago and was in a very remote area (Carroll, 1961). Charles Taylor would work continually to have the aircraft flying by the following afternoon (DeFour, 1997). Rodgers took a train and went ahead as far as he could and still be able to return the same day to scout the area's topography (Lebow, 1989).

On October 26th, Rodgers arose in high spirits and oversaw the clearing of the desert debris from his takeoff area (Lebow, 1989). The aircraft was ready to fly to Del Rio and

claim a cash prize. The flight was just over half an hour and covered 31 miles. He landed well ahead of the special due to a significant tailwind. He refueled the aircraft and enjoyed a couple sandwiches while waiting for the train to arrive. Rodgers flew up the Rio Grande cutting back and forth into Mexico on his way to Sanderson. The topography was severely different from his east coast experience. It was breathtaking for the aviator flying over canyons and mesas along the southern border. The lack of an emergency landing site caused him to maintain an uneasy feeling about the area and climb to a higher altitude in the event of engine failure. He landed only due to oil depletion and was well ahead of the special. Dryden was the nearest town and he found oil there rather than waiting for the special (Lebow, 1989).

Cal would arrive over Sanderson two hours ahead of the special (Stein, 1985). He elected to wait for it and spend the evening in Sanderson where he could be sure of a good takeoff area the next morning. He had covered an astounding 170 miles for the day and was ecstatic about his success (Stein, 1985). The following day high winds caused the aviator to wait and not risk continuing in dangerous conditions (Lebow, 1989). Patience was a key to his success and he had the tenacity required for such a daunting trip (Carroll, 1961). The extra days were adding up, but with the Hearst Prize off the table, Rodgers thought it best to take his time and press steadily westward (Stein, 1985). A sad moment in the trip occurred during the delay: Charles Taylor would have to leave the group and return home (DeFour, 1997). His wife became ill and required his immediate assistance in Los Angeles (DeFour, 1997).

On October 28th, the sun rose just after Cal arrived at the *Vin Fiz* (Stein, 1985). Even though the day was substantially less windy, Rodgers lost control on takeoff, causing a

skid to break, tearing the left lower portion of the wing (Carroll, 1961). Without Taylor, the other mechanics would be challenged to keep the *Vin Fiz* airborne (Lebow, 1989). The repairs were made allowing Rodgers to leave before noon. A strong wind blew him along faster than anticipated which helped make up for the lost time from the accident. Cal experienced one of the challenges of mountain flying when he became enveloped in thick clouds that formed from the wind cooling as it blew up the side of the mountain. The clouds were so thick he was unable to see his hands working the levers as some points (Lebow, 1989). This was the first known record of someone flying through clouds (what would later be known as Instrument Meteorological Conditions) making it nearly impossible to maintain a course without modern avionics (Villard, 1987). Rodgers was able to survive the weather and land at Alpine nestled among the mountains of western Texas (Carroll, 1961).

From Alpine, Rodgers flew to Marfa, located just beyond a treacherous pass in the mountains (Lebow, 1989). The crowd swarmed to meet the aviator and gaze on the mystical craft he flew. The propeller chain was malfunctioning and required an adjustment before continuing. Once Rodgers was airborne again, he followed the railroad to Sierra Blanca, Texas where he would stop because of nightfall. The day's total was 231 miles: an impressive amount of flying considering the difficulties and mechanical issues. El Paso lay just over on the horizon for the next day's journey (Lebow, 1989).

The next morning (October 29th), Rodgers was off the ground at Sierra Blanca around 9 A.M. (Stein, 1985). He would soon have a water leak from the water-cooled engine and have to attempt to land in a hostile topography (Stein, 1985). He endeavored to fly the plane a few miles further to Fort Hancock where the area would be clear, but

the engine began to bind bringing him down in a Mesquite bush (Carroll, 1961). The landing would cause damage to both skids and the lower fabric surface (Stein, 1985). Rodgers was bruised by the auxiliary fuel tank breaking off in the crash hitting him in the head. He still insisted on assisted with the repairs where he could. Due to the scheduled arrival at El Paso, the repairs were shoddy at best. Just after 1:00 P.M., Rodgers was airborne again taking just over an hour to fly to El Paso (Stein, 1985).

In El Paso, a crowd of spectators waited for first sight of the aviator (Stein, 1985). Rodgers elected to bypass the scheduled landing at Washington Park due to the excessive crowds with no police controlling them (Stein, 1985). He landed near the railroad and boarded the train before the crowd could make it out to the *Vin Fiz* (Lebow, 1989). The aviator spent the rest of the day with Armour representatives at a bullfight in Juarez, Mexico across the El Paso border (Carroll, 1961). Rodgers found little enjoyment in the bullfight (Lebow, 1989). As a heavy cigar smoker, he reveled in a fresh haul of Mexican cigars. The following day (October 30th) would be a day of rest because of the engine dislodging from the mounts and moving backwards half an inch. This slight change would have been catastrophic to the balance of the aircraft and needed immediate attention before continuing (Lebow, 1989).

The trip total to El Paso was 3,204 miles in just over 8 weeks (Lebow, 1989). Without Taylor, the two mechanics struggled maintaining the various engine and airframe items that Taylor had assisted in designing (Lebow, 1989). The rest of the time in El Paso was spent sightseeing and visiting the various attractions in the city (Carroll, 1961). The city was formed around the end of a mountain range giving it a distinct and unique horseshoe

shape that was a peculiarity to Rodgers. The next day, Rodger would finally depart the Lone Star State (Carroll, 1961).

The overhauled aircraft purred contently as Rodgers flew the short and uneventful trip to Deming, New Mexico (Lebow, 1989). From Deming, Rodgers flew to Lordsburg where the foot control cables broke requiring him to emergency glide the aircraft down. The circus happened to be in town this day and once the news arrived the airman had landed, the entire circus—crowds and entertainers alike—rushed to the landing site. The propeller chain was missing a number of rollers but Rodgers elected to take a chance and fly to Willcox, Arizona where he wanted to spend the night. The flight was 78 miles and would go smoothly despite the risk taken flying with a faulty propeller chain (Lebow, 1989).

The first day of November arrived with both mechanics and Rodgers working to replace the individual rollers (Stein, 1985). The work was tediously slow requiring the majority of the morning to complete. Just before noon, Rodgers was flying towards Tucson, Arizona where he would encounter a special surprise (Stein, 1985). About the time Rodgers left Chicago, Robert Fowler began to fly from west to east attempting the transcontinental flight (Lebow, 1989). He currently was in Tucson and the two aviators exchanged congratulations and encouragement for the flying that lay ahead. Fowler would be the first man to cross the country from west to east, but he did not complete his trip before Rodgers made it to Los Angeles becoming the first to cross the country by air (Lebow, 1989).

The meeting was cut short as Rodgers departed for Phoenix (Sayner & Hatch, 1974). The sun was already beginning to set but he hoped to make it to Maricopa before night.

The aviator pushed luck's limits again pressing on even as night fell. The moon shown bright and soon the town, lit with oil lamps, appeared in the distance (Sayner & Hatch, 1974). The aviator set two world records that day (Lebow, 1989). The first was completing 3,466 miles of transcontinental flying since the Sheepshead Bay departure. The second was completing the first successful landing at night. Cal's confidence was boosted even more by these successes (Lebow, 1989).

The following morning Rodgers repaired a half a dozen rollers on the propeller (Lebow, 1989). The repairs took several hours, but Rodgers was airborne and for Phoenix by mid morning. Rodgers would fly at 60 miles an hour at times between Maricopa and Tempe, his first stop. He made a call to the hotel owner in Pasadena explaining he planned to be in Pasadena in three days (Lebow, 1989). He flew over Phoenix where the railroad swapped over to the Southern Pacific Railroad (Sayner & Hatch, 1974). He followed it southwest to the railroad outpost of Stovall Siding Junction where he would wait over two hours for the special to catch up. A lack of communication caused Rodgers severe frustration when the special arrived without gasoline for the aircraft. The delay would require the party to spend the night at the barren Stovall Siding surrounded by desert. The next morning, a westbound train would bring in the supply of gasoline required for the remainder of the flight (Sayner & Hatch, 1974).

While waiting for the fuel, Rodgers and company had a special visit (Lebow, 1989). Early in the afternoon, a dozen Indians began peering in the windows of the railcar. Panic welled up in Mabel Rodgers' mind. Yet the chief spoke English and had been to college in a near by town. He came to bless both Cal and his wife as they journeyed across the desert. After a few minutes of talking they left as quietly as they came. Cal spent the

evening conniving a plot to spook his mother and wife. The eerie desert landscape and a willing accomplice in the form of a mechanic nearly gave his mother a heart attack as they walked across the moonlit sand (Lebow, 1989).

The next morning fuel would arrive (Stein, 1985). Rodgers departed on November 3rd towards Imperial Junction where the railroad turned northward towards the Banning Pass before descending into the Los Angeles coastal area (Lebow, 1989). As he climbed to 4,000 feet, Rodgers noted he actually smelled the ocean crossing into California. The flight to Imperial Junction was smooth but as Rodgers turned northbound catastrophe struck. The number one cylinder blew apart sending shrapnel into both the aircraft and Rodgers' right arm. Rodgers banked back towards Imperial and used the altitude to glide half a dozen miles back to the railroad junction. The aircraft was skillfully landed right beside the railroad in the only clear area for miles. The mechanics, having gained proficiency from making multiple repairs, deftly began repairing both the aircraft and engine. Cal set a record for his trip by flying over 133 miles without refueling. He would spend the night in Imperial Junction due to the extent of his injuries and the damage of the aircraft (Lebow, 1989).

It took two hours for the metallic splinters to be removed from Cal's arm (Stein, 1985). The pilot was restless to get to the coast. He had flown over 4,000 miles and already reported to Pasadena he would be there the following day providing there was not an accident. The day was spent attempting to ready the pilot and the aircraft for the last jump between the mountains to the coast (Stein, 1985). Rodgers left Imperial Junction on the morning of November 3rd with intentions of making Pasadena that same day (Lebow, 1989). The blue Salton Sea spread beneath him between a mountain and Colorado River.

His mind was distracted from the scenery by the misfiring of his engine. The flight gently turned left following the topography around the San Jacinto peak and just south of the San Gorgonio Mountain (near modern day Palm Springs). Both mountains were above 10,000 feet and separated by less than 3 miles. The wind currents were unpredictable and dangerous even to Rodgers' seasoned skills. The turbulence worked the magneto loose requiring Rodgers to make a landing at Banning to repair the engine before pressing on (Lebow, 1989).

The magneto and a unknown leak in the radiator were repaired before Rodgers found an even bigger problem (Lebow, 1989). One of the connecting rods had worked loose and a bearing had become completely worn out. Major repairs would be needed causing the *Vin Fiz* to disappoint the Pasadena crowds that day. The mechanics worked feverishly to complete the repairs, but the aircraft would not be ready to fly until mid morning the next day (Lebow, 1989).

Cal took off from Banning and headed towards Pasadena (Stein, 1985). Near the town of Beaumont, the pipe bringing fuel from the tank to the engine cracked from the vibrations of 49 days of flying. Fuel began leaking down onto the fabric. Rodgers chose to land and patch the pipe before pressing on. Pasadena was less than 100 miles away. Rodgers would fall short of Pasadena again when landing for fuel at Pomona and damaging a strut (Stein, 1985). The aviator, out of frustration, made a makeshift splint to get the wounded aircraft back in the air flying the last flight to Pasadena (Lebow, 1989). It had been nearly two months since Rodgers left his New York home and began his trek across the country (Lebow, 1989).

On November 4, 1911 at 4:10 in the afternoon, Tournament Park in sunny Pasadena witnessed the final official touchdown of the first man to cross the country by air (Stein, 1985). The roar of some 25,000 spectators drowned the inconsistent moaning of the exhausted engine (Stein, 1985). The trip totals were astonishing: 4,231 miles had been covered in just over 82 hours of flying at an average rate of 52 miles per hour (Lebow, 1989). A world record was set for the first time (Hilton, n.d.). Rodgers totaled up the fuel consumption for the trip that evening: 1,230 gallons. The only two original parts of the *Vin Fiz* to make it completely across the country were the drip pan and the rudder. Everything else had been repaired or replaced at some point during the trip. The trip had been expensive—costing \$18,000 (in 1911) in parts alone—but worth every trial and expense to the aviator (Lebow, 1989).

Rodgers was determined to complete his trip by flying to the coast (Groom, 2013). He went to Venice beach just north of Los Angeles in search of a landing spot but the ultimate choice would go to Long Beach on the southern part of the peninsula to claim a generous \$1,000 purse offered by the Chamber of Commerce (Lebow, 1989). Cal became a victim of complacency when he departed for Long Beach, though. The neglect of properly inspecting the aircraft cost him in the form of a broken fuel line to the gas tank. The engine was in no condition to fly, but Cal attempted to press on. The result was devastating. Rodgers would barely survive when his aircraft crashed near Compton leaving him semiconscious. Rodgers fainted and the aircraft was totaled. He suffered major sprains to his ankles and would be hospitalized for a week straight while the repairs were made on the aircraft. The flight to Long Beach would wait until December

10—nearly a month after he attempted initially to make the final flight to the coast (Lebow, 1989).

On December 10th, the aviator had to be helped into his aircraft and used crutches to maintain mobility on the ground (Stein, 1985). At 4 o'clock that afternoon, the *Vin Fiz* came to rest on the white sand beach of Long Beach. Rodgers reached into his coat, pulled out a cigar, and lit it before the crowd swarmed the aircraft. The aircraft was rolled into the ebbing tide of the Pacific that christened the wheels with its brackish waves. The aviator was assisted to a car and then his hotel while the world reveled in the glory of his achievement (Stein, 1985). Cal Rodgers finally had attained what he had been chasing for over two months: satisfaction (Winchester, 2013).

Results from the flight

The day Rodgers landed on Long Beach, the press would release a surmising that someone would “so perfect the type [of aircraft] that it will be just as safe and far more speedy than the transcontinental trains” within a few year (Lebow, 1989, p. 230). The flight did spur on the production and innovation of better aircraft (Winchester, 2013). In less than a decade (1919), Belvin Maynard would fly from New York to San Francisco in under four days (Bruno, 1942). By 1923, the first non-stop transcontinental flight would be completed in 26 hours by John Macready and Oakley Kelly. Rodgers’ flight truly spearheaded the innovation of aircraft in the area of transportation (Bruno, 1942). Yet his story fell into relative obscurity (in comparison to the Wright Brothers, Charles Lindberg, and Chuck Yeager) in the lore of history books for three main reasons.

First of the three reasons for Cal Rodgers’ lack of posthumous fame was the advent of World War I. By 1914, war had broken out on both the ground and in the air. This was

the first major conflict since the invention of the aircraft, and it was being used as a machine of war. As with any war, both research and production increase in attempt to give an edge to each producer's side. The war brought many inventions and improvements to the aircraft, so that by the end of the war an aircraft could cross the country in less than a tenth of the time it took Rodgers to do it. The war unnecessarily stole the brilliance of the *Vin Fiz* Flight because, in half a decade, the engine, airframe, and even navigation evolved so rapidly it seemed to be an obscure and antiquated aircraft. Even though America was severely unprepared (In 1912, the French government had appropriated \$4,500,000 for aviation in the military and Congress only saw it necessary to spend \$125,00) for the battle of the skies, the nation developed and utilized the developments of allied nations both in military and civilian aviation usage (Lebow, 1989).

The second reason for Rodgers' lack of long-term fame was his absence from airshows and the spotlight, especially in the Los Angeles area. Rodgers would live in Pasadena for the remainder of his life and keep his aircraft at the Dominguez airfield near Long Beach (Lebow, 1989). Yet the only flying he participated in was as the first aerial herald of the Parade of Roses in Pasadena in early 1912 and tours or flight training in his personal aircraft. When the Dominguez family planned and proposed an airmeet in January of 1912, Rodgers would opt out of flying with the other 54 aviators because he would be required to pay an entrance fee instead of being an honorary aviator due to his flight across the country. Rodgers would be entirely absent from the airmeet receiving an award in New York from the Aero Club of America. President Taft and Wilbur Wright were among the notable guests and Rodgers would be requested to give a speech. His

bashfulness (mainly stemming from his deafness) would cause only those nearest him in the grand event hall to hear his speech. The awkwardness of that would only be alleviated when the room erupted in applause as the aviator received his medal for the transcontinental flight. Rodgers' lack of extroversion would be a hindrance to him in both public and private settings' causing media and airmeets to begin to overlook the aviator.

The final and most significant reason for the aviator's lack of immortalization in aviation was his untimely death. Upon completing his landing at Long Beach, the aviator went back to Pasadena, where he recovered from the lingering ankle injury received in his crash near Crompton. As previously mention, he would live in Pasadena but leave his aircraft down near Long Beach. While in recuperation, the aviator would begin to consider other possible "first flights" such as an international flight from Canada to Mexico, following the west coast to Alaska, and even began seeking sponsorship for a transatlantic flight (the flight that made Lindbergh famous in 1927—over a decade and a half later). Cal would also maintain his flying by offering scenic tours of Los Angeles for a price. The mild winter weather in Los Angeles attracted many tourists who were willing to pay to ride beside the first man to fly across the nation. Charles Taylor would install a new motor on Cal's personal Wright Model B aircraft and also equip it with a spare seat for passengers.

Rodgers would relocate his aircraft to a beach tent at Long Beach when relations with the Dominguez family worsened but also to be able to fly tourist daily. April 3, 1912 started like any other day for him. Mabel White had requested to be flown by Rodgers that day. Rodgers took off on a test run to make sure the aircraft was working properly. While running along the beach, the aircraft disturbed a flock of gulls, causing them to fly

up and in the aviator's path. Rodgers attempted to dodge the birds. From spectators' accounts, it seems a bird or multiple birds hit and broke a control cable, making Rodger's aircraft nosedive into the shallow water near the Long Beach Pier. The near vertical descent crumpled the aircraft, causing the engine to break from its mount and fall on the aviator.

Rodgers would become the first aviator on record to die in a bird strike. After the autopsy, it was determined that the cause of death was spinal injuries, including a broken neck from the 400-pound engine falling on his back. His funeral consisted of 13 men: his own wife was unable to attend due to grief. His body would be returned to his mother in Pittsburg, Pennsylvania, where he would be buried. His wife and cousin John would ride the train back across the country they had crossed in the opposite direction some six months earlier yet again following the aviator. It had been just under a year since Rodgers' first flight in Dayton while visiting John; yet somehow, this rookie pilot was able to conquer the air like no one else his senior in age or skill. His wife had a one-sentence epilogue for the pilot: "he was a rare, brave man" (Lebow, 1989, p. 225).

CHAPTER III – REFLECTION

Selecting the *Vin Fiz* Flight for the Creative Project

Aviation is an intricate part of our lives today. Even if one does not fly or has not flown commercially, one still enjoys the benefits of aviation by decreased shipping times and a plethora of industrial job opportunities ranging from engineering and testing to installation and assembly. As seen in the previous chapter, Rodgers' flight was a major driving force to make possible the modern aviation industry. Not only did Rodgers prove to the world that aviation could become a feasible means of transportation with his transcontinental flight, but he also overcame significant personal struggles to complete it (primarily deafness).

When considering how I could complete a project that could raise an interest in aviation, I wanted not only to fly a route with historical significance but also to choose one that showcased an individual overcoming a personal or physical setback. At a young age, I was considered dyslexic. My mother was not convinced and would not let me use it as an excuse in my homeschooled training. Through her dedication, I was able to overcome that issue and even obtain my pilot's license. I wanted to choose a flight for my project that could encourage individuals who may not realize that they, too, could learn to fly. There are multiple organizations such as the Wheelchair Pilot Association and even a Deaf Pilot Association dedicated to giving aerial freedom to those handicapped individuals.

After considering multiple options, the *Vin Fiz* flight was chosen due to its significance in history, the self-perseverance Rodgers demonstrated, and the feasibility of the flight. After consulting with the Honors College and the Aerospace department, it was

concluded that the project would be both feasible and could be utilized as positive promotion for the programs.

Considerations for the Project

The primary concern of this project was safety. In an attempt to combat the dangers of mechanical failures and human error, a Standard Operational Procedure Manual (included in this thesis as Appendix B) was developed in conjunction with the Aerospace department and the Honors College addressing the safety concerns that could be foreseen for the trip. This manual was used in multiple instances and went beyond the scope of legality in the name of safety.

Another consideration for the trip was the use of an aircraft. Initially the Aerospace department considered allowing the use of one of the Middle Tennessee State University Diamond Star (DA-40) aircraft to complete my trip. After some deliberation, the department was unable to provide an aircraft for the flight. The other option was my personal aircraft in which I had learned to fly. This aircraft (a Maule) is a four-seat aircraft with plenty of space and power to make such a trip. The benefit of using my own aircraft was the fact I had nearly 500 hours of flight time in it. The draw back was that the cost of fuel and maintenance would be higher than the Diamond Star. Another benefit was the back seat could be removed, providing room for all the equipment I would need for the trip.

In attempt to compensate for the cost of this project, I set up a “Go Fund Me” account and spent the 6 months prior to the trip campaigning for it. I raised \$3,000 of the estimated \$6,000 total cost for the trip via this method. I also researched a t-shirt

campaign and purchased 500 of them at a discounted price and sold them for \$10 (200% of cost). This raised another \$2,000 of the funding leaving me \$1,000 short of my minimum budget for the trip. I was able to apply for and received two scholarships that would be applied to the cost of the trip allowing me to have a buffer in case of mechanical issues occurred while flying

The final consideration was to acquire the necessary equipment for the trip. Before leaving, I purchased a tent and hammock to reduce the cost of lodging; I was also able to stay with friends along the trip to save money. This significantly reduced the cost of the trip and also provided for welcomed fellowship as I traveled across the country. The avionics (radios and GPS) in the aircraft were tested and upgraded before leaving to make sure the electronic navigation devices would be functioning properly and accurately during the trip. Hard copies of all maps were purchased and a backup hand-held radio was even obtained in the event of radio failure. A fully stocked First Aid kit was included in the luggage and accessible to the pilot with a backup battery pack for charging a cellphone in case of an emergency landing. Enough clothing for a week was packed and a three-day supply of nonperishable food was stored in the cargo hull.

Researching the Flight

The original *Vin Fiz* flight was flown over 105 years ago. Rodgers landed at over 70 locations. The majority of these locations are the same name as today, but there was an issue with the larger cities along the route (New York, Chicago, Dallas, Phoenix, etc.) was finding where geographically was the closet landing point along the route. Several accounts were taken into consideration and even local newspapers were checked for accuracy. The trip was to be flown as close as possible to Rodgers' original route. In a

few instances, the nearest airport would be as far 30 miles from the actual point where Rodgers landed in a field or by the railroads a century ago.

The Smithsonian Institute published the most accurate and complete rendition of the story of Cal Rodgers in *Cal Rodgers and The Vin Fiz* (written by Eileen Lebow), providing sufficient information to plan the stops of the project. The National Air and Space Museum of Washington, D.C. also provided a list of landings and other information concerning the first trip, including specifications of the *Vin Fiz* aircraft. Once the route information was obtained, the course could be charted and modern airspace and other limitations could be considered for the routing.

The flight was laid out on the paper charts and a list including airport identifiers, distance between them, time in flight at cruise speed, and fuel burn was generated. This is a standard practice for a pilot making a single flight from one airport to another, but with nearly 80 stops to plan this allowed me to calculate rough estimates for the entire trip. This list was saved electronically and printed out as a hard copy for reference during the trip. The planning did not just involve the fuel burn and time; it also included a list of nearby lodging and food as well as airport managers and maintenance shops in case of emergency.

After charting the course, the airspace and geography had to be taken into consideration. The first flight flew through some of the busiest airspace in today's aviation world requiring me to be very studious in my planning. These modern airspace limitations required slight diversions from the original flight. New York's airspace required the most deviation from Rodgers' routing. John F. Kennedy Airport was the closet airport to the starting point, yet I was not allowed to land there due to heavy traffic

in the afternoon when I was arriving. I would divert about 8 miles to the east on Long Island to Farmingdale. On departure, I flew north and east more than 50 miles off of Rodgers' course to make room for the incoming cargo and airline traffic (per Air Traffic Control requirements).

The navigational aids Rodgers used for his flight were very crude. Without any engine gauges or even a compass, he had to fly by reference to the ground solely. The Maule has a modern Global Positioning Satellite (GPS) in it that was updated for the trip. As back up, the paper charts were always available. The use of an Electronic Flight Bag (EFB) allowed for all of my documents (charts, approach plates, navigation information books, etc.) to be uploaded onto my iPad for easy access. EFBs have been only recently accepted as an optional and legal substitution for charts and information by the FAA. The use of modern navigation aids was not a compromise in the project. Safety is the primary concern for every flight and for this project. Therefore, the geographical route would be followed as strictly as possible while the navigation would utilize a century of development.

Positive Aspects of this Creative Project

The goal of this project, according to my proposal, was to “promote General Aviation, especially to young adults, as an adventure, practical, and feasible.” I believe that the goal of this project was met in three different and distinct ways. The first was through positive media coverage of the trip. During the trip, nearly a dozen news stations interviewed me or asked for a completed questionnaire concerning my flight. This helped me to show aviation in a positive light. One of the major hindrances to individuals learning to fly is

fear. By showing how a college student could safely fly across the country, I was able to promote General Aviation as both adventurous and feasible.

While on the trip, I was able to visit several family members and friends who lived in the cities where I stopped. This was not the only way but one of the ways I showed the practical use of aviation. I hoped to show how a pilot certificate is both an open door to adventure and has utility advantages. Pilots do not obtain their certificates simply to put them on a resume; they use them to go to the beach, visit family, take a vacation, and a host of other things that would cost more time and money if one does not have the option to fly oneself.

While on the trip, I talked with young people about aviation and the possibilities it held for a career and future. At the Aircraft Owners and Pilots Association (AOPA) fly-in at Beaufort, North Carolina I was given a display area to talk about my trip and the purpose for it. Many people were interested and the pilots I talked to realized the issue of a lack of interest in aviation was an issue. The young people who came by and talked were enthusiastic about the trip, and several still keep in contact and follow social media updates even after the flight. I also have opportunities to speak in a formal setting to the Aerospace department at Middle Tennessee State University concerning my flight. Other opportunities will be speaking at non-profit flight schools such as Huntsville's FlyQuest and the Experimental Aircraft Association: Murfreesboro Chapter concerning the trip and how young people can get involved in aviation as financially feasible as possible.

While on the trip, a blog was maintained to keep family, friends, and fans informed of the flight's progress. This turned out to be a tremendous idea because it preserved my thoughts from every day so I could reflect on the events of the trip once I returned home.

Those journal entries became the first appendix (Appendix A) and are the most accurate recollection of my flight. I would have struggled to complete this thesis in a semester had I not already had my trip documented before beginning to write the thesis.

A personal benefit from the trip was the experience gained by flying across the country. Before leaving, I considered myself an experienced pilot. I did have 500 hours and was a Certified Flight Instructor, flying over 25 hours a week with a local flight school. Yet the experience I gained while on the trip made me a noticeably safer pilot. I considered risks more carefully while on the trip because of the lack of familiarity with the airports, learned more intimately the features of both my iPad and GPS navigation systems, and became much more accurate at planning flight times between airports and fuel consumption estimates. These are all intrinsic skills that will help me in my future to be a safe and effective pilot.

One of the most beneficial aspects of this flight was learning the specifics about Maule aircraft more thoroughly than I previously had known. The pilot of any aircraft is required to read the operating handbook prior to operating the aircraft. I have read the Maule Operation Handbook multiple times over the past six years, but I know the information better now than I have ever before. I also learned the mechanics of the aircraft more in depth than I knew them prior to flying the 6,500-mile trek. Only one mechanical failure occurred during the trip but I was able to safely and effectively address the problem without damaging my aircraft.

Problems Encountered during the Project

There were only a few problems encountered during this thesis project. The first issue was obtaining information on the first flight, which was flown over a century ago. There

were only three books that were readily available to me solely discussing the *Vin Fiz* flight. The lack of publicity required me to search through periodicals as the main source of my information. The Smithsonian Institute was extremely helpful in directing my research and recommending sources for information concerning the trip.

The second issue was the mechanical issues occurring to the aircraft the flight itself. Two instances occurred when on the trip requiring mechanical intervention. As a mechanic student, I was able to assist in the work done to repair these issues. At Kent University, the propeller required repositioning before continuing the flight. I was able to identify the issue and completed the repair with minor assistance from the mechanics at the airport. This issue would not have been catastrophic to the flight, but it was causing internal wearing of the instruments. Eventually, there could have been an instrument failure due to the excessive vibrations on generated from the improperly positioned propeller.

The other mechanical issue occurred in Austin, Texas. The starter on my aircraft failed to disengage after the first start of the day. I executed an emergency shut down and was able to shut the engine off before damage occurred to the starter or the ring gear support (connecting the starter to the propeller). I had experienced this during my maintenance training at MTSU and identified it immediately as the problem. By identifying the issue quickly and efficiently shutting the engine down I was able to save time and money as well as maintain a safety for the remainder of the flight.

The third issue I faced occurred during the writing of the thesis itself. I was planning to write an appendix discussing my flight and Rodgers' flight. I realized that this was the bulk of the thesis and would take an excessive amount of time to complete. Dr. Craig

suggested that I insert the journal entries from the trip as an appendix to allow the trip to be recorded in my thesis and utilize the time I had already spent writing about my adventure. The only changes that were made were edits for grammatical issues from the limited time I had while on the trip. I also removed all the photographs from the post to turn it into the thesis.

Effects of this Project

This project has been published already in various online periodicals (AOPA's *ePilot*, *Flyby*, and more) with several others showing interest in either publishing an article or coordinating a speaking engagement. This project will continue to encourage young people to get involved with aviation for many years after the thesis is completed. As a Flight Instructor, I also am receiving requests to speak (to other instructors) about teaching students who have little experience how to train the students' to have the proper decision-making mindset despite outside influences (one of the leading factors in Human Error causing more accidents in General Aviation than any other factor) (Groom, 2013).

The final potential possibility that this project provides is the documentation in a prose format. Multiple people have asked if this project would become a book. Once the thesis is completed, I plan to start writing a more informal story about my trip. The reason for waiting for the completion of the thesis is multifaceted. Primarily the thesis itself would be included as part of the story along with the other events that have occurred because of my flight.

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Appendices

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Appendix A – Journal Entries from the *Vin Fiz 2* Flight

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Explanation of Documentation

I determined that a blog would provide the best means of accurately documenting of my trip while also providing a means of preserving the each day's details. This Appendix contains the blog posts copied directly from the Internet, starting before the trip began and continuing until June 17, 2016 when the trip was completed. The only changes that have been made are grammatical and spelling corrections. Photographs also have been omitted since the material was written independently of the posts for the reader to comprehend the events of the day without the images. The blog, in its entirety, can be viewed online at www.vinfizflight.wordpress.com.

The Journey to the Voyage

The hardest part of starting this story is where to begin! I have already been on a journey: researching the first transcontinental flight, navigating the thesis proposal, and raising funds for this trip. Sitting here reflecting back on all of it has been both beneficial and memorable as I trace back along the route I've been privileged to travel so far. But where do I start?! I guess I will go all the way back to the beginning of my story... (I apologize in advance for the length of the story, but I feel compelled to show the factors leading up to this point).

I was raised in rural Smith County, Tennessee. I have always been heavily influenced by my church in which I was privileged to be raised. At a young age, I realized my need for a personal Savior in Jesus Christ. From then on, I had a desire to serve Him in some form or fashion with my life. My faith has played the preeminent role in deciding what I will do with my life, and it continues to guide me in decisions I am making. At the age of eight, I had the desire to work as a missionary and tell those around the world the good news of Christ. My parents encouraged such a desire to serve. They have been guiding lights as I have made decisions concerning my career, work, and personal life. Both they and my faith drove me to be the best I could be at whatever I was doing. Dad taught me to work; mom taught me to read. Dad taught me to make a living; mom taught me to take care of myself around the house. Yet I soon became interested in an area my parents could not directly help me with: learning to fly.

During the spring of 2003, my mom, who helped organize activities for our church's homeschool group, coordinated with a friend who was a pilot to host a group at his hangar at the Lebanon Airport. Mr. John Baugh was already an elderly gentleman at that

time (in my young eyes) that I had assumed must have helped invent the airplane. I was enamored with everything dealing with aviation. I can still remember sitting on the brown plaid couch in Mr. Baugh's expansive hangar with multiple aircraft and a few relics of a previous time all shimmering in a young boy's eye. I remember specifically asking if the bombs tied to the ceiling were real, and know I asked half a dozen other almost seemingly worthless questions to an older gentlemen, who no doubt would have enjoyed doing many other things that sunny morning rather than answer the questions of a group of kids whom he might never see again. Mr. Baugh had a dozen twenty-five-page booklets produced by a major aviation educational company, and he randomly gave me one as I was leaving. To this day, I still have that tattered booklet that I must have read nearly a hundred times over the next few years. It was my only vein on the subject and I extracted every nugget I could from it. I was 10 at the time: much too young to get into aviation.

There were, however, other areas dealing with flight I was able to pursue. A few years after my first encounter with flight, my father had a friend who flew Remote Controlled (RC) aircraft. These RC aircraft were miniature versions of the real thing! To me, it was as good as flying. We flew several times, ended up purchasing a couple small trainers, and finally purchased a computer simulator that was state-of-the-art for RC aircraft. My brother and I would spend hours flying aircraft on the simulator. That was honestly where I practiced my first takeoffs and landings: in the safety and inexpensiveness of virtual flight.

When my 15th birthday arrived, I knew what I wanted to do: take a flight lesson. My parents were a little hesitant—the closest airport was 30 minutes away, it sounded

expensive, was I even old enough—but mom did make a call to the Lebanon Airport we had visited years before to find out more details. She talked with the lady on the phone for a half hour while I listened from afar. The lady on the other end of the phone turned out to be one of her best friends from high school and a manager of the airport. She paired me with the “best instructor available” and we had a lesson on the books! I was ecstatic. I was finally going up in an airplane. Commercial flights had always been fun and the airport environment was thrilling for me, but now I was going to be able to see flight from the cockpit! Little did I know I wasn’t just going to watch someone fly, I would be doing it.

As I look back at my logbook’s first entry, memories of that day flood back. Getting to the airport and meeting my instructor Rhett Kamm, a tall slender man in his 30s who wore sunglasses if he was outside no matter what the weather was. He had a relaxed demeanor about him like I was the only thing he had on the schedule that day even though I, as an instructor, now realize that was the farthest thing from the truth. I was expecting just to observe him takeoff and then hoped to get a few minutes on the controls. Imagine my surprise (and the hesitance of my mother who flew with us) as he said, “you want to take it off?” To my amazement, he was able to walk me through the departure sequence so smoothly that I felt like it was too easy. I never let go of the controls that day. He was able to verbally guide me through every phase of flight, which is something that I am boggled by to this day when I think about my struggles to teach pilots with as many as 20 hours flight time. The flight wasn’t long, less than an hour. The remarks he wrote were the understatement of the year—“aircraft familiarization. Control inputs. Basic flight maneuvers” followed with his signature and instructor information.

Once we landed, we set up the next meeting. Now I sit here, a Certified Flight Instructor myself, with nearly 500 hours of flight time. It has been an amazing ride and when it comes down to it I can look back on every flight during my private training and remember exactly what happened during those nearly decade-old events.

As I prepared to graduate from high school, my parents and I began to look into secondary education options. I knew of Middle Tennessee State University but never considered going there. A family member, who is a school donor, mentioned to my parents at a family gathering that my brother (also a senior) and I should apply for the Buchanan Fellowship through the Honors College at Middle Tennessee State University. The Buchanan covered 16 hours of tuition each semester and included preferential treatment for living on campus. I didn't think much about it. Only 20 of these awards were given out each year and who was I to think I was capable of contending for such an honor. I honestly never expected to hear back from them when we applied. In May of 2013, both my brother and I were notified we both had been selected by the scholarship committee and would be selected as the Buchanan Class of 2017. Talk about overwhelming! Both of us had been selected for the Fellowship. I would declare my major prior to the first semester as Aerospace with a concentration in Maintenance Management.

Being in the Honors College at MTSU has done wonders for me! As a homeschool student, I was use to small... er, single person... classes. The Honors College allowed me to transition into a 26,000-student environment without getting overwhelmed. The main advantage for me was I ended up taking 6 classes designed specifically for Buchanan Fellows to take together as part of the Fellowship requirements. This allowed me to get

comfortable with my classmates over several semesters during the transition. I loved the honors classes almost as much as I did my Aerospace ones. They provoked a deeper discussion and typically consisted of the upper echelon of self-motivated, diligent students. Yet I found out early in my collegiate career that something dreadful loomed on the horizon: the undergraduate thesis project.

The thesis was pitched to me by one of the honors college faculty as “a chance to study a topic of your own choosing you are interested in.” So for a year I just assumed I would figure it out later. Then came sophomore year when the thesis talks came more frequently now advising us to “start thinking about your topic.” As time passed, I became more apprehensive about the process and what to do. As a research assistant at the NASA funded F.O.C.U.S. (Flight Operations Center-Unified Simulation) Lab, I assumed I would just do some statistics problem utilizing the piles of amassed data from years of classes in the lab waiting to be shuffled into a cognitive pattern. This was something I was excited about but I saw it as a way to “cop out” of having to do a difficult thesis and still get to deal with an area that I enjoy. But then all that changed...

It was actually Honors College advisor April Goers who gave me the idea of doing a transcontinental flight. I had been in her office talking about the apprehensions I was having about the thesis paper and she recommended I do a creative project, which was the substitution most Aerospace major did to turn a paper into a project. I had been recently reading *Flight of Passage* by Rinker Buck and randomly joked about flying from coast to coast as part of my project and was stunned when the reply was a confident “do it!” instead of a hesitant chuckle. That same day I was talking to Dr. Paul Craig, an Aerospace professor who would become my advisor for the thesis project, and he

suggested I not just fly across the country but follow the route of the *Vin Fiz*. I had never thought about it and honestly had to have a refresher on the details of that flight. I soon realized that this was the first time someone had crossed the country by air and it had occurred back in 1911—less than a decade since the inception of flight. I didn't know much else but I knew what my project was going to be. In less than 24 hours I had wholeheartedly committed to the flight and was ordering books to research the first flight.

That was over a year ago! I have read (and reread) dozens of books, articles, biographies, and accounts of Cal Rodgers' flight. I have planned the route following his trip that I expect to take a month to complete. I have been awarded various scholarships I will apply toward the trip and raised money for project funding. I have started a Facebook page that will be the primary outlet for updates on the trip. I have completed the daunting thesis proposal and now am excited about flying the route. I am prepared as a pilot and mechanic to safely complete this trip. I am excited, anxious, apprehensive, and impatiently waiting for May to get here so I can start flying this trip of a lifetime!

As you can see, the journey has been underway for years now. This flight will not complete the voyage, but rather be another chapter in it. For this blog though, I hope to be able to keep family and friends informed, document this trip, and maybe spark some individual's interest in aviation the same way someone else did for me over a decade ago.

Published 17 April 2016.

Flying into the History Books

This post was the proposal submitted to the Honors College in the spring of 2016.

Every day, multiple airline flights depart New York City for the West Coast safely and comfortably transporting thousands of passengers in a matter of hours. This is an incredible logistical feat involving pilots, dispatchers, controllers, and other critical individuals who are not directly involved with the flight itself such as ticket sales representatives, maintenance technicians, and aircraft manufactures. The modern aviation industry is the result of the evolution of aviation since the Wright brothers' first flight in 1903. Many events such as grueling wars, chasing records, and even sobering accidents have molded aviation over the years. For the first decade of its existence, the airplane was not considered a viable means of transportation. Yet one event would change not only how the public perceived aviation but also the future of aviation—it would change the world forever.

After the Wright brothers achieved their momentous flight, aviation struggled to take hold in the American people's minds as a practical form of transportation due to its unproven capability. The "aeroplane," as it was called, was seen as more of a daredevil hobby for the brave or foolish (depending on who you asked). This was partially due to the fact that in 1908, the Wright brothers themselves still struggled to master the machines of their invention with both Orville and Wilbur having multiple accidents. One of these left Orville with broken legs and ribs which took over 4 months from which to recover. Furthermore, the advent of "airshows" in which aviators took to the skies to perform death defying and sometimes fatal stunts before thousands of wide-eyed spectators caused the public to have apprehensions of flying. At the Chicago Airmeet of

1911, there were numerous accidents and incidents as well as two fatalities among the two-dozen aviators who participated in the event. While the crowds still flocked to the airfield by the hundreds of thousands, they only wanted to see the daredevils of the sky and their crafts; those who had thoughts for the future of aviation were only considering the militaristic or entertainment purposes.

One of the spectators at the Chicago Airmeet was prominent newspaper owner William Randolph Hearst, who had already made a name for himself in aviation. Hearst, being a visionary, looked past the issues and shortcomings of aviation at the time and believed it could become a feasible means of transportation. In October of 1910, Hearst thought “general thrust of aviation was misplaced” and the effort should be focused on developing better, more reliable craft. He announced he would reward a \$50,000 cash prize to the first aviator who flew from one coast to the other passing through Chicago (location of Hearst’s newspaper) in 30 days or less. The offer was made in October of 1910 and would expire one year later on the October 10th per Hearst’s stipulations. It was Hearst’s goal to promote research and development of the airplane, and also to prove its capabilities.

One of the many competitors at the Chicago Airmeet was Calbraith Perry Rodgers. Rodgers began flight training in June of 1911 at the Wright Brother’s school of Aeronautics in Dayton, Ohio. He was a natural pilot and soloed in less than a month. He became the 49th certificated pilot at the Wright brothers’ school on August 7, 1911. Three days later, Rodgers arrived in Chicago where he would make a name for himself as an aviator by winning the Endurance Prize at the 1911 Airmeet. During the nine-day event, Rodgers would fly over 31 hours to take home the largest single prize of the

Airmeet—\$5,000. His total purse was just over \$11,000 and he caught the eye of many with his deftness and skill surviving an emergency that could have taken his life. While still at the Airmeet, Rodgers casually mentioned to his wife Mabel he was considering the Hearst Prize. Her response was simply “I think you should do it. It’s a great idea!”

The Chicago Airmeet would be a memorable event boasting multiple world records but most impressive was an altitude record of 11,578 feet set by Lincoln Beachey. It was an optimistic time for aviation with daily record breaking and all ages of people anticipating the next great feat of flying. When Rodgers attended a dinner after the Airmeet and mentioned to J. Ogden Armour, owner of the Armour Meat Packing Company, he was considering the transcontinental challenge; Armour broached the topic of sponsorship for the flight. Eventually they would come to agree that Rodgers would be compensated \$5 per mile and have a special train with railcars for personnel, an automobile, maintenance equipment, and spare parts. In return, Rodgers would pay for his own fuel, oil, maintenance, and personal staff; he also would have to provide his own aircraft with a specific paint scheme promoting the newest endeavor of the company—a new grape soda called “Vin Fiz.” By September 14th, Rodgers, who had only 3 months of experience as a pilot, was traveling to Long Island, New York with his newly modified Wright Model “B” biplane to begin a flight that would change the world.

Rodgers’ *Vin Fiz* flight would be the most significant flight since the invention of the aircraft. He would go on to have monuments build in his honor, speak at aero-clubs across the country, and move to Pasadena (California) where he and his wife fell in love with the city and its people on the way to the coast. Rodgers would slowly fade out of the limelight as World War I approached and development of the aircraft made his trek seem

obscure. Aviation would move forward as yet another individual molded the path she would take. But for a while, Rodgers was as famous as the President himself!

Published 1 May 2016.

And so it Begins ...

The last 36 hours have been a blur! Finishing up flights with students at work, changing the aircraft's oil, finalizing the last minute flight details: and now I'm sitting in the guest bedroom of the longest active Jungle Aviation and Radio Service (JAARS) pilot in history. Just reflecting on everything has been a challenge! I keep thinking, "wait, that happened this morning?!?" and "wow, this is just day one!" The day started for me at 5:00 am when I remorsefully woke up before my alarm clock. I had a private pilot checkride student scheduled for 8 A.M. so I would be heading down to the Murfreesboro airport (KMBT) bright and early for his final endorsements and to see him off on the ride. The plane seemed like she was anticipating the beginning of the trip as she leapt off the 1,200-foot grass strip behind the house that doubles as a cow pasture with more runway ahead than behind even with the extra 250 pounds of luggage I was carrying.

I landed at Murfreesboro with an hour to spare before the checkride thanks to a strong tailwind out of the northeast. I would get the plane washed up and the final items strapped in before heading out around 10 AM to fuel her up for the trip. I had a chance to talk to several news media groups about the trip and the highlight of the departure was seeing my family and friends come out to see me off on this trip! One of my professors at school (Bill Allen) and his wife (Christi) came out on her lunch break to say adios and then some of my best friends showed up along with part of the Honors College staff from MTSU for the sendoff. It meant more to me than you will know and was a great way to start the day! After fueling up and taxiing out I decided to do a "standard Maule departure" (a steep climb out). Afterwards, I climbed to altitude while headed eastbound smiling gleefully that I was finally starting this trip.

After contacting Nashville Approach and opening up my IFR (Instrument Flight Rule) Flight plan, I had to divert around some traffic. I started the climb up to 9,000 feet where I would cruise over the mountains (but not much over them!) and make my way to JAARS-Townsend Airport (N52) nestled in the hills just southeast of Charlotte, North Carolina. (To see the flight and to follow the rest of my trip via the National Airspace System feed, go to <http://flightaware.com/live/flight/N3156K> and check it out!) The flight took 2 hours and 45 minutes and was a mix of beautiful scenery and the murk of clouds as I flew an approach to minimums for the first time ever!

I got juggled around between controllers as I made my way eastward and was vectored for the GPS approach into N52. I haven't flown in the "soup" (pilot slang for clouds or rain or pretty much anything that limits your visibility to the wing tip) down to minimums ever on any approach so finding myself 600 feet above the ground and still in the clouds was... let's say a "new" experience. But thankfully I broke out just as I arrived at the minimums and made a landing at JAARS. I was greeted over the radio by an elderly gentleman (my contact at JAARS) vectoring me to parking and congratulating me on making it! JAARS stands for Jungle Aviation and Radio Service and is a missionary organization utilizing flying to ministry around the world. I wanted specifically to make this stop on my way out to Beaufort because to fly in Papua New Guinea with TTMK (That They May Know which is another missions organization) (www.ttmk.org) I will need to complete a Technical Evaluation of my flying skills to make sure I've got "the right stuff" for both aviation and ministry. The goal of stopping here was to talk to several of the people who would be involved in that evaluation and learn specifically what I need to prepare for when the time comes.

Once I finished closing out my flight plan, I hopped out to stretch my legs and get my bearings. My contact (who had graciously volunteered to host me for the evening) was an elderly gentleman who assisted me as I refueled the aircraft. I then stored it in a hangar overnight since a storm was moving through. After a quick run over the grounds and meeting some various individuals, we headed back to his place for the evening. As we entered the house, we were met by the most delicious smell of dinner reminding me that I had forgotten to grab lunch before leaving. We sat down to eat supper at 6 and got up after 3 hours of talking! Come to find out, the couple I am staying with has served in 3 different continents, the husband is the longest serving JAARS pilot ever, and they have truly been a testament to the goodness of God! The prolonged monologue from my host was prompted by a single question and received the full response of 49 years of experience both on and off the mission field. Needless to say, my first day has been a huge success! Even though the transcontinental trip has not “officially” begun, I have been encouraged, challenged, instructed, and completed 282 miles of a 6,800-mile trip!

Published 20 May 2016.

Down to the Sea

Today started off with the sound of rain pecking at the window of my temporary quarters letting me know that the weather still had not improved since last night. After breakfast, Mr. Evan (my host from yesterday) and I headed down to the airport to talk about stuff dealing with my future as a missionary pilot in Papua New Guinea including the testing and training I would need. It was a great time and I am very thankful I chose this as my halfway-hop to the eastern seaboard! Such sweet fellowship and even a few unexpected gifts in the form of some great books on flight instructing and one of the classics on airmanship. It was honestly a great reminder to start this trip that the Lord is in control, no matter what happens and I am okay with that knowing that He knows what is best.

After finishing our lunch, I checked the weather and realized it was going from bad to worse, so I decided to make a run for it while it was semi feasible. With the advent of modern aviation tools the flight plan filing routine has gone from multiple phone calls and half an hour of planning to a few clicks of a button to enter the pertinent information and then just make a radio call to “open” it up. I had done the preflight before we got started with everything that morning and fueled up the aircraft yesterday so it was ready to go as soon as I finished planning. Mr. Evan and I parted ways with well wishes and in hopes that our next meeting would not be a distant one.

The engine fired on the first turn and the light drizzle was muffled by the hum of four cylinders at idle power. The systems checked within tolerance so after a slight delay due to traffic I was off to Beaufort! While climbing out of the airport, I realized that the cloud bases had dropped from 700 feet above the ground to 400 feet and about 2 miles of

visibility. No problem because I can just follow my on course heading of—and then it hit me.... When you are flying, you use an instrument called the “heading indicator” to tell you which direction you are going in relation to north. This isn’t a compass because it mounts vertically on the panel. It is a gyroscope that turns a circular disk with 360 degrees on it representing the headings of a compass. This is supposed to be set every flight before takeoff to match your compass heading (typically runway heading) and then monitored just in case the gyros regress due to slight imperfections in the system. When I shut the engine down yesterday, I was on a west heading. The heading indicator remained on west as I turned the aircraft while pushing it in the hangar. Because of a narrow time window to takeoff from the airport by Aircraft Traffic Control, I had forgotten to check the instrument and was less than 100 feet from being totally blind outside the aircraft and just a bobbling magnetic compass to guide me. Thankfully I was still on runway heading and had enough time to get the dial set just before the windows turned white. Other than that human error incident, there was smooth flying all the way to cruise. I’ve mentally realized that I was more focused on making sure the major things had gotten taken care of (flight planning, clearance calls, etc.) and forgot to set one of the basic primary instruments that is critical to flight but due to a distraction it was overlooked!

Today, I decided to climb up to 7,000 for the 202-mile leg to Beaufort. I had really good fuel burn rates coming over the mountains at 9,000 (due to less air to combine with the fuel so less fuel is required). I wanted to stay high enough to get some extra fuel savings. It worked out fine but I ended up flying in the clouds from the time that I entered just off the runway till 30 miles from my destination. I have flown over 5 hours the last two days with 75% of that being “instrument” flying which can wear you down pretty

quick if you're not accustomed to it. Even so, it was great practice and invaluable time! I definitely have put the new avionics in the plane to good use over the last couple days!

Everything was good at altitude until all of a sudden my relaxed heart rate turned to more of a "that's-not-right" heart rate. At cruise power with no change the airspeed indicator went from 108 miles an hour and dropped all the way to 0 in a matter of seconds. After I recovered from the weird sensation of seeing no airspeed and still flying I started to think what could be the problem. This wasn't a "mayday, mayday, mayday" issue but definitely was going to be something that needed fixing. First reaction: look at outside air temperature. It was reading just above 45 degrees, not a freezing issue. I still hit the pitot heat (used to heat up the airspeed sensor, or pitot tube, in case it clogs up with ice) and looked at the wings to confirm the rain was beading up but just rolling off. Then I noticed what would be the culprit, the rain itself! I had been used to a steady drizzle on the window since departing the airport but now it was more vivaciously covering the window and running in streams across the wing. As the flow ebbed, I noticed a gentle rise in speed back to normal cruise. This happened twice more during the flight, both times occurring in moderately heavy rains. The pitot tube simply could not drain the water going in fast enough for the air to stay in the system. Once out of the clouds, the issue disappeared and did not return.

ATC vectored me around a little as other aircraft heading to Beaufort flew in above and below me. They also had to keep me clear of a Military Operation Area (MOA) and Restricted Area that were active. I caught my first glimpse of the ocean soon after breaking out of the clouds. It was still overcast above me causing the scene to look like something out of Melville's *Moby Dick* with the wharf with greenish blue waves lapping

against shore. A tilt-rotor Osprey that had just cut me off on my turn to final soon distracted me from the beauty of the scene. The airboss controlling traffic at the fly-in sent him to a different runway and I continued straight in on runway 08 in Beaufort overflying a quaint and sleepy looking town.

There were already a number of aircraft at the airport and several traffic directors on the ground funneled me to the main area where “static displays” were to be parked. The Maule is not a perfect aircraft on the outside, so I was surprised when I was placed in the dead center of the area opposite the AOPA Sweepstake 172 that looks like its too pretty to fly. I’m quite sure Molly is teasing it tonight about the rain messing up its finish coat of wax. After parking, I checked in and started to set up my tent for the evening and now am setting on a half deflated mattress with a steady stream of water dripping of Molly’s wing on the door and a showery drizzle that has persisted for a few hours now. All in all it was a good day: lessons learned, tails to tell, and smooth sailing for the second day.

Published 21 May 2016.

OBX

There was a blog post connected with this one entitled OBX2 that was only photographs from the AOPA fly-in as well as my flight that day. That blog has been omitted but can be accessed online.

Today is one of those days that started yesterday or more accurately last night when the storms hit. After completing my flight from Waxhaw (JAARS-N52 airport), North Carolina, I was excited about getting to use the tent. I pitched it just under the wing and next to the asphalt because there was a clear drainage ditch right beside the ramp that I thought might get soggy due to the rain. That turned out to be a drastic understatement. The weather was fine until 3 A.M. when a storm awoke me (and everyone else on the field) with brilliant lightening shows mixed with sheets of water being dumped on the airport. I pulled out my phone and checked the weather. I was mortified! I found a couple of solid red areas on the radar headed directly for the airport. I kept monitoring it but the storm was moving around 20 miles an hours so the 5-minute update wasn't giving me much on where it would end up. The red started to dissipate but was replaced with an even worse reading: twisters. Two tornados (technically waterspouts because they were over the ocean) were within 10 miles of the airport with one projected right for it and the other just east of it. I had no idea what to do, so I sat and watched (and figured it was a good time to begin my morning prayers). I have a basic understanding of meteorological phenomenon and I was wondering if the storm was so strong that a tornado was "ghosting" on the radar screen. Either way, in a few minutes the storm digressed to yellow and no tornado activity. I was not getting anymore sleep that night. It was 5:40 by

then and half the airport was crammed in the main tent where the fresh smell of coffee lingered among the strange mix of airport aromas.

By the time I unzipped the Columbian tent to see what the damage was, it was just beginning to break light outside. I looked out and then down: water. To the left as far as I could see: water. To the right: you guessed it. So I reached over to grab my boots... you'll never guess! In the process of grabbing my shoes, I realized that on the opposite side of the tent the water was inside the tent! My mildly inflated air mattress was actually bobbing on that end because there was enough water to lift it. So I threw my shoes on and made a run for it.

The rain broke almost entirely in the span of a minute. It went from all to nothing and the drainage system worked fantastic. The water in front flowed away while the river behind was there later that afternoon when I left. Thankfully, the weather improved and the sun helped to dry the tent out for the most part. There still were a couple spurts of rain throughout the day.

After a filling breakfast of pancakes and sausage, I began to set the “exhibit” up. I was in a prime area so I had several chances today in spite of the rain to sell shirts to raise money for the trip. I ended up selling between 50 and 70 shirts out of my 200-shirt load, which was not bad considering the weather. As the afternoon rolled on, I had an interview with Mr. Paul Harrop of the Aircraft Owners and Pilots’ Association (AOPA) about the trip. During our chat, the most recent pilot (Robert DeLaurenties) to circumnavigate the globe walked up and started talking to him. I recognized him immediately from magazine articles and post online. Mr. Harrop introduced us, and we got to talk about both our trips. He seemed to think it more impressive going coast to

coast in the Maule rather than flying a Piper Meridian around the world as he had done. Either way, it was a treat for me and I felt honored to meet the man.

The weather finally cleared and I was done for the day. I'm not for sure if it was the blue skies bursting through or the consistent rumble of engine that did it but I suddenly got the itch to get back in the air. I had planned to over night again in Beaufort but after last night I was looking forward for the next stop. I had planned to go straight to KFFA (Kitty Hawk) to the Wright Brothers' Memorial but saw that the gas at the airport just to the southwest of Kitty Hawk was a dollar cheaper than Beaufort. So after a brief charging of the iPad and filling out a flight plan I was ready to go to Manteo, NC. The flight was delayed slightly because two jets rolled in just as I was getting ready to leave. I finally got out to the departure runway and called up clearance and got a direct shot to the airport which was unexpected due to some airspace issues I thought would be in play.

The flight to MQI (Manteo) was the most beautiful scenery I think I have ever seen while flying. I started across the mainland area with its farms and canals and then passed over the southern edge of the Outer Banks. Eventually I would cross the bay area which was slightly nerve racking! I realized once I got over the wide expanse of water I would be in the pond if I lost my engine power. Then after that thought, I look down... sharks. Three thousand feet below me and clear as day was a school of sharks. Just before these menacing ideas had entered my head I sat my phone on the ledge in the aircraft. As I contemplated the terrors of death by drowning while sharks nibble on me my phone fell off the ledge and wacked my knee. As much as I considered leaving this detail out of the story, I screamed thinking something was wrong! It actually turned out to relax me after that happened so everything worked out good.

After shooting the approach into Manteo, I taxied back to the beautiful pilot rest building that overlooks the bay. The Unicom (Universal Communications or “airport radio frequency for non-towered airports”) said to park over at the end for camping. I was shown the shower and was most grateful to get to wash off after a dismal and difficult bout with the weather last night and today. I left my phone to charge and walked around the airport some before returning to the tent to find the most gorgeous full moon rising behind my plane. Now in the tent, I hear the murmur of a few different types of frogs, the screech of the windsock frame lacking lubrications, and waves lapping against the seawall build abut to the runway. All in all, it was a short flying day but a great one with some great photos!

Published 22 May 2016.

Pilgrimage

Today was a really special day! This morning started again with rain. This is beginning to feel like I am watching reruns of the same lame movie. But I learned my lesson since the last deluge fiasco. Now I had the tent pitched completely under part of the wing so the water ran down the backside and not the door. That worked pretty well, so I may stick with that in the future.

Since it is a Sunday, I spent a little extra time in my personal devotions this morning because I didn't have any Internet connection to listen to my church's message. It was extremely pleasant sitting on the porch of the Fix Base Operator (FBO) at Manteo listening to the lapping of waves and smelling the fresh ocean breeze as I spent time in prayer and studying. After the airport attendant arrived this morning, I got the chance to explore the FBO while my phone charged and tent dried out. The airport was built by Civil Air Patrol in the late 30s and ended up being used by Corsairs during World War 2 as a training base. It would become a civil airport again but maintain the three runways from its war base days to eliminate the issue of having a strong crosswinds. I found a museum of the history of the airport and really enjoyed reading about the famous aviators like Billy Mitchel and others who flew out of it.

After getting packed up and fueled, I made the shortest flight I will make all trip. I took off from Manteo and made the 15-minute flight across the bay to KFFA: Kitty Hawk's First Flight Airport where the Wright Brother's Memorial is located. It is a pilgrimage for pilots to make the trip to Kitty Hawk; and one that not many can say they have done. The runway is 3,000 feet long, limiting some aircraft, while the trees and power lines keep others at bay. I was the only one who flew in there today with the

exception of one other plane which flew over but didn't risk the landing because it was too large. Having been to Kill Devil Hill (the actual name of the place where the brothers made the flight: Kitty Hawk was the telegraph outpost a few miles away that made the world-changing news known) once before, everything looked familiar. I walked around the actual spots where a century ago two brothers who said "yes" when a world said "no." I spent about two hours there and had to get going due to weather.

The flight out from Kitty Hawk to Hornell, Virginia (W75) was smooth. After climbing through a lower layer of clouds, I broke through to a beautiful blanket layer with good visibility above. I flew directly over Virginia Beach as I headed to the airport in Hornell. The only reason I was going there was for the cheap fuel. \$3.41 is good enough to make anyone divert, but it truly was the strangest airport I've ever seen. The first taxiway led to a boat yard and the opposite one led to a flight school with only one aircraft setting out on a 20-place lot. The fuel farm was about 20 years out of date and the rotating beacon had a bird's nest on top which has to give the bird a headache. I was there just long enough to top the tanks off and it was "bye bye" creepy airport.

Once I got my flight plan filed to Manassas Airport (KHEF), I took off and climbed out above the Rappahannock River. The Manassas Airport resides inside the 60 Nautical Mile ring around Washington D.C.'s Special use airspace (SFRZ) and requires special training to fly into if you go under Visual Flight Rules (VFR) or a Instrument Flight Rules (IFR) flight plan. The best way to go in is IFR so that's what I did. I simply flew to the airport via vectors and approached it flying just over the Quantico airport south east of it. I grabbed what I thought I'd need for the evening and got an Uber to a friend's place! It honestly has been nice to get a warm shower and lie on a solid bed even though

camping has been a great adventure! Currently trying to figure out the best way to get to the National Air and Space Museum tomorrow and looking forward to the weather making a turn for the better!

Published 23 May 2016.

Walking Through Time ...

Real museums are places where Time is transformed into Space.

-Orhan Pamuk-

I was super excited last night as I heard that the person whom I was staying with would be driving into town to work this morning and would be able to drop me off at the MARTA (Mass Transport system in DC area) stop. I woke up at an excessively early hour due to my alarm that was accidentally left on. The Orange line on the MARTA stops less than two blocks from the National Air and Space Museum, which was the first destination on my schedule for the morning. At the station, I realized that I was more concerned about traversing the DC area alone than I have been the entire trip while flying! The hour ride was a good time to catch up on talking with some folks back home and getting some emailing completed. I ended up walking onto the steps of the museum just as the doors opened at 10 A.M.

This was my second trip to the Air and Space Museum. I have been once before as a high school student but didn't realize the reason for the biggest adventure of my life was hanging from the ceiling in the "Pioneers of Flight" exhibit. I actually looked back and during that trip several years ago I took several photos of the *Vin Fiz* aircraft not knowing what I was doing. I was thrilled that as I turned getting off the escalator I was the first person upstairs except an elderly gentleman about 20 feet from the *Vin Fiz*. I asked if he would take my picture and gave him a brief tutorial on using an iPhone. He asked me why it was so important and I talked about 20 minutes on the flight I'm doing and the flight Cal did. Two other people started listening and when I finished he asked if I was going to be giving tours today! That made my day and I explained I actually was there for only a few hours before leaving to fly out to Fredrick, MD.

I spent the next few hours relaxing and looking at more history than I could absorb. Some of the greatest aviators of all time had flown some of the most iconic aircraft in history and now those were all housed under one roof! I walked through the rest of the exhibits just to pay homage to the great pilots who held the yokes of these beautiful birds of prey and peace. Then it was over to a building that was less exciting yet more influential in my life: the Federal Transportation Building—Federal Aviation Administration. The massive building was almost as ominous as the name emblazoned on the front with a slight patina discoloring it. I stayed just long enough to get some pictures and then was out of there!

The return trip was more eventful because I boarded the wrong train back. The Grey line ran on the Orange tracks part of the way and I was about to be headed way away from where I wanted to be. Thankfully I realized it at a junction and not after the split. I then caught an Uber back to the house to pick my bags up and head to the airport.

When you fly out of a small airport, you normally are given a heading and then told to turn “on course” after a while. The busier the area and airport, the more formal the instructions get. So I tried to plan the trip myself without getting in ATC’s way by using waypoints on a Departure procedure as my flight plan. The FBO guys topped the Maule off with fuel and then I fired it up to get started. I was not in a hurry, but the natural tendency is to “go” when the engine is started. I had to go to painstaking efforts plug in the waypoints on the GPS before calling up Clearance for my IFR flight plan. I did all that work only to be told to “advise when ready to copy” or in other words “you’re not getting what you wanted” in proper phraseology. I ended up getting the other departure procedure and would have to swap over all my waypoints. I figured out the GPS was able

to do that in a few knob turns and clicks but my iPad was another story. I finally plugged it in only to climb out and get cleared on a heading to the north and then direct to the Fredrick Airport (KFDK) about 20 miles into the flight.

I had a North American T-6 about 2 miles behind me on landing. I was not going to hold him up, so I flew pretty much at cruise speed till short final where I chopped power and just bled off the energy that I was using to fly and added flaps. I ended up doing a pristine wheel landing in front of the entire AOPA staff (or so I would find out) at their quarterly board party. I taxied off and parked and then (because I didn't know the party was happening on the other side of the field) I walked over to find the entire AOPA building abandoned and empty! It was super eerie and I texted my contact here to figure out if they just left work around 3 P.M. or if they were somewhere else. Luckily, they were in a hangar eating and having some R&R to kick the week off.

After bumming supper from the AOPA event, Paul Harrop (one of my contacts at AOPA) and I hashed out plans to fly tomorrow morning for video footage for either AOPA Live or Flyby (both aviation weekly newscast). While I unloaded the plane, I realized there was some water logged in the bottom of the belly. I grabbed a fan and started drying it out while the rest of my stuff was rearranged to fit better moving the weight forward in the aircraft. Once the party died, they offered to give me the hangar for the evening to have the plane indoors and sleep under the convenience of a roof. I lay here now reflecting on a great day and looking forward to tomorrow—when the westward voyage will begin!

Published 24 May 2016.

Go West, Young Man ...

Today, I got started on the transcontinental portion of my journey. I actually didn't get started on the "official" westward trek till mid afternoon! The day started out beautiful with a pristine sunrise and a mini flight around the "pattern." The pattern is just a rectangular path from the runway takeoff point and back around to the landing point. I was flying with a AOPA photographer who filmed my preflight, taxi, takeoff, and all the other things with the flight. Hopefully this will become a video on either "AOPA Live" or "Flyby" and get more young people interested in aviation. After that, we went back and I packed up the airplane getting ready to go and taxied up to the AOPA Headquarters. I got the special tour of the buildings and got some insider information on stuff coming down the pike for a great organization.

After the great time I had at AOPA, I planned the trip to Farmingdale (KFRG) on Long Island where I was going to begin my trek westward. I hoped to get to fly the VFR (Visual Flight Rules or clear weather flying) Skyline route up the Hudson River but would have to postpone that to another time because of the poor weather at the time. I called up clearance and got a royal mess of a list of waypoints, Federal Airways, and navigation aids. I had to ask the clearance guy to spell each waypoint and then took a few minutes plugging them in to get it to work. I hoped that I would be able to go direct with vectors but if everyone did that it would be terrible trying to direct that many flights in the airspace. I flew to the coast and then was vectored northward to past JFK and landed at KFRG near Farmingdale, New York. I taxied back to the Talon Air FBO and parked to use the restroom and get a photo before hopping back in and heading out to Orange County Airport (KMGJ). I learned a valuable lesson here. Plan for the worst! I had about

an hour and a half of fuel in the aircraft and knew the 45 minute flight (Direct route) would be plenty if I could get cleared and off quickly. I would set on the runway for another 30 minutes as the traffic exploded on the airport, with jets, helicopters, and even military aircraft converging all over the place. I realized I was burning into my reserves and would have to go direct if I planned to make it with some fuel to spare. Just as I was getting a clearance, I saw on the radar a storm in the dead center of my routing. I realized that all the pieces were stacked against me and for safety requested to taxi back to Talon to park till the storm had past (and also to get another 2 hours of fuel).

So from now on, I'm going to stack the odds with me instead of against. Thankfully everything worked out and I did have a good time as I left an hour later embarking on a sunset chase towards Orange County. After Farmingdale, I flew to Orange County (Middletown), New York. This was Rodgers' first stop on his flight many years ago. I would beat his record and not crash on the first landing! He actually crashed it running into a chicken coop busting the skid and damaging the wing slightly. I stayed long enough to get refueled and then was taxiing back calling up for a clearance. It took 20 minutes to get a clearance and there was a Twin Diamond Star parked beside me waiting on the same thing so we actually just chatted on the local frequency while listening to the clearance frequency on other radios. I was amazed at the speed the controller fired off clearances! He was almost unintelligible for this southern-raised boy! He had a strong Jersey accent that made it nearly impossible to figure out exactly what he was saying or who he was calling. He actually called me up and asked why I had filed direct saying, "you rarely get direct in New York" to which I shouldn't (but was fed up with the wait and seemingly meaningless delay) asked "why?" He stuttered for a second and then got

me a “nearly direct” route to the airport and after being handed to the next controller I got cleared direct nearly instantly.

I landed at Elmira about 20 minutes before dark. I then was directed to a hotel and now am hitting the hay after the longest day by far! I am thankful that tomorrow has only one flight up to Rochester where I will be meeting with a few friends before starting a grounded adventure!

Published 25 May 2016.

Detour

Today started with me missing my alarm. Classic Collin move... even so, I was up at 6:30 eastern and ended up going to the airport around 7, which was an hour behind schedule. The Country Inn & Suites I stayed at was fantastic! I was bummed that the first night the weather was absolutely beautiful I was unable to camp. The Elmira Airport had policies against it and, apparently, Operations would descend on me like vultures if I tried. I was up and gobbled down some eggs and cereal this morning and was riding in Atlantic Aviation's shuttle back to the airport.

After preflighting and adding 15 gallons of fuel, I hopped into the plane and fired it up just as a Cessna Citation (small business jet) taxied in to take my spot. After finishing the starting checklist, I called up "Elmira Clearance" for my Instrument Flight Rules (IFR) clearance to Ledgedale, New York near Rochester (7G0). I have never had an issue using ForeFlight (a pilot flight planning app) while filing my flight plans. Clearance was on struggling this morning and got my call sign wrong, model aircraft wrong, and then I realized I didn't hit the file button for the flight plan. So I requested Visual Flight Rules (VFR) and asked to be filed IFR when available for both the in-system availability (so everyone can see me on FlightAware) and the priority. Then I took off and leveled at 4,000 on the way northwest.

After landing at Ledgedale, I met my family friends, who were gracious enough to be my host while staying in the area. I secured the aircraft and then headed out to Niagara Falls where we spent a few hours before heading back towards Rochester. The Falls were beautiful! The day trips have been one of the main thrills I've had while on this trip. I don't remember much about my first trip to the Falls other than what I've seen in pictures

but I'm pretty sure that's standard for 9 month olds. We went to the overlook and spent the \$1.25 that it cost to go to the observation deck and elevator down to the "crazy-people-wanting-to-get-sprayed-by-the-water" deck (that was more or less the informal name I quickly bestowed upon it). It was a remarkable scene and one I will be glad I got to see. I was told that the view from the Canadian side was better but this was a spur-of-the-moment trip so I didn't have my passport with me. There is always next time.

The drive back was smooth, apparently. I fell asleep the first 20 minutes or so and bobbed between consciousness and catnapping for the remainder of the trip. It was a warm day and the window was rolled down, which is a recipe for me snoozing. After the trip, it was a relaxing day looking at flight planning and then getting some maintenance lined up for a brief look at a possible issue on the Maule. I don't think there will be much of a problem, but the propeller seems to be a little out of balance and has been since the beginning of the trip. Just want to make sure the engine is running properly (currently still passing systems check so that's why I'm leaning towards prop balance) and making good power. I will start my southwesterly journey tomorrow towards Dayton, Ohio where I hope to be by Friday. Then it is a couple days in Museums and the Wright Brothers' home, shop, and test field.

Published 26 May 2016.

Preventative Maintenance

Today marks one week that I have been on this trip! It feels like more than that, honestly. It feels like a month since the Fly-in, and that was just Saturday! It is amazing that in the last week I have flown around 30 hours, covered well over 1,500 miles total distance, seen Niagara Falls and the Air and Space Museum, and gotten to fly into some amazing airports! It has already been an amazing trip, and I am looking forward to the rest of it. I ended up reaching my eighth new state in the 7-day trip so far!

This morning was a fairly relaxed one since I was thinking I would have two days to make Dayton. I got up and ate breakfast with the Rows and then we all piled up in the van and headed the 30-minute drive to Ledgesdale where Molly spent the night. I took off from the faded runway and turned on course to the next stop. I had actually planed on going to another airport but as I was sitting in the plane I looked at the NOTAMS (Notices to Airmen that are disseminated information about airports and other aviation related items) and realized the airport was closed for a fundraiser. I elected to go to the next one on the route rather than waste a day waiting. The next was Great Valley Airport (N56). Its name was no accident! The approach to the airport led up a valley and then the runway was aligned with the side of the hills that crept up 500 feet above the runway within less than a quarter mile! I landed and taxied back taking in the beauty of the airport. After shutting down, I left some of the new flyers I picked up for the trip at the shed that I believe was the FBO and then filed for my next hop. It was a pretty day and I wanted to put that to good use!

I climbed out maneuvering up through the canyon-like valley till we cleared the hills and then leveled off at cruise on the way to Port Meadville (KGKJ) where I fueled up for

the last time of the day. I had noticed the propeller was out of balance for the last few days but just slightly (not something that was a huge issue). So I made a call to the next place to find out if they could do the balance. He referred me to someone who was well of course and 30 miles away. I called him and he was unable to balance the propeller because he didn't have the tools. That mechanic referred me to a third mechanic and I played phone hound with him. I never could get him but he was less than a 10-minute flight from Port Meadville so I just hoped in and ran over to him thinking that he would be able to help. I got out at Portage (KPOV) and asked the secretary for Chris. She pointed me to an elderly gentleman who was lanky and showed signs of working as a mechanic for years. After introductions and explanations he seemed to ignore me and walk out to the plane to take a look. He completely picked apart my airplane explaining "everything that's wrong" with the first job saying he couldn't get started till next week and would be off for a few days Memorial Day. Then he said something that turned on the light bulb. He mentioned that whoever had put the propeller back on did so with the compression stroke on the blade (Yes, I know... technical terms: pretty much the point where it was difficult to turn the propeller) was in the wrong spot so the blade was behind where it was supposed to be. He didn't have time for me to explain why that was, but as he stormed off to go be a blessing to someone else I realized my vibration issue was a simple fix. Just rotate the blade one bolt ahead and then safety wire it back properly.

With my newfound knowledge I hoped in the plane glad to leave the Grinch behind. I had a short hop (10 minutes) to 1G3 (the home of Kent State Universities Aerospace program). Kent operates a 30-fleet, FAA approved 141 flight school almost exclusively at the airport. It is not an easy airport with a narrow runway and significantly slopes down

the southbound one. I talked to the mechanic on staff and borrowed a socket (because apparently I had every one in a set EXCEPT the 5/8th inch) and a torque wrench and went to work. I removed the spinner and then broke the torques on the 6 prop bolts. After that, it was the awkward task of rotating the 80-pound blade by myself and then securing it. I got it on the first try thankfully! I was at the airport less than an hour and had completed the entire project start to finish. I had to get the mechanic to sign it off because I'm not legally able to until I finish school. She fired right up and purred for the full range of RPM settings I gave her. After shutting it down I walked to the FBO and dropped some flyers off and used the restroom. I was amazed when the guy in the back office poked his head out and questioned me about my t-shirt and if I knew the *Vin Fiz* landed at Kent. I then explained what I was doing and he was very knowledgeable about the first flight so we walked to the plane where we talked more about both trips. Several other line guys came with us talked about the plane, trip, and school in general. I taxied out for a test flight in the pattern before breaking out toward Dayton.

Just as an explanatory side note, the aircraft never was "dangerous" as I flew with an unbalanced propeller. It was just eventually going to wear the gears and other items out faster in both the engine and the instruments if allowed to persist. Moving the propeller eliminated those issues preserving the life and power of the engine. It wasn't like the propeller was flailing in the air waiting to rip off and send me plummeting to the ground.

As short as all that sounded, I had flown over 4 hours before I started the propeller shift and then spent an hour on it. I had hopes of making Dayton but started to question whether it was the right decision. So, instead of filing IFR, I just took off and picked up a VFR Flight Following and said the first time I got tired I would just divert and call it a

day. I never was tired actually! I still am feeling good even after a 6-hour flight day! I landed at Dayton and pitched the tent on a beautiful evening and now am dropping in and out between sleep. I will wrap this up and get some sleep! A great day of flying and friends and fixing stuff! Looking forward to another day trip tomorrow in the “Gem City.”

Published 27 May 2016.

Dayton: Day 1

Today was a day-trip again. I woke up around 9 o'clock, which is pretty late for me. It was a beautiful morning and I was disappointed I wasn't going to be flying today. As I packed up the tent and stored everything, I mentally got a game plan for the day. I was originally planning to go to the Wright Brothers' home and museum as well as some other famous parks and places, but without a vehicle I opted for the National Museum of The United States Air Force near Wright-Patterson Air Force Base. I thought that would only take a few hours... but once I got there I was amazed by the plethora of aircraft the four hangars (more like enclosed football field domes) held! The Uber driver who drove me in today was a veteran himself and gave me the rundown on the Museum and what to do while in Dayton. We had a very good conversation on the way in and we parted newfound friends from aviation.

It has amazed me that the majority of these museums are free admission. I couldn't imagine getting to live by one of these time portals! I would spend hours in them just thinking, reflecting, learning, and most definitely dreaming of the days gone by where the Aviator was the top rung of the popularity food chain. As I made my way through security, I picked up a map and started walking through the "early beginnings" exhibit about the pre-World War I area of flight. For the next 4 hours, I was looking at some of the most iconic aircraft in the history of aviation. They even had a SR-71 Blackbird, which was the only aircraft never to get shot down on a combat mission! I was exhausted by the time I'd walked through the museum's exhibits and was ready to sit down for a bit. Mom was actually on her way to Dayton, Ohio from home in middle Tennessee, so I just moseyed around the gift shop and then the outside exhibits while waiting. While in the

museum I got a call from a local news media outlet wanting to do an interview for a news article on the flight. Once mom got there and I loaded up in the car, we raced back to the airport to meet the news reporter about the flight. It took about 30 minutes and after watching the video I was reminded of just how much of the South can be heard through my accent...

After getting back to the hotel, I plugged in all my dead electronics and then headed for the shower. The next plan was supper! Mom decided I needed a “good meal” for supper, leading me to assume that we were headed to Wendy’s. Then we turned into a “Firebirds” and I got a really good meal. I ended up having some of the best sautéed mushrooms I’ve eaten in my life! The waitress was very nice and, through conversation, we got turned to our reason for being there and ultimately my trip. After hearing of my adventure, she ended up having the staff sign a “good luck” card for me as we got ready to head out!

After supper, we drove about 20 minutes north to see Hawthorn Hill: the home Orville built after Wilbur died in 1912. The grounds were closed but we snooped around and took some photos of the gorgeous exterior. After finishing up with some photos there we plugged in the “7 Hawthorne Street” (the childhood home of the Wright Brothers just a few miles towards town) into the GPS and headed there. One hundred and twenty years later the plot of ground has been preserved although the home is now in Michigan at Henry Ford’s complex. For a split second, there was a surreal feeling as I opened the gate and walked on the same ground where the geniuses of the sky had lived years ago. I have been privileged in less than a week to walk the sand dunes at Kitty Hawk and to visit the

home of the Wright Brothers. It was an amazing feeling and I was honored to visit such a significant place for aviation.

It was a good day filled with history. Tomorrow, we'll return to a couple places and visit some new ones that have to do with Rodgers trip. I truly am thankful though to have been able to see these sights in person and look forward to tomorrow's adventure!

Published 28 May 2016.

Carpe Deim!

This has probably been the most unplanned yet rewarding and exciting day of the entire trip thus far! I was reminded of the Roman poet, Horaces, whose Odes popularized the phrase *Carpe Diem*, which typically is translated as “seize the day.” Sitting here even as early as 7:30 PM I believe that I have fully seized the day I have had! We had some plans but the unusual sound that I heard around 8:30 A.M. altered all that. As I looked out the window for something that I audibly couldn’t identify I was met with the strangest sight I have ever seen. An aircraft slowly crept into view passing just to the right and a few hundred feet above climbing. It was no ordinary aircraft: It looked like the Wright Brothers’ Flyer! We were planning on going to the Dayton-Wright Brothers’ Airport at some point in the day but I told Mom we had to leave NOW so I could figure out what I had just seen! Upon arriving at the airport, I went into the Museum that was closed the day before. I found that they not only had a replica of the Wright Flyer but it actually flies! For a hundred bucks, they would take you up on a flight! Well, you only live once! So I set it up to come back around 11:30 and have a flight in what would be the most amazing aircraft I have every flown.

Due to the winds, the pilot said I couldn’t get my phone out and video from the cockpit... Mom did get a video from her location on the ground of the entire flight. As we taxied out I noticed he had more instruments than Maule does! The severe modifications came in the form of the engine. The Wright homemade 35 horsepower engine was replaced with a state of the art Lycoming IO-360 with 180 horsepower! The engine was also turbocharged. The gauges were positioned between pilot and passenger. I was amazed at how slow its maximum speed was: 60 MPH. I was also amazed at the

slow speed at which we took off! The airplane lifted off the ground in under 500 feet, which I was used to with the Maule but did not expect it from this! We flew up and then descended back in for a landing coming to a stop in under 1,000 feet. The ride wasn't long, but it was incredible! I actually had an extremely dry mouth from where I had been smiling so much that the wind dried out all my salivary glands. The pilot and I chatted about the trip I was making and both concurred Rodgers was a special kind of person to be able to fly in the same conditions for 85 hours over a 50-day period! When we taxied back, the ground crew had him park a little ways off so we could take a few pictures with the Maule. I wanted to get a picture of a replica of Rodgers' aircraft and mine in the same photo since this was the only functioning one in existence.

We taxied back the Maule and I tied it down. I was ecstatic and it still had not sunk in that I just flew a replica of the 1905 Wright Flyer. I don't know what the ramifications are for legally logging it, but I am definitely putting the flight into my logbook! I found out later that I sat in the same seat and moved the same controls as Chuck Yeager, Neil Armstrong, Sky King, and Jimmy Stewart! It truly was a remarkable experience and one that I had no idea was going to be an option for me on this trip!

Several individuals have been quick to point out that Rodgers never flew to Dayton on his transcontinental trip, and I'm not for sure if it is their concern for my geography or a nitpicker trying to criticize me for coming to the Birthplace of Aviation. While that is true that Rodgers never did fly here, a replica of his Model "B" was here (and I flew it), I went to the field that he learned to fly at, I found his memorial on the "Wright Brothers' Hill" just outside of Wright-Patterson Air Force Base, and we went to the shop where the Wright Aviation School built his aircraft. When it comes down to it, I have found a ton of

information for my thesis here and got some fantastic photos of the steps leading up to an incredible man's journey.

Between the time I scheduled the flight in the Model B and getting to fly we ran up to Huffman Prairie. Huffman Prairie was actually on Wright-Patterson Air Force Base. We had no small difficulty trying to get out on the base and once we did the gun range (which was currently active) ran parallel to the field. As we pulled in and got out, I was slightly hesitant about being able to feel the muzzle shock from the rifles because we were in front of them and just off to the side. Thankfully, it was military and not some redneck shooting skeet pointing his weapon all over the sky. As I walked through the Prairie, I could see in my mind's eye Rodgers showing up to visit his cousin John who was enrolled as a pilot in the Wright's School of Aviation. I could see him as he took off on his first flight: a treat from Orville. Then getting hooked and spending hours on the "simulator" which was a wooden board that the pilot used to practice keeping balance when in the airplane. Eventually I covered the field and was amazed at how big it actually was! It would have been the perfect place to train and I can tell why the Wrights chose it for their training grounds.

As I walked over to the hangar that had been built in the 90s to resemble the one from back in the day I had one of the most unusual meetings ever. As I passed the only other person whom I had seen at the field that day, my southern nature naturally gave him a head nod and an "afternoon" and I proceeded on my way. He then turned around and asked a question I've never been asked before: "You're that kid off the news last night?" It took me a second to remember that the local Channel 7 news did an interview with me yesterday. I replied with a simply yet honest "I guess so..." and we delved into a

discussion of aviation, Huffman Prairie, and then the *Vin Fiz* trip. His name was Mr. Lloyd Green and he was “working on a project” for something dealing with the Wright Brothers and the Prairie but didn’t exactly explain. We talked and he tried to pitch me to join the Air Force and come work at Wright-Patterson. I was having a good time with him and gave him a flyer and t-shirt before leaving. I guess this trip is generating some news but it still feels weird when people recognize me in the most random of places and exclaim “you’re the kid flying across the country!?”

After that we drove briefly over to the Wright Brothers’ Memorial on Wright Brothers’ Hill. I was super excited to find Cal Rodgers’ name emblazoned on a plaque with all the students who became pilots through the Wright School of Aviation in Dayton. We took some photos and then left, anxious to get back and fly in the replica Flyer on Dayton-Wright Field.

After running back and getting into the car, we made the dash back to the Airport for the Flyer flight. When we completed the flight we headed north into Dayton for the final (so we thought) trip of the day. We stopped at the Aviation Heritage Trail on West 3rd street in Dayton where we had visited last night to see the bicycle shop where the Wright’s dream of flight was born. It was amazing to stand under the same roof that two bicycle mechanics with no college education tackled the elusive idea of flight. The shop actually still is a Bicycle repair shop and can be used to purchase a bike and parts (if you want a \$3,000 bicycle). From there we walked over to the Museum.

After going through the museum and viewing the exhibits, we hurried over to the Carillon Historical Park where they led tours of the Wright’s Home on Hawthorn Hill every Saturday 10:30 and 2 (or so we thought). We were disappointed to find out that the

number “1” had fallen off the sign and the tours actually were held at 12:00. But the receptionist said if we would like to look around we could and she would have the tour guide check back in later when he returned. We walked back into the Park and found the Aviation Exhibit where Orville Wright gave one of the two surviving Flyers to Carillon for the Park to exhibit. We went into the Aviation Center and made our way through to the Flyer exhibit hall where we were almost by ourselves with the original aircraft. That particular airplane would break all the records of time in 1909; in just one flight, it would fly longer than the preceding 109 flights combined. This proved to the world that sustainable flight had truly been accomplished.

After seeing the aircraft, we walked back into the information area where I assumed we would be told that we just needed to come back another time and get a tour when they were scheduled. But instead and to my excitement, Mr. Alex Heckman (Director of Education and Museum Operations) offered to take us back over to the home since we would be unable to come back and I was on the transcontinental trip. We loaded up and followed him back to Hawthorn Hill where we had been yesterday but now for a personal inside tour. As we pulled up, there was a middle-aged man standing out on the porch. Alex ran over and talked to the individual who he apparently knew and we walked over once we parked to meet them. Come to find out, this mystery man was the great grandnephew of the Wright brothers and was there to give a special tour but the tour guest never showed. Wilbur and Orville were the two youngest boys of five siblings in the Wright household. The oldest son, Reuchlin, and the next oldest, Lorin, both married and had children from whom the remaining Wright relatives are descendants. Neither Orville nor Wilbur married in their lives, and the youngest, a sister named Katherine,

married after her childbearing years. Mr. Stephen Wright is a descendant of Lorin Wright. He and his sister keep the house in shape for tours and as part of the heritage of their family name. The house dates back to 1914 when Orville finished it and moved in with his father and sister. Wilbur sadly had passed away from Typhoid two years before in 1912.

The house was incredible with many stories about the family that I would love to tell but realize this is becoming a novella, so I will regrettably leave them for another time. It was a fantastic day filled with learning and retracing both the Wrights and Rodger's path to the transcontinental flight and beyond. Looking forward to getting back in the saddle tomorrow (maybe) and heading west before turning back "on course" to Huntington, Indiana.

Published 29 May 2015.

Providence

After rereading this post I feel compelled to give an explanation at the beginning here for some readers who might not think this is a part of the trip or should not have been included. My goal with this blog is to keep my readers informed on ALL my adventures while on this trip and because I am a Christian that will be reflected in my actions. Today's events were ones that are special to me and honestly possibly more important than some of the other things that have happened in the past on this trip.

Today was not a flying day (at least on Rodgers' route), but it turned out to be a very successful one just the same. After getting ready this morning, Mom and I left out to go to a church in Dayton for Sunday services. I had visited Cornerstone Baptist Temple in Dayton almost 10 years ago when I went with a missionary and friend for a day trip to the town visiting two churches. As I entered the building, I remember the good service we had before and actually recognized a few of the gentlemen who still were faithful men at the church. That first trip has an interesting story that I will tell as quickly as possible. When I was visiting the first time, I was praying about going into missions and possibly becoming a Missionary Pilot. At the church on a Sunday evening those many years ago, there "just so happened" to be an older gentleman who had been a missionary in the country to which I was praying about going who "just so happened" to be passing through and stopped to see the church. I had been praying for a few years then about a small yet diverse country in the southwest Pacific called "Papua New Guinea," which has a great need for both missions and air support for the ministry. As the missionary whom I was traveling with (also to Papua New Guinea) conversed with the older man, I waited to pack up and head home. My plans were altered as I felt a touch on the shoulder and was

introduced to the elderly man who was also a pilot in Papua New Guinea (PNG) for several years before leaving the aviation side of things. Call it circumstance if you like; I just claim to have a big God.

Back to today's tale. After arriving and getting our seat, we settled in for the Sunday school lesson. It was about 20 minutes into the lesson and a young black man walked into the auditorium dressed sharply. A moment later another walked in and then four more came in before they all had arrived. I didn't think anything about it and the service continued. But when the pastor had them stand to sing I looked at them and kept thinking "two of those guys look just like Papuans," but didn't linger on it. Then they began singing: I don't know exactly what it was that gave it away, but as soon as I heard them say the word "Jesus" I knew they were PNG Nationals. There is just something about the dialect or tonal formation that is unique about that culture and certain words and having been over there for a few weeks I had enough experience to pick up on it. Sure enough, every one of them was from PNG, and all of them were in Bible school preparing to head back to the country at some point to start works in their hometowns and other places. I got the chance to talk with them afterwards about my desire to work there and we had some sweet fellowship for a few moments before I headed back to the airport.

After checking out of the hotel, I loaded up the aircraft and parted with Mom. As much as mothers can be... well, mothers, I am glad God gave me such a sweet, loving, and caring mother that wanted to drive nearly five hours one way for a few days to see her son and then back again afterwards just to make sure he was okay and feeling good. I will never cease to be amazed at the love a mother can show and hope to find a wife one day who can do as well as she did in raising children and encouraging dreams.

The plane was loaded, the flight plan filed. I climbed in, ran through my checklist and fired it right up first turn of the key and then taxied out for the take off. Apparently the Indy 500 was clogging up traffic coming into the main Indianapolis airport so I flew to the small airport of Greenwood (KHFY) on the southeast side of the airport. There I met a young woman named Katie McCoy whom I met years earlier at church camp. Katie actually lived a few hours away but was staying in Indianapolis for Memorial Day. She was staying with her sister and brother in law who brought their kids out to the airport. The two oldest kids (4 years and 3 years) sat in the aircraft as I unloaded my necessities for an overnight stay. I wanted to make some tracks on the route but couldn't pass up on good friends and a free bed. I am just south of Huntington, where I will leave out for tomorrow and hop back on route not even missing a single landing site Rodgers flew to and get to spend a few days visiting with friends and seeing the Birthplace of Aviation.

After we got back to the house, I changed back into church clothes for their evening services and we loaded up for church. The church we attended was having a "senior night" honoring the graduation seniors from high school with a special service to encourage them. I was honestly looking to get something from the message but not really expecting it to be significant (never underestimate the way God will work!). The service was nice and we got down to the last verse of the message: Psalms 16:11 which starts off with "Thou wilt shew me the path..." I went from listen to being captivated. I have been dealing with a few decisions over the last month that I am going to have to make soon. When I think about them, I always think of them in terms of "possible paths" that I could take. I think back to the children's game "Chutes and Ladders" in which one of the tiles I always seemed to hit took me from near the end of the board back down to the beginning.

I don't want to hit a "spiritual chute" in my life and this verse was my confidence to keep from that. It was as if the Lord gently reminded me that it wasn't "my" path that I was walking on but one that He has laid the way long before I arrived to this point. I went from worrying to being relieved! God had given me a verse as He has so many times before to comfort me as well as to keep me from making a hasty decision out of fear and anxiety.

After services we went to "Wing Stop," which actually was a pilot-themed wing restaurant. I only took one picture, sadly, but it was a fantastic place to eat! I highly recommend if you're in the Indy area to drop in and get some! They were also pretty reasonably priced! Katie and I then chitchatted for a few hours after headed over to her sisters' place for the evening. I have gotten this written and now am ready to crash land into a pillow for the evening and look forward to tomorrow!

Published 30 May 2016.

Windy City

This was the 12th day of the trip! It is hard to believe I've just been gone from my family and friends that little time! I am having a great time and learning a ton, but I still feel like I've been at this project for a month now rather than a week and a half. I can't wait to sit down and reflect over the entire trip and look back at all the things that I am amassing in the back of the Maule from my stops and tell the stories associated with them.

I had only been asleep for a few hours when I woke up this morning. I have a very handy yet sometimes annoying habit of waking up right at 6 A.M. (even across time zones!) every day. Although I stayed up till around 1 A.M. yesterday getting the blog written, I was "up and at 'em" around 6:10. Katie drove over to pick me up and as I slid into the car I was met with the aroma of a fresh White Chocolate Mocha from Starbucks. We then went with her nephew and got some doughnuts for everyone at a local bakery in the suburb area where her sister's family lived. After breakfast, I mostly spent the day just relaxing and checking the flight planning for the next few days. My goal was Chicago by nightfall and I am currently sitting on a bench outside the Bolingbrook's Clow "International" Airport just a few miles west of Chicago O'Hare. Not sure where the "International" part of the name comes from but I guess you could maybe get to Canada in something that takes off on 3,000 of rough asphalt from here... back to this morning; we left around noon to run downtown since I had never been actually in Indianapolis before and looked at the Monument Circle which is the centerpiece of the city. It is a Civil War memorial to the volunteers from Indiana. We climbed up 330 steps and by the time we reached the top I felt the consequences of such a climb due with

minimal recent physical activity. The descent was much easier and the view was totally worth it. I had an amazing time on this stop and was truly disappointed to see it come to an end.

Back at the house, I finished my flight planning by double-checking weather and NOTAMs (Notices to airmen) and then headed out to leave. I departed from the Greenwood airport and headed east actually to clear Indy airspace and then from there flew just northeast back on course. I was literally going the opposite direction I wanted to overall but the first flight route was mandated by the routing of the airport, which means I have the strangest set of flights showing on FlightAware now.

After taking off towards Huntington, I got a bottle of water out of the back of the seat. I forgot about the water actually, so it was still cool but not cold. In an abnormal stroke of genius, I opened the window and carefully slid the bottle out into the 120-mile-an-hour winds. At 40 degrees Fahrenheit, the water would cool down soon. One minute later, chilled water and a happy pilot.

The flight to Huntington was shorter than I expected. I also had a tailwind for the first time in 5 days, which was a relief. I have been showing groundspeeds between 78 and 82 Knots for the majority of the westward trek from Long Island and it has been adding up. I am just under 40 hours of total time and I planned to be just over 30 at this point in the trip. Thank goodness for error bars in calculations!

After landing at Huntington, I turned cellular on again and made a phone call to a friend of a friend in Chicago who had been willing to have me stay with them. After working out the airport and time I needed to be there I took off and headed towards the

next points on Rodgers route. While Rodgers landed at them, I simply flew over North Judson and Lansing on my way to Clow Airport (1C5). I had a really cool experience today. On the way in, I found the railroad tracks that Rodgers followed back in 1911. They still run from Fort Wayne (near Huntington) up to Starke County (near North Judson) and then on to Lansing where they got lost amid the urbanized area approaching Chicago. It was really incredible to be able to fly at the same point as he did so many years ago when only a handful of aircraft would have been in the skies in the entire world at the same time. My approach to Chicago was much different! I was monitoring a couple of frequencies in the aircraft: one was “Indy Center” for my IFR flight plan and the other the nearest airport that I saw multiple aircraft taking off from with my new Garmin Transponder with traffic alerts in the cockpit. It is pretty much a “fish finder” for airplanes and really is a great tool to keep you safe while in the skies.

After landing at Clow, I called my host and then looked around to see what this little yet unique airport held. I found they had a restaurant on the field (which I will be landing at for some breakfast tomorrow morning) and an Aviation Museum on the field. They also had these Star Wars looking hangars that pretty much are a clamshell dome made out of sheetmetal. I hope to be able to check both of these out tomorrow before heading south beginning the run down to San Antonio tomorrow! Looking to get as far as Kansas tomorrow but just will see what happens with weather and aircraft.

Published 31 May 2016.

Diversion

My plan was to wake up at 6:45 this morning and be ready to leave at 7. Well, after back-to-back days of early starts and late nights, my body just said no. I am normally awake well before my alarm, but this morning it was the second time my phone had gone off before I woke up. I jumped up and finished packing my bags at my temporary quarters and then grabbed some breakfast before one of the guys ran me down to the airport. As we drove in, we talked of past and future and it was a blessing to get to fellowship with a likeminded young man. After preflighting and getting some luggage situated, I departed with blue skies overhead. I picked up a clearance in the air because the airport didn't have a remote frequency to contact Chicago on the ground. As I climbed out, I had to dodge traffic in the very busy airspace that surrounds the area. After about 20 miles, though, it was just myself for as far as the traffic reader could see.

I stopped for the first leg of the day just south of Peoria at Pekin Municipal Airport. It was a gas stop but also I was landing at another significant airport along the route. When Lindberg was trying to set a time record from St. Louis to Chicago, he supposedly used the beacon that (due to the lack of innovation) sat on about an acre of land right where this airport was built. Today, it is just another airport dealing with the decline of student training over the last decade. I then left out toward Springfield. I could see on the radar in the aircraft a line of storms south of Springfield's major airport but assumed that the storms wouldn't be moving fast enough to beat me to the airport. Besides, I was about 40 miles away and could easily make it before them. As I got closer, the storm had strengthened and, unbeknownst to me, sped up. This is where a very important skill in aviation that I try to engrain into my students' minds came into play: change the plans. It

is very easy to get into a rut and try to force the plans that you've made to work just so you can say they did. I have seen many situations where even competent pilots will attempt to follow through on a good plan that has had an unforeseen variable come into play and make poor decisions. As I flew the Instrument Landing System (ILS) about 5 miles north of the airport, I decided to take my own advice. I could clearly see a wall of water moving towards the airport about 2 miles on the opposite side from where I was coming. I called the tower and just told him I needed to cancel my landing clearance and head about 20 miles west to Jacksonville airport due to the weather. He actually came over the radio and complimented me for making the wise decision and cleared me "as required" (not a technical aviation term but I think he was just saying whatever I wanted to do was good) to the airport and handed me back over to the ATC till I arrived at Jacksonville.

After landing at Jacksonville, I took the time to hook up my iPad and phone and then rested for a half hour or so while they recharged. The storm would stagnate over Springfield and not let up even into this evening. I would have been nearly a 100 miles behind schedule if I had attempted to land and could have had even more consequences than that to deal with. The hardest thing about diverting is the mental block of "I failed" that actually is the total opposite! Most of the time, if you have to divert then it was a success. But if it was unnecessary then you are just a safe pilot! It's a win-win. Once I got my plan for the next legs of the trip together, I headed back out and loaded up westward to Kansas City. Just as I was walking out I noticed on the top of a shelf in a bookcase a picture frame of old newspaper articles. I honestly didn't think anything about it but having a slight history-nerd side to my personality I decided to check it out. I walked

over and took it down and found an original newspaper clipping from 1911 that talked about Rodgers' trip! I was blown away! Then I started looking at all the other clippings, originals... "Lindberg flies the Atlantic," "Yeager breaks sonic barrier," "Armstrong lands on moon," and many more! I was holding no telling how much history in my hand. I couldn't believe that on the top of this shelf someone had kept all these clippings of great aviation events and assembled them under one glass. It was unexpected as well because Rodgers only flown over that area, he never landed at that particular town.

After taking off, I headed towards Marshall, Missouri. Cal would reach this point in his trip on Day 30. The offer for \$50,000 would expire at midnight and he was impossibly short of the coast. But it was his personality that kept him going. He was quoted by a Kansas City reporter as having said "I don't care if I get \$50,000 or 50 cents, I'm going to be the first man to cross this country in an airplane." This isn't even the halfway point and he was woefully short. The Hearst offer had expired not just for Cal, but for the world. It was only good from October 10th of 1910 till October 10th 1911. So after this, no one even had an interest in going coast to coast. Had Rodgers quit his flight and gone home, it is hard to say what aviation would look like in our world today.

A monsoon met me at Marshall. I never even got out of the aircraft there. I simply filed and took off towards Kansas City. I knew the airport name was "Downtown" but I didn't think anything about it. While flying the approach though, I realized that the airport literally is downtown! It sits just south of the river and north of the skyline, which made for an amazing approach to land. After getting a hotel because I had no stay in Kansas City planned, I secured Molly and rode over into the city where I found I had gotten a really good deal on a very nice hotel room! I took a shower and went down to

ask directions to a good BBQ joint nearby (“nearby” was the critical word that was missed in translation). After getting told to go out and hang a left till I hit the restaurant I thought surely it couldn’t be that far. I started walking and looking for the street I was to turn on. I kept walking... and walking... Eventually I actually walked out of downtown, though an area that only can be described as “the sketch...” and then back to civilization. I was wondering if I was going need my passport to get to this place but after 3 miles I found it and got some of the best BBQ (sorry Uncle Dan...) that I have had in a long time! But then again, I was hungry before my exodus from the city. After eating, I headed back and the return trip went much more quickly. I was also full so that probably had something to do with it.

Now back in the room, I am going finish this and get to sleep before 9 o’clock for the first time in like a week and hope to sleep in some and get some rest before heading towards Texas tomorrow!

Published 31 May 2016.

Delayed

This morning started out absolutely beautiful! I woke up around 8, got a shower, and walked down to the local coffee shop two blocks away (much better than my barbecue run last night) and get some breakfast before packing up to leave for the airport. I heard there was a museum on the airfield for Trans World Airline (TWA) and spent part of the morning trying to locate it. Once I found it on the map, I realized it was on the exact opposite end of the airport. So I call up ground and they gave me a taxi clearance to drive the plane across to the Signature Flight Center. Once over there, I got the free ticket to the museum and then started my way down the hall to the entrance that was in the same building.

After meeting a couple of the museum staff and getting the privilege to fly the simulator of the Constellation, I browsed through the gift shop and found a TWA Flight clipboard, which was a steal at \$4. After checking out, I headed over to preflight the Maule and get ready to leave towards Texas. My plans were to make it all the way to McAlester, Oklahoma today, which would put me a short hop from Dallas tomorrow. As I was walking out though, I got slightly distracted by an A-10 Warthog setting on the ramp.

The Warthog was actually flown by a husband-wife team! They had diverted from Whiteman due to mechanical issues and the techs had been working on it all night. They were very friendly and let me look inside and talked for a while before they loaded up to head out. I then preflighted the Maule and filed to my first stop just south of Iola, Kansas. After departing, I climbed up to 4,000 feet and had a massive tailwind, which cut the 50-minute trip down to nearly 30.

After landing at Iola, I got out to stretch and then talked with the airport attendant for a little bit. He was nice and let me leave my fliers on the airport desk. I have loved meeting so many different people along the way! I hate that I don't remember names very well, but I have enjoyed seeing the diversity of aviation in the first half of the trip so far.

After taking off from the airport, I turned east and found the railroad tracks that Rodgers followed on the way between Iola and Parsons. It was surreal humming along at 500 feet above the ground speeding at 130 miles an hour: twice as fast as Rodgers in his Model B. Then after a few miles of that, I broke off and headed over to Parsons Airport. Once I'd landed, I taxied in for the last time of the day although that was not my plan. I went into the flight building and hooked up my iPad to charge and took a look around. It was a very nice building to be out in the middle of pasture area. I noticed a Christian theme to some of the things there and after 10 minutes still hadn't seen the manager. I walked over to the next building while noticing a black band of clouds on the southern horizon that looked slightly more ominous than when I had landed. I found the airport manager, an older yet spry gentleman named Lee Mattix who gave me the tour of the facility. I found some pretty cool aircraft, including a very nice Stinson!

I then returned to the main terminal to see what the weather looked like south where the storm clearly was brewing. I had been texting a friend who had set up a place for me to stay in Tulsa tonight and got the number of the people who I was staying with so I shot them a message and went back to planning. It looked to me like the storm was only a few miles wide and I could easily get through and then down to Tulsa area. I was explaining my predicament to the manager when he recommended I just park the plane in the hangar and then spend the night at his place in the guest room. I was tentative about that at first

because I really did want to stay with my friend's friends and move further along the route but after about an hour of dawdling I finally came to my senses. I had a hangar here at the edge of the storm and wasn't for sure if there was even a tiedown at the Tulsa airport I would be flying into. Staying here, I knew the storm was going to pass well below and out of my path.

Once we got the airplane stored, we headed back to Mr. Lee's place. After going to his midweek mass (he is Catholic), we drove to a local Mexican restaurant where I had some fantastic enchiladas. We got back to his house that has a 2,200-foot grass strip in the back yard and he asked a dumb question: "you want to see my airplane?" After gawking at his plane for a few minutes he asked another dumb question: "you want to go up for a little while?" I may have logged 4 hours of flight time today, but I never (well just about never) say no to free flying! So we kicked open the door and I jumped in to hold the brakes while he gave the prop a whirl. We taxied out and took off in less than 5 minutes in that "Yellow Bird!" For 65 horsepower, it hauled us both and full fuel with no problem. We never got above 1,000 feet and the airspeed was about 60 mph the whole way. The aircraft handled on a dime! I really did enjoy getting to fly and we both were smiling when we landed back at his house.

Tomorrow, I forge southward if the weather permits. Hopefully I can make it near the border of Texas but plan to stay out of the storms for as long as needed to keep safe!

Published 1 June 2016.

Slowly Southward

Mr. Lee and I left his place this morning around 8:10 going back towards the airport. We stopped for a doughnut and coffee on the way. I learned some interesting things from him about this town. The first monkey to go to space came out of their little zoo and the baseball star Mickey Mantel played under the lights of the local ballpark years before he would become a big league player. We also past an armadillo that did not make it to the other side! It was the first one I have ever seen so I was fascinated with it like a young boy is with a bug. After getting to the airport, I rearranged the luggage in the aircraft and then got ready to leave out. I checked (and double checked) the weather at my destinations and realized I wouldn't be able even to finish what I had started yesterday. I was still going to end up short of McAlester, Oklahoma, even though the plan was Dallas. The low-pressure system moving against the hands of the clock kept me at bay pretty well.

After bidding farewell to Mr. Mattix, I winged to the west towards Independence. I had one more touristy attraction to hit plus I needed to fly over the town to get the route right. As I passed the airport, I looked for a small homestead area that is apparently a homeschooler's mecca—the original site that the “Little House on the Prairie” was actually built. It was over 100 years ago that it was built and people have preserved the location (albeit restored the house) over the decades. It was packed as I zoomed overhead.

Once getting to the Vinita airport, I realized the wind was 90 degrees to the landing runway and about 12 knots. The aircraft is demonstrated to 12 knots of crosswind (wind coming from the side) component but I haven't done the maximum demonstrated in a

long time. (Just a side note, I have been able to do 15 knot crosswind landings, but it has been a while since I was flying constantly enough with the Maule to do such. It doesn't mean the aircraft can't land in more than that; it just means someone demonstrated it to be capable of handling at that speed). Upon landing, I walked over to the rest area that spans the interstate at Vinita and got a Subway sandwich before heading southwest towards Tulsa.

Once I headed towards Tulsa, I found another section of Rodgers' train track. This was the third or fourth time I have found parts of it and have been able to follow the exact route he would have been taking on his trip. I reached the Harvey Young Airport just in time to beat a massive storm that would come crashing down just as I got the aircraft in a hail shed. The rain poured for about 40 minutes while I touched base with friends and family and contacted the people I was staying with tonight. Once the weather subsided, I walked back to the "main terminal" and waited for my ride back to civilization. The airport was... lets call it "interesting!" The runway was about a half mile of broken asphalt and wild grass grew in between the cracks. There wasn't much of a taxiway and the terminal doubled as a 70-year-old guy's batch pad and was in severe need of a cleaning (or burning).

Once my host arrived, we loaded up my stuff and headed back to their place, where I promptly dropped everything and hooked up my phone before going to socialize. The Martins are a young couple with a boxer and a lovely home just outside of the Tulsa area. We ended up going by the Spartan School of Aviation on the way out to an amazing German restaurant named Siegi's. The sausage and schnitzel was my choice for the evening and it was absolutely fabulous. The best German food I've had all trip! Once we

finished that we stuck with the European theme and walked for gelato. After that, we hiked over the few blocks to the “Mayo” hotel where the Penthouse that used to belong to Elvis was. All in all, it was a good day, but the weather tomorrow looks foreboding, so I may have a little more time to explore the Tulsa area.

Published 3 June 2016.

Waiting

This was really a nice day; the weather was terrible, but that allowed me to rest for the first time in about two weeks. I got up at the crack of 9:00 and spent the majority of the morning sipping coffee and reading my Bible before running a load of laundry and checking the weather. I knew that last night when I looked at the weather it wasn't going to be possible to leave this morning. As I checked Texas radar, I realized the low-pressure system hovering just south east of Dallas was still going to prevent me from getting into the city. So, in a sigh of frustration, I resigned myself to staying another day in Tulsa. But I couldn't have gotten stuck in a better place! The Martins have been such a blessing and I have thoroughly enjoyed my stay here with them. After I finally I got ready, I went to the Tulsa Air and Space Museum. After being at DC's a week ago, it couldn't help but pale in comparison. It did have a F-14 *Tomcat* which is one of my all time favorite jets so that was awesome.

After exhausting the limited exhibits, I perused the gift shop and found a signed copy of a book from a captain of the Discovery Shuttle and a couple other books without a price tag on them. I went to the checkout and just asked if they'd take \$10 for the both of them and the cashier just said "I guess." I then waited till Lindsey swung back by and picked me up which wasn't long. By now, it was mid afternoon and I made a quick stop at Walmart before heading back to the house. While out, I ran by to check on the plane and found that she still had all three tires securely attached and no tampering had been attempted. I was relieved to get a bag of dirty laundry out and take it back to run in the wash.

We grilled out hamburgers tonight for supper. By “we,” I mean my host, “Luke.” They were extremely delicious and I regrettably ate a second patty without the bun but still felt like I shouldn’t have. Then I got the unexpected treat of running down to the vender on the corner and getting a snow cone. It was honestly the best snow cone I’ve ever had: more flavor and less ice. We then had homemade Snickerdoodles and sat around talking for the rest of the night.

I am looking to get to Dallas by tomorrow evening. Hoping to add about four hours of flight time and beat the storm that is wrapping back around!

Published 4 June 2016.

Texas

I meant to get this completed last night but didn't have the chance after a very late night. Yesterday was finally good enough weather to fly towards Dallas. After getting everything packed up and ready to go, Luke drove me out to the Harvey Young Airport where I preflighted the airplane and stored my luggage. By the time we left for the airport, a fairly significant storm was rolling through Tulsa and I had to wait (again) for the rain to subside before taking off. I rolled Molly out of the shed and then fired her up. The systems all looked really good, so I taxied out for departure. I was so happy to be leaving that little airport but sad that I had left new friends behind! Looking forward to the next time our paths cross in the future.

The first stop for the day was at the town of McAlester in the southern Oklahoma area. I only was stopping for a quick layover and going to head out but remembered a couple of friends back home were getting married today. They provided the ability to watch the wedding online because several people would not be able to attend in person. I got it loaded onto my iPad and headed back to the airplane. After talking to a family that walked in just before I got ready to leave some about the trip, I taxied out and departed for Durant, Oklahoma.

After an hour or so, I arrived at Durant, Oklahoma. I was way ahead of the storm by this point and had no rush, so I looked around the expansive operations center and bought some of the cheap \$3.36 fuel! They must have been out to lunch because not a soul was in the building. Actually, I didn't talk to anyone yesterday other than to ATC on the radios or another pilot over radios from the time I left the family in McAlester till I

landed in Dallas: about 6 hours. I fueled up and departed for the short hop over to North Texas Regional about 20 miles away.

I did a touch and go at North Texas because I just had fueled up and was wanting to make it to Dallas by the evening to stay with my best friend from school who was there for a Southwest Airlines training trip for one of the Aerospace Labs at school. At this point in the trip, Rodgers got disoriented and headed westward instead of south. He would not realize his mistake until in Gainesville area where he landed. He refueled and turned south towards Dallas. He landed in what would today be the area between both major airports in Dallas. Since I didn't want to deal with the traffic and landing fees at those airports, as well as the insanely fast-pasted communications, I landed at Dallas Executive where I took an Uber to my buddy Evan's hotel and changed to go with the group to American Airlines Operations Center.

We loaded up in their rental and headed towards American. It was a beautiful building and really cool to see all the operational logistics involved in running an airline. We stayed for a few hours and then went back to the hotel before getting something to eat. Evan and I split from the group because I did not need to be exhausted while flying the next day. We didn't want to be out till the early morning hours. We walked a short distance to this "Modern Mexican" place and had a really good supper before heading back and bringing each other up to speed on what was going on in our lives.

Today, I am working my way southward towards San Antonio where I am going to spend a day tomorrow if everything works out as planned. Either way, I should be heading westward this week and near Los Angeles by the end of the week!

Published 5 June 2016.

Breezy

For breakfast, Evan and I feasted on omelets, sausage links, pastries, yogurt, fruit, and cereal before I loaded up and headed to the airport. Once there, I got the plane ready to go and then sat in the lobby watching my church's Sunday morning message via Internet. It was a blessing to see familiar faces for the first time in nearly half a month. As much as I have loved being on this trip, the love and well wishes sent from home on nearly a regular basis are the biggest blessing for me while I trek across the country.

After packing up my luggage, I called up Ground Control and got cleared to Waco, Texas. I noticed the wind was picking up but didn't think about it for a while because I was already taking off headed south bound. After leaving Dallas Airspace, silence fell over the radios. Waco Approach cleared me to land before even seeing the airport. After landing, I went over to the operator building and parked for an hour or so to rest and let the iPad recharge. As I waited, a family taxied up in a Cirrus (a very nice airplane) and walked in. It was a husband piloting the aircraft along with wife and two children about 5 years old. The man was getting dropped off to go play golf. After the wife and kids hugged him and said "goodbyes." They discussed the different airplanes on the ramp. They then raced back out to the airplane and the kids followed their mom like a shadow as she did a preflight. Then they piled in and she flew them away. It was a really cool scene to see a family in aviation.

As I headed south from Waco, I caught a good tailwind causing me to check exactly how strong the winds had gotten. The winds were currently out of the north about 15 miles an hour gusting to 23. That was fine because most runways faced north and south that I had seen here. As we got closer though, I realized it was shifting and getting

stronger. So when we reached Austin, the winds were about 60 degrees off the majority of the runways in the area and up to 28 mph. I wasn't going to risk that because the aircraft has a direct crosswind (the component could be found using some vector math and previous experience) component of about 12 mph. I located a good runway near Austin with a runway within 30 degrees of the wind direction and diverted over to that airport. Taylor Airport was a little airport with no one working today and a key code written on the top of the lock (so why did they buy the lock). After landing I spend a few minutes updating everyone back home while I was in the convenience of air conditioning. I had to wait for the winds to stop howling before heading on the short hop down to Austin Executive. By the time I got there, the winds died down to 18 mph. I still maintained a 60-degree crosswind which made for a very exciting landing.

Once I got tied down, I (through my parents) realized I had a contact in Austin and worked it out to stay with them for the evening. Once he picked me up we went to his church where we had a great service and I got to see several friends who I haven't seen in some time. After that, we headed home to find that the neighbor's sewage had backed up and, with the excess rain Texas has had, wound up seeping out under the house. Then we proceeded to get a pump out and got up under the house to set it. After that fiasco was over, we got showers and now are attempting to sleep amid the lingering odors.

Tomorrow is a short hop to San Antonio where I will stay tomorrow night and then head towards El Paso on Tuesday! Looking forward to seeing some sights while there and happy to finally see the end of this day!

Published 6 June 2016.

Breakdown

Today was the day I was dreading. It started as a beautiful morning with sunrays bursting through the blinds of my room as I dressed. After my tango with a scorpion last night, I was very relieved to have a clear picture of clear flooring ahead of me. My host, Mr. Geer, picked me up at 6:30 sharp because he had something else to attend to that morning. After breakfast back at his place, we drove into town and he completed his errands. He dropped me off at Austin Executive where I promptly filed a flight plan and was fully expecting to be in San Antonio for lunch.

As I went through the starting sequence, I checked off everything methodically and systemically. At the “start” point, I called the area clear and engaged the starter. It has been my practice for as long as I have been a pilot to leave my headset off or around my neck till after I started the engine. I just thought if I ever heard an issue I would be quicker to notice it if I didn’t have headsets on. The 80-pound propeller rhythmically whirled in front of me as the starter engaged. The sputtering beast caught fire and came to life. Even before it stabilized at an idle RPM, I realized I had a problem. I heard a noise somewhere between a metallic grinding and a whining sound. I immediately pulled the mixture to “cut off” to take the fuel from the engine and checked to make sure the oil pressure wasn’t too low and caused the noise. As the engine shut down, I realized I had heard the noise before. Last fall, I took reciprocating engine overhaul in school; this was a class where I took an engine apart and put it back together in the semester. The last time someone used the starter on my overhaul engine the engine failed to ignite. The result was that a gear was stuck out instead of being forced back into its housing when the engine starts. It made a particular clicking sound when we would move the propeller. So

today as the propeller decelerated to idle, I could hear that clicking noise. Before I stepped out of the aircraft I had assessed the situation, knew the culprit, and where the noise was coming from! That's not to brag on me, that's to brag on the value of knowledge and skill for a pilot. I have loved having maintenance classes at MTSU and today was the proof of how helpful it can be. I went over and got the local mechanic and before he walked out to the aircraft I explained the whole problem. He brought the tools he needed out to confirm my hypothesis was accurate.

Mr. Bob and I spent the better part of the morning and the early afternoon removing and tinkering with the starter to see if we could get it to disengage. The problem was I was supposed to lubricate it with a dry lubricant every 50 hours of flight time. Well no one had ever told me that, so it had been nearly a 100 hours since annual and would have gone another 50 hours before getting home. I am actually thankful it failed here and not at a big airport where it would have been backlogged and a small one where no one was working. We then checked the web for local shops and couldn't find the newer (as well as lighter and cheaper) model in stock local so we decided he would grab some spares at his place tonight and we could get the part that we need from one with a bad motor and go from there. If it works out, I will save \$500 and get the plane back flying. If not and I actually have to purchase another one, then I would only be out another day (and the money).

As I sat there taking an account of the delay, I realized that the oil would need to be changed in the next 10 hours of flight time. Here I was, sitting on the ramp with an aircraft that couldn't fly at a maintenance base that could change the oil. I asked the manager if I could do it myself and he gave me permission with offered assistance. I got

it done in a couple hours from start to finish and took care of one more project instead of waiting to be down another day. That should make it much simpler for me the rest of the trip because honestly I wasn't for sure where I would get the chance to do that again.

With the oil changed and a new starter assembly tomorrow morning, I will be ready to head onward to San Antonio where I hope to head west to Los Angeles with no delays.

Once I got the oil done, I coordinated with Mr. Bob about meeting tomorrow morning. I then headed to the FBO where I found a fully furnished "quiet room" that I am currently locked up in trying to finish this blog so I can get some sleep on this amazing bed. After getting settled in the operations building, I talked to a friend for some time via text and then finally got a shower and headed off to get some supper. I was hard pressed on what to get but when in Texas you at least have to stop by a Whataburger!

After supper, I headed back to the hotel in the "crew car." Typically your crew car will be a somewhat older and used vehicle. That was not the case with Austin Executive. It was a 2014 Mustang with serious power! The drive was almost as fun as anything else I got to do today! Oh and did you know that some of the speed limits around Austin are set as high as 85 mph!?! Talk about obeying the law... no problem here. Today was unplanned but could have been worse. Thankful I didn't accidentally burn up the starter by continuing my flight; the gear support was also undamaged, which was another blessing. Hopefully tomorrow I will still be able to make it to San Antonio!

Published 7 June 2016.

Pressing on ...

Today will be a very memorable day for me. After waking up at the airport lounge, I walked down to the plane and loaded up my luggage while Mr. Bob McBride (from yesterday) took apart my starter. Once he replaced it and lubricated the drive, I tested the airplane out verified the starter was working properly and the engine oil didn't leak. We cowled the aircraft back up and then Mr. Bob went to get the bill ready. When I was handed the invoice, I was confused. The bill was just for the case of oil I purchased, not for any parts or labor on the aircraft even though I had spent pretty much an entire day at the shop with at least one mechanic on the aircraft most of the time. I brought the discrepancy up to Mr. Bob and was shocked at his response; the work was the people at Chuck's Aviation's way of donating to my trip! It would have been hundreds of dollars, and I was speechless for a moment when he told me. I thanked them all and said farewells before heading out. They asked if I was going to Oshkosh in July and said they would be there and told me where to look for them if I were. I am planning on going with a friend from near home so maybe I will see them yet again.

As I headed southwest to San Antonio, the world seemed a bright and happy place. The sky was blue and Molly played hide and seek in the scattered clouds as I followed ATC's instruction for our Instrument flight plan down to San Antonio. As we descended into the city, San Antonio Tower gave us a clearance and warning that I have never gotten before. The Tower told us to land on runway "30 Right." Airport runways are numbered by the nearest 10 degrees of magnetic heading from the departure end of the runway; so runway 30 was actually lined up with a magnetic heading between 295 and 304 degrees (and rounded to 30 with no last zero). So if you have runways that run beside

one another, then you have “parallel runways” and they get dubbed “left, center, and right” (or just left and right if there are only two). The Tower advised me that as I was landing on “30 Right” a Boeing 737 (a Southwest Airlines aircraft) would be landing on runway “30 Left.” These are called simultaneous approaches and the airlines do them all the time. But it can be a little nerve racking when you see a Boeing 737 within about half a mile from you on final. I actually could faintly hear the rumble of his engines even over the purring of Molly’s meager 160 horsepower engine! Needless to say, that was a little discomfoting but it was safe as long as I didn’t get in his wing tip vortexes. I’m quite sure it was an odd sight for some of the passengers to see this bug of an aircraft nearly keeping up with their massive transport; I was flying at near cruise speed to get down and off before other traffic would be landing and he was as slow as possible yet still managed to pass me like I was standing still. It was just another reminder why it has taken so long to cross the country.

After landing, I was shuffled around the larger aircraft before clearing to taxi to the flight center on the north side where I parked Molly for the evening. The sun was at its full strength in the noonday sky and I smiled as I hopped out and donned my sunglasses, ready for a new urban adventure. Once the details for Molly were straightened out, I left her to sunbathe on the ramp and headed towards downtown. The main attraction (for a homeschooled nerd) in San Antonio is the Alamo. I am a big-time history geek, so it wasn’t the first time I have been here, but I did want to swing back by now that I am older. It was sobering—more so than I expected—to walk the halls where so many men gave their last full measure of devotion for a plot of ground that literally was surrounded.

Yet they knew their actions would pave the way for a happy future for generations to come.

After visiting the Alamo, I turned towards the south and found my way to the Riverwalk. The Riverwalk is a beautiful scenic area where the river has been diverted and a canal carved for it to flow around the businesses and restaurants along the walkway. I made the mile or so trip all the way around before picking a stop for supper. It dawned on me this was actually the first meal I had today. I wasn't hungry having been distracted by the adventure and fun of the day.

After supper, I headed back to the airport where I located a hotel for the evening and made sure Molly was secure. I think the line guys thought I was an idiot not to trust them on it, but then again they aren't the ones flying across the country in it. I spent some time catching up with friends and family via text at the airport before getting the shuttle to the hotel. Not for sure if it is the trip finally getting to me or exactly what but I'm not feeling 100% this evening and think that an early turn in will do me a world of good! As I sit here watching the sunset emblazon warm hues across the sky I reflect on everything that has happened during the trip and good memories that have been made. Yet I long for home again and look forward to being back with loved ones and family in a week and a half or so. Looking at the flight plan for the trip, I probably will be in Los Angeles by this weekend and then start the trek more or less directly home which will put me back around Friday of next week. But first things first, I have to press on to finish the westward journey with some difficult flying lying ahead.

Published 8 June 2016.

Desert

Today's adventure started out last night! After publishing the blog yesterday evening, I went to turned on the shower and then was taking care of some other stuff that was going on. I kind of got distracted so the tub completely filled up because I accidentally left the drain stopped up. When I realized it was filled, I unstopped it and turned the showerhead on. Well apparently the cheapest hotel is not always the best one. More water came around from behind the head than actually made it out the heavily oxidized nozzle. To make matters more frustrating, the room I got was a "smokers room." I didn't feel like going and changing because it had been a hassle to get one anyway. The air conditioning didn't work right so it would spastically come on and off all night. I don't even want to think of all the other things that could have been wrong with the room; I just got in bed and tried to get some sleep.

I woke up this morning because of my phone ringing. It was barely 6:30 and a news station was trying to see when they could come by the airport and take some interview footage and shoot some film. I have to insert that Randy Weiler at MTSU has sent some information to all the stations along my route as I approached the city to see if there is any interest. I have done a couple of interviews up until this point but today all three major San Antonio stations (News 4, 5, and 12) wanted to do an interview. I don't care personally either way about the interviews but the media gets the word out, which makes what I am doing more visible, which will allow more young people to see and hopefully take an interest in aviation. I waited and after talking to all three of them, we walked out where they videoed my preflight and then my takeoff. As I was climbing out, I just started laughing as I looked back at three camera guys following me on climb out.

My route took me up into the desert and mountainous area of western Texas region. Texas' geography is still amazing and it is hard to believe that I'm still in the same state I crossed into nearly a week ago! As I climbed out, I headed over towards the border and followed the Rio Grande up to Del Rio. Del Rio is near Laughlin Air Force Base and was hopping with jets and helicopters. I was given some special clearances and asked to cancel my flight plan early to allow for other aircraft to land as well. Once down, the Texas-sized heat rolled through the windows of the plane to remind me that I was not in New York any more.

After getting a delayed clearance to depart, I skirted up the border within about 20 miles of it the entire time and normally within gliding distance to Mexico. It was strange that the same air just a mile to my left would be ground for imprisonment and permanent loss of license. Once I cleared the tip of the Mexican "peninsula" that gives Texas its curvy southern border, I turned direct towards Dryden and waited to get cleared for my landing. I never heard from ATC and I kept hearing other aircraft call them so I knew that I had slipped below their coverage. Eventually ATC had a Southwest Airlines flight call me up and I canceled my flight plan via them with Houston Center about 20 miles from Dryden since they couldn't hear me anyway. Instead of landing at Dryden, I flew over the airport and continued on towards Alpine, Texas.

After landing at Alpine, I was amazed at the beauty of the airport even in the rugged conditions. Pictures can't do the landscape justice and the mountains seemed more impressive in person than they turned out to be in photographs. The stop was only for an hour or so at which point I made contact with my family friends in El Paso who would be my host for the evening upon arriving. The flight from Alpine to El Paso was an

adventure of its own. For those of you who know what a microburst is, I got the unpleasant privilege of watching one at about 20 miles. It was slightly nerve racking and there were storms kicking around in the hills so I made the executive decision to climb up to about 11,000 feet to make sure I had about 3,000 between me and the tallest peaks and then about 5,000 between me and the rest. The other part of the adventure was coming through what looked like to be a small shower but actually turned out to be a massive downdraft. I pretty much flew through (and down) a waterfall from a cloud. At the last second, I looked to the left and saw the sheets of water being driven by the wind and so I had a slight notice before the rollercoaster took off. I dropped about 1,000 feet in 10 seconds! And as fast as I had started descending, I broke out and stabilized for a moment before finding a thermal and climbing back up to about 10,500 feet. Needless to say, I am sick of mountains!

After landing in El Paso, I unloaded my luggage and waited on my missionary friends to arrive. Once they got there, I loaded up and we headed back to their place in New Mexico. Technically, I left Texas today, but tomorrow (hopefully) I will be flying out of it towards Tucson, Arizona for the day. They took me and another friend out to get some genuine Mexican food tonight and it was amazing! I had a “Mexican coke” which is apparently made from real sugar and might be the only thing keeping me going right now to finish this blog! It ended up being a good day... some difficult things I had to deal with but it got better! Looking forward to tomorrow’s adventure...

Published 9 June 2016.

The Wild West

This morning was a first! Not only for me on this trip but also my life in general! I got up and showered since the opportunity was available and walked into the kitchen for breakfast. I sat down to a plate full of chimichangas before me along with some Mexican pastries. I think that is the first time I have had a chimichanga for breakfast and were they good! After my nonstandard sustenance, I loaded the bags up and we headed for the airport. Once there, I finished my flight plan to Lordsburg, New Mexico where I would land for the first stop of the day.

After getting cleared to Lordsburg, I got a vector to a south heading to get around the Franklin Mountains. El Paso is shaped like a horseshoe with the Franklin Mountains splitting the city into the western, southern, and eastern sides. The airport sat on the eastern part and I needed to get around the mountains before turning northwest towards Lordsburg. I was on an instrument flight plan on the way there so I was following the ATC “orders” to the letter. As I climbed though, they gave me a southern heading. I held it for about a minute and then looked down: the Rio Grande. I was crossing into Mexico! I immediately called up ATC and asked if on an IFR flight plan I could cross international borders. They confirmed that and so today I flew as pilot in command of an aircraft internationally for the first time! I only was across the border for about a minute and the air was the same over there, but it was strange crossing the Rio Grande coming from the Mexican side for the first time (ever, so technically I flew myself into Mexico before commercially doing it!).

After clearing the mountains, it was a straight shot to the airport. I climbed up to about 10,000 feet where I cruised for the remainder of the trip. The scenery was nearly the

same as yesterday: rugged mountains and open desert. The flight was uneventful for the remainder trip. After landing at Lordsburg, I borrowed the airport manager's truck and ran for some lunch. Once I got back, the winds had risen to about 22 miles an hour. I taxied back and decided to not take on any more fuel since I had plenty to get to Tucson but not an excessive amount adding unnecessary weight. The 94-degree temperature on the ramp was compounded by the reflective asphalt and desert cooking even the air around me. As I took off from runway 30, a dust devil stirred up and crossed the runway right in front of me. I climbed up to about 10,000 feet again to clear some more mountains before heading over towards Tucson.

On the way, I hit a massive thermal at about 8,000 feet (where I had originally planned to cruise) that sent me up to 10,000 feet in a matter of minutes. I didn't descend after that because chances were there would be a downdraft later causing me to descend as much as I had climbed. While I never hit a downdraft, there was moderate turbulence the entire way to Tucson. I was more than happy to be on the ground instead of getting shaken up any more.

After fueling up at the west ramp, I taxied the 2 miles back to the start of runway 29 Right. I took on about 30 gallons of fuel and the weather was blistering hot. My temperature gauge read 103 and the airport disappeared in a mirage about half way down the runway. Once I got back to the departure end, I called up tower and got cleared to depart and climb to 8,000 before heading around the mountains over to Phoenix. On climb out, I looked over to check the instruments; all great and in the "green" (good) arc. I monitored speed and looked back about a minute later to see the top of the green arc on cylinder and oil temp. I was only about 2,000 above the ground and had another 4,000

feet to climb. Looking at my airspeed I was below the speed I needed to climb and not climbing at all. As I lowered the nose, I started to descend; as I raised it, the speed decreased and the engine was overheating. I had to cancel my flight plan for the time being and fly up the valley in an attempt to cool the engine before climbing up. If I could get to altitude, I would be able to cool the engine. But if I was too hasty in my ascent, the engine could get damaged or worse fail by overheating. For about half an hour I would climb 100 feet and then let it cool off and then climb another 200 feet and repeat the process trying to get higher. Then the game changer happened: a thermal. I found a random thermal in the middle of the valley pushing me upward into the sky. In about a minute, I climbed from 5,100 feet all the way up to 7,200 feet because of the thermal. The lift allowed me to lower the nose significantly and get more airflow in the cowling and in about 10 minutes the temperatures were down and I was at cruise flight around 8,000 feet. Albuquerque Center reissued my flight plan to me and I was off to Glendale, Arizona near Phoenix.

This would be a good point to explain why my routing today (if you watched flight aware) was so contorted and not direct. The FAA sent out a news bulletin today through a flight-planning app that I use pointing to a NOTAM (Notice To Airmen) about GPS outages due to some interference that may be caused by some testing in the “southwestern United States.” The testing is going to be causing intermittent coverage between Oregon and central Mexico and Los Angeles to Dallas—the entire area I am going to be for another 5 days or so. The reason for the non-direct routing is because I am following a different form of navigation that was the predecessor of GPS. These units emit a frequency at varying amplitudes to distinguish 360 degrees around to know exactly what

radial you are from the VOR (the name of the navigational aid that I used). Once you know that, then distance-measuring equipment will allow you to figure out where you are specifically. So I was following those navigational aids, and will be for the remainder of the trip to make sure I don't get led to somewhere in Mexico.

After landing at Glendale, I taxied to parking and shut Molly down for the last time today! We had a good but long day and I barely have enough consciousness to wrap up this blog tonight. Phoenix is hot! My cousin and her husband who live here picked me up from the airport and we went for supper to a really good restaurant near the Cardinal's stadium. After we drove the scenic route home where I got my first glimpse at cacti this trip! I was surprised not to see any until Phoenix!

Tomorrow's adventure will hopefully take me to the outskirts of Los Angeles, where I will finish my westward journey Saturday. I am planning on spending a couple days in Los Angeles and back towards home! I will be glad to get out of the mountains, I have enjoyed the rugged beauty but I miss the low-level ground back home where the density altitude isn't 7,000 feet or greater the majority of the time.

Published 10 June 2016.

Penultimate

This morning I awoke at 5:30 Arizona time. I got up to check the weather and was shocked it was already 85 degrees outside and the sun was just rising. After a cup of coffee and some flight planning, I headed to the airport where I added a few gallons of fuel before getting my flight clearance to Imperial Junction in California. The Glendale Airport was baking in the sun and by the time I departed the temperature had reached 92 degrees on the ramp. After yesterday's engine temperature problems, I kept the airspeed up in the climb even though it took a little longer to reach altitude. I wanted to make sure I had enough wind to cool the four cylinders keeping us flying.

After departing Phoenix, I headed south along Rodgers' route until I met up with the railroad line again turning westward to fly between a military airspace area and the border. As I did, I thought I saw the GPS flicker just a little. Remembering the FAA's bulletin, I went ahead and got the maps out and set up my secondary form of navigation. The system before GPS was called VOR. These are ground stations that emit a signal that can be tracked to a particular radial. The Maule has one of these units in it so I plugged in the proper frequencies just incase I need to use it during the flight.

The GPS did go flicker some during the flight. I was prepared and ready to go with the VORs. A few other pilots who were less astute started frantically requested vectors and resigned routes. Once ATC got around to asking me how it was going, I simply replied that I was direct to the VOR I was using at the time and they confirmed and cleared me way ahead of where they should have because they realized I knew what I was doing.

After the GPS recovered, I got a call from ATC advising that an “Eagle Flight” was approaching at my 12 o’clock position at the same altitude. “Eagle Flight” is the border patrol tilt-rotor Osprey helicopters that fly in groups while searching the border. I started looking and didn’t see them. Then came the 5-miles and 1-mile warnings. All of a sudden I could literally feel the airplane shaking and hear a low rumble. I looked to my right where I saw a group of four Osprey aircraft with rotor’s full forward tilt zipping past within a half mile. It was a majestic sight to see but one I hope never to get the privilege to view again!

After landing at Imperial, I walked over to Rosa’s Plane Food. It was an airport dinner serving Mexican, steak, and seafood. I went with the Mexican and was pleased! Once back to the airport ramp, I realized that there was a storm rolling in so I got my flight plan together but ended up not having enough time to file. I flew visually up the Palm Spring Valley between the two mountain ranges. It was amazing to see an actual lake (Salton Sea technically) in the middle of a desert and then Palm Springs is a gorgeous town nestled against a 10,000-foot mountain that provides shade for the city in the afternoon. There were probably two-dozen golf courses in the area making a spectacular mixture of green with the drab brown of sand. I swung around the valley just as Rodgers did to descend into Banning, California.

The two mountains that were on either side of the pass sat only 3 miles apart. I felt like John Bunyan’s “Pilgrim” (*Pilgrim’s Progress*) when he walked between two chained lions in a narrow gap. The majesty and beauty of the mountains was surreal but the danger was also very eminent. I have had a few experiences with mountain flying so I knew to hug the side instead of fly up the middle. I finally saw the airport and descended

into Banning where I spent a half hour planning an intricate flight plan down to the Compton airport in Los Angeles. After takeoff, I was slightly bummed that the controller said “proceed direct to Compton via vectors” rather than “as filed.” I had planned this beautiful and intricate flight plan involving navigating across a very hectic airspace and wasn’t even going to get to execute my masterpiece.

As I descended into Compton, I realized that I was only a few miles from both LAX and Long Island Airport (where I’m flying tomorrow) and could see multiple large aircraft on both the left and right maneuvering for the airports. It was a very busy airspace but I have gotten accustomed to the extra airflow over the last 3 weeks. I landed on one of the parallel runways and taxied to the operator base. Once I tied it down, I loaded up my stuff into mom’s rental car (she flew in commercially to see me finish the trip) and then we headed for supper before going back to the hotel. It still hasn’t sunk in that this is the second to last day to fly on the coast-to-coast portion of the trip and after tomorrow I will be headed back towards home.

I have some minor day trips planned tomorrow and then resting Sunday before heading back towards Murfreesboro. I hope to have a day trip or two along the way but may not now since I am ready to be home! It has been an amazing journey and I look forward to wrapping it up tomorrow before starting the long journey back home.

Published 11 June 2016.

Desire Accomplished

“The desire accomplished is sweet to the soul”

This morning started off slightly different than planned. I woke up and threw back the curtains to find that the sunny skies of yesterday had disappeared. Bleak overcast layers replaced them this morning. After checking the height of the clouds, I realized I wouldn't be able to fly visually over to the Long Beach Airport. So mom and I went to eat breakfast and checked out of the hotel before heading out to the airport. She drove me to the airport and then drove the 6 miles as the crow flies from the Compton Airport to the Long Beach Airport. I had intended to set up for a short and simple flight before landing at the busy Long Beach Airport instead of flying all day and being exhausted. As I got to Compton, I found the most hysterical sign at the end of the centerline of runway 07 left. It said “no straight out departures,” which was comical because of the saying “Straight Outta Compton.” I laughed so much from that sign! The cool thing about the Compton airport was that it had two parallel runways, but it was an uncontrolled airport! You had the option of either runway and could fly uncontrolled, parallel approaches with another aircraft.

I called the telephone number to pickup my clearance to the Long Island Airport and then I waited... and waited...! It took ATC about 30 minutes to give me a routing that would work for them. When they finally did it was “runway heading up to 3,000 feet and then south bound.” They then proceeded to ask if I understood! I was expecting some thirty-waypoint flight plan and got a heading, altitude, and heading. Most of my initial pilot license students could have flown it. Once airborne, I could see the beach and skyline under the thin layer of smog. Then at about 2,300 feet, I slipped into the cloud

deck where I would remain until popping out on the instrument approach into Long Beach.

As I sat in the plane the bleak whiteness obscured the exterior completely and forced my eyes inward. My thoughts also dove inward to the fact I was finishing what would probably be up to this time the greatest adventure I have set out on in my life. The highlights of the trip flashed back to me as I made corrections for altitude and heading to follow ATC's vectoring around the approach into Long Beach. I have flown over 60 hours of flight time and covered nearly 6,000 miles since I left Murfreesboro 3 weeks ago. I have spent time with old friends and new friends and seen some of those friendships grow deeper because of the trip. I have seen over a dozen major cities in the USA and experienced what each of them had to offer (primarily in the food department). I have been to the "Birthplace of aviation," the location of the first flight, the greatest aviation museum (in my opinion) in the states and so much more. It is overwhelming the grace that God has given me as I travel and the protection I have received both while in the air and on the ground. The weather only caused a delay for 2 days—a miracle in and of itself. I have been able to use this trip to work through a couple big decisions in my life. It truly has been a remarkable adventure and isn't over yet! As I broke out of the last layer of clouds, I saw Long Beach airport right in front of me; a smile crept across my face. The smile faded slightly when I received a notice that I had a 10-knot tailwind coming in on Runway 30 and was cleared to land. I was too low to make a circling landing so I just sat Molly down gently and was very vigilant about keeping her on centerline. I then taxied to Signature Flight support where I received a warm welcome from the line guys and mom.

I need to stop here and say what a blessing my mom has been this trip. She has taken time out of the last few weeks to drive nearly 5 hours one way to see me for a couple of days. She got up yesterday around 3 A.M. to fly to California where she met me last night and then today at the airport. While Rodgers might have had tens of thousands of people awaiting him as he rolled out on the beach, I had the one person who rode along on my first flight nearly a decade ago and has encouraged me to reach for the sky in all I do—not just aviation. It seems only appropriate that she was there for me today as I taxied in; obnoxiously waving this ridiculous sign she had made and acting like she hadn't seen me since leaving at Murfreesboro even though I had seen her about an hour earlier. I am truly blessed with the parents God has given me.

Once we finished the paperwork for parking the aircraft overnight, Dave and Nate (the line guys) were more than helpful getting it in a hangar. They even offered me tenet fuel pricing which was substantially cheaper than the regular price. I can't sing Signature's praises enough this trip! More than once, they have cut me a deal in the half dozen times I've used them through this trip. After we got Molly tucked away, Mom and I drove over to the main terminal and found some information on Rodgers from the centennial celebration in 2011.

Once we finished there, we started out on a mad goose chase for a monument that was built for Rodgers. After going to the local library, talking to two different historians, visiting two different piers (where it was supposedly located), and stopping at the historical center we simply accepted the fact that if there was a monument, it no longer existed. It was slightly depressing not being able to find it. Supper lifted my spirits and I'm looking forward to a good day off tomorrow before setting a course into the sunrise

for a change. I hope to be back in Murfreesboro this Friday and then on to home from there. Chances are the Maule is going to need to go down for annual once she gets back because of the trip even though she isn't due it till July.

All things considered, I have been blessed. I can't believe that I have successfully finished the transcontinental portion of this trip. I am looking forward to some plans I've got for the return trip! As one person once put it, "Traveling leaves you speechless, then turns you into a story teller!" I have plenty of stories, some I've left out of these blogs for one reason or another—some related to flying and some not; but when it comes down to it, I've had a remarkable journey and look forward to being home again.

Published 12 June 2016.

Touristing

After completing the transcontinental flight yesterday, I wanted to take a day and just rest before returning to Tennessee. I woke up and got the chance to watch our home church's services before heading out for some sightseeing. It was a blessing because the message today was honestly an answer to some prayers I've had as of late in my own life, and I personally felt that it was just what I needed in the form of guidance along the path God has for me. After we loaded up and got in the car, we headed towards the northwest (near LAX) for a tour that mom wanted to do.

After loading up on the completely full tour bus, we headed northwest even further towards Santa Monica and made our first stop at Venice. It was an interesting little town with a plethora of younger people making the beach and strip mall a melting pot for every kind of person imaginable. And trust me when I say it was every single kind of person imaginable! We ended up finding a taco truck and were able to grab a quick lunch before getting back on the five-hour bus tour.

Back on the bus we headed up to Santa Monica. We passed the pier (where mom and I would return for supper) continuing on towards Hollywood. Big cities are not a problem for me but I had no desire to spend any more time than at Hollywood I had to. I went, took the picture, and loaded up! I can stand crowds but not that type! Just a slew of people from every race imaginable and all speaking different languages with loud music and traffic: it was a recipe for headaches. We stopped by a Starbucks on the way back and picked up some gifts in a local souvenir store before loading back on the bus to go to the farmers market.

After loading up, we went down to the Sunset Boulevard and saw several celebrities' homes. There was a long list but some of the celebrities who either currently or at one time lived in the house were Paris Hilton, the Fresh Prince of Bel Air (filming location), Jerry Lewis, Sylvester Stallone, Ron Howard, and George Clooney. Honestly the only one I cared about was Nicholas Cage who actually still lives in the house and was having furniture moved in when we rode by.

After we left the residential area we arrived at the farmers market. I expected to see a bunch of farmers at a market: what the name implied. But apparently this was "city folk" farmer's market which was a misrepresented name for a "mall." We went into a couple of stores so mom could find some gifts for the nieces. I browsed Barnes & Noble for a while looking at the books while waiting for her. Eventually we loaded back up on the bus returned to the station for the completion of the tour.

After finishing the tour we headed back up to Santa Monica where we got supper at the pier and then headed back to the hotel room. I am looking forward to meeting with the Aviation Commissioner of LA County tomorrow morning before heading home after a great rest following the completion of the trip! Hopefully I will make the Grand Canyon before tomorrow evening, weather and maintenance permitting! Looking forward making it home sometime this week!

Published 13 June 2016.

Homeward Bound

This morning, I had a special treat for me! Once we finished breakfast, Mr. Dennis Lord, Aviation Commissioner of LA County, swung by the hotel to pick mom and me up for a tour of some aviation related sights. He took me around town and to his work (which we will get to). The first stop was the location of the first American Airmeet in the Long Beach area held back in 1910. There was a plaque with the details of the airmeet on the side of the road that we stopped and looked at before going over to the airport.

We stopped by the Experimental Aviation Association (EAA) hangar at the Compton airport (where I landed a couple days ago) where he showed me the various aircraft and projects in the chapter's hangar. He is the president of the local chapter for the next two years allowing me inside access to the cool projects they have going on. I saw some amazing things including a 1920s model Pietenpol Camper being build, a couple really cool Long EZs, and a few one of a kind aircraft.

After that, we stopped by the Dominguez home (who hangared Rodgers' aircraft after he completed the transcontinental flight and prior to the dispute which caused him to relocate to the beach), but it was closed requiring us to peer through the windows at the aviation room. We then we drove over to where Mr. Dennis worked. I didn't know what to expect honestly. I was astonished to find an amazing collection of automobiles with many custom Hot Rods that he was working on! He worked for a gentleman who had the most extensive private collection of cars I have ever seen. He is the only electrician on staff and designs all the wiring for the classic and specialty vehicles.

I was enamored by the classic collection but the most interesting vehicles were those in his “famous cars” collection. He has one of the DeLorians used in filming *Back to the Future 2* and K.I.T.T. from *Knight Rider*. He had several others including one of the 8 actual “Bat mobiles” that were made. There were numerous other ones I didn’t recognize. After seeing the vehicles, we went back over to the airport where we got a picture together with the Maule before he dropped us off back at the hotel. I had an amazing time touring the area; it was an absolutely privileged to meet Mr. Dennis! Looking forward to keeping in contact in the future.

Once we left, I finished my flight plan while packing up the stuff I needed for the next few days. One of the advantages of having mom here was I could load up all the stuff I don’t need and send it home with her when she leaves. I didn’t want to lug anything extra back across the country. I planned the flight from Long Beach airport to Grand Canyon airport realizing it would be almost a four-hour flight. To help make sure I had plenty of fuel, I flew at 11,000 feet. The higher you fly, the less fuel is needed due to there being less air to mix with it for the same ratio. I was able to lean out the fuel to air mixture to burn five to seven gallons an hour. By the time I landed at the Grand Canyon, I only had used 24 gallons of fuel for 3.9 hours of flying. That was very good for my aircraft, especially considering I had climbed to 11,000 feet! This flight may have been the most beautiful scenery I have seen the entire trip! The landscape started with the ocean and soon changed to mountains followed by deserts and finally canyons! It was absolutely breathtaking.

Now that I am at the Grand Canyons, I have eaten a small supper before heading to bed early. My plan is to do a little hiking tomorrow morning early before leaving the

airport around noon headed East. I hopefully will make it all the way out to the plains of Oklahoma or Kansas by tomorrow evening. The routing will be interesting with severally mountain ranges standing over 13,000 feet high in my way.

Published 14 June 2016.

Grand Canyon

After a hardy breakfast this morning, I headed to the Grand Canyon. It was a beautiful sight and since I didn't have much time to spend there I took the trail recommended to me for being "the prettiest" with unobstructed views. The trail followed the top of a ridge hiking down from the canyon rim to the Colorado River. Once I got there, I had to take the south rim trail 2 miles out to get the beginning of the trail head. The views were amazing!

After finally making it to the trailhead, I began the hike down South Kaibab with a timer set for 30 minutes. The trail begins by zigzagging along the canyon wall down to where it started descending along a wall. Then it led out to a ridge and followed the top of a hill as it descended into the Colorado River. I was only able to get to the beginning of the ridge with my limited time. That still was about two miles of hiking which included a good 1,000-foot drop in elevation. I didn't realize that they only sold water bottles and not bottles of water at the Grand Canyon. On the south rim, water was pretty sparse. I was that tourist who showed up with just my phone ready to explore... not what I recommend doing. Nonetheless, I made both descent and ascent with no issues. I was upset that I needed to get going because I would have loved to spend all day hiking down, spend the night camping, and hike back up another trail the next day. I am hoping that there is another trip to the Grand Canyon in my future! I'm going to definitely be doing some more hiking!

Once back on the rim, I had just under an hour to make it back to the room and get checked out. I was actually ahead of my mental schedule. I went over to the bus stop and hopped on the one that said "village route" and didn't think a thing... until we turned

right instead of left at the exit. I calmly asked the person setting beside me which bus we were on; he replied “Blue” instead of what I was hoping to hear, “Purple.” I nodded my head and then looked back out the window while internally having a panic attack coupled with frenzied fear. At the first stop I sprinted back to the opposite direction bus and made it back in less than five minutes. The only problem was the “Purple” route (the “Village Route” you can see my confusion; to make matters worse the buses weren’t different colors) was just departing would be another fifteen minutes before it returned. I had to get an extension on the checkout to allow me to take a quick shower, packed up, and run downstairs about an hour behind schedule. I took the shuttle to the airport where the aircraft needed fueling. By now I realized it was after 2 P.M. and my plans to make it to the Midwest plains today were shot.

The flight to Santa Fe was nice. Going home, I am taking as direct a route as possible but still having to cut around mountains so I flew just to the south of an east heading to get around some 13,000 peaks towards the north of Santa Fe. My plan was to be in the northwestern corner of Texas this evening. I landed I realized the time change put me even further behind schedule. Thankfully there’s only one more time change to go through before I get home. The flight was a mixed bag of topography: Painted Desert, random forests, and then more deserts.

Tomorrow I hope to be sitting around the Oklahoma/Arkansas line. The goal is to make it home by early Thursday afternoon. Weather looks great so lets hope that Molly keeps chugging along to make that happen!

Published 15 June 2016

Nearly Home

This morning started at 5:45. I woke up and was kicking myself for setting such an early alarm, but I wanted to be able to make it home tomorrow so I had to put some distance behind me to do so. I had planned for either Tulsa, Oklahoma again (since I had friends there willing to keep me) or to make it all the way to Northwest Arkansas. I have a pilot friend who lives there with his family and cleared it with them to crash land at their guesthouse for the evening. I was at the airport just after 6:00 and ended up meeting the morning crew at the door as Signature Flight opened. They fueled Molly up while I filed a flight plan in the lobby. After touching base back home, I walked out into the cool morning just as the sun's rays began to warm the tarmac. I did my preflight and climbed into the plane ready for a very long first leg to Clinton, Oklahoma.

On climb out, I noticed that the aircraft was running warmer than normal. I climbed about 10 knots faster than normal to increase the air flowing into the cowling to cool the engine. Eventually, I reached the cruising altitude of 10,000 feet assigned by ATC due to the mountains in the area. This would be the last flight dealing with both mountainous terrain and desert. It also would be the last flight with airports above 3,000-foot field elevation. Once I reached Oklahoma, I can fill the tanks up completely without having to worry if the aircraft will be able to climb up to 10,000 feet to clear a mountain. The flight was slightly different than planned; I ended up going to the airport after Clinton due to fuel being unavailable at Clinton. I landed at Thomas Stafford Airport in Weatherford, Oklahoma. The flight from the Grand Canyon to Weatherford lasted almost four hours. I was exhausted from the heat and humidity I felt as I descended into the airport. I sat on the couch and drank two bottles of water before I felt good enough to flying again. I also

made my way through the museum there at Stafford Field and saw some monuments of the astronaut the field is named after.

Once I fueled up, I departed for Springdale, Arkansas. I would end up flying from Santa Fe to Springdale. I could have made it home by tonight but I would have been exhausted. I saw some storms on the horizon that confirmed my decision to stay with my friend overnight. I landed at the busy airport between a King Air and business jet. We got supper before heading back to their place for the evening where I am finishing this up after catching up from not seeing one another in a few years. It's amazing how blunt your questions can be when you don't know when the next time you'll meet is!

My plan for tomorrow is to be at Murfreesboro's Airport around 3 o'clock. That could significantly change depending on the weather tomorrow morning but I plan on doing an IFR flight plan so the flight will be visible on Flight Aware. I will update the times on the Facebook page if there are significant delays. I am ready to be home but super blessed at the adventure I've gotten experienced. There are so many stories I could tell that haven't been listed here but there will be more updates to come. This is only the beginning of my thesis! Sometime this fall I will write the written thesis, defend it to the Honors College, and speak to different groups about my flight.

Published 16 June 2016.

The End...

Wow. So much has happened over the last few days I don't fully think I can process it all right now. I am sitting at my desk in my room for the first time in nearly a month. Yet it seems all so surreal to me. It feels as if the trip should not be over yet but it is. At least the flying part is over. I left this morning from Springdale, Arkansas (KASG) heading east to the southern corner of Missouri that is wedged in between Arkansas and Tennessee. The airport I was intending to land at had fuel for \$3.19 a gallon. That is a very good price and my reason enough for me to landing there! Clearly the fuel was cheap because three aircraft were in line when I arrived with a few rolling up to the pump when I left. It was a warm day for the flight to Kenneth, Missouri. The air is just so humid and oppressive now; nothing like the pleasant day in May when I left the region. I climbed up to 5,000 feet but didn't get away from much of the heat. With the sun mostly in my face, the cockpit warmed up quickly. The engine temperatures rolled up to the top of the green "normal range" and stayed there for the remainder of the climb. Below me, I could see field after field of crops at various stages of growth with the occasional crop-duster racing across them taking odds against trees, fences, and power lines. As I neared Kenneth, I crossed the boarder of what I believe was my 25th state to cross during this trip. It's difficult to believe that I've flown over half of the country in the last month!

After fueling up, I filed another flight plan before going inside the building where a blast of cool air nearly gave me a headache. I noticed a pilot having a difficult time starting a Cessna 182. Even though there isn't a Hippocratic oath for aviation maintenance technicians, I felt it nearly duty to go preserve his starter. When it is hot outside, the engines will become "vapor locked" or the fuel will evaporate in the lines

before reaching the engine. This requires the operator to start the aircraft nearly opposite from the normal starting positions of mixture and throttle. He noticed me approaching and cracked open the passenger door almost beckoning for some assistance at firing the aircraft up. I hopped in and my instructor-side kicked in; I taught the guy how to properly “hot start” an engine for about 5 minutes. After firing it up and giving him a handshake, I hopped out lingering only for a second as the warm blast of air from the propeller cooled me off for a minute.

After firing my own plane up, I only had to wait a few minutes for the engine to warm up. The other aircraft had taxied to the far end of the runway. I didn’t feel like taxiing all the way down so I called him asking if he could hold short of the runway while I departed the closer end. The wind was a perfect crosswind so it honestly didn’t matter which direction I departed from. I took off turning eastward for the two-hour flight towards Murfreesboro. As I climbed up to 5,000 feet, I realized the winds were twice the strength forecast and directly behind me. I looked and my estimated arrival time was 2:30 rather than 3 o’clock as I had broadcast all over social media. I pulled the power back all the way down to 60% total power. I flew along at less than 90 miles an hour on the airspeed but still was doing almost 110 across the ground. To compensate for the fact I thought that everyone would be showing up before 3 rather than earlier, I asked for a GPS approach that would take me 10 miles away from the airport to delay the landing. About 100 miles west of Murfreesboro, I just happen to tune into the Traffic Advisory Frequency and was able to pick up the local airport traffic. It was the first time I realized I was about home; I was listening to some friends make calls. I attempted to call from 100 miles out making an advisory call just to be funny. Even though I was an hour away,

one of the guys heard me and replied! Also, I don't know who it was, but just after taking off from the Kenneth airport I was talking on Memphis's Center someone called out "welcome home, Collin" between the ATC calls. It was pretty cool (despite the excessive heat).

As I approached the initial GPS approach waypoint, I realized I was still early. I requested to do a couple of holds (pretty much oblong turns in the sky to kill time) over the fix before proceeding towards Murfreesboro. I turned inbound seeing Murfreesboro through the haze and then saw the runway. I seemed like a small eternity since I'd seen it. The GPS showed that it was a classic training day at the airport with half a dozen aircraft within 5 miles of the airport. I wiggled into the flow of traffic and was greeted over the radios by fellow friends as I made my initial calls. I love aviation for the camaraderie that pilots share. When you have friends who fly, that makes it even more enjoyable. I bounced my landing pretty bad but recovered to make it look like I had done a beautiful one before I rolled into view of the small group that had gathered to welcome me home. As I taxied off, I felt a burst of relief to be home. I have had an amazing time, but honestly have been ready to be home for a week or two now. The last few weeks have been some of the most difficult flying of my life. There are multiple reasons for that's another story for another time.

As I got out, the first person to greet me was dad. I haven't seen him in about a month. A month earlier and a few feet from where I parked, he stood watching his son leave out on this crazy adventure. He walked up and hugged me saying "welcome back, Bulldawg (a nickname he has given both my brother and I going back to his collegiate days); I'm proud of you." It was simple yet very special to me to have such a caring

father. Mom was waving that ridiculous sign (now is sitting in my room) to remind me of her motherly love for me as well. My brother and a friend showed up as well as Dean Vile of the Honors College to congratulate me on the return. One of my professors, Joe Hawkins, made it to the airport to welcome me back. It was an honor that he took the time in his schedule to do so. A few media reporters also were there along with the local people who worked at the airport. It wasn't a large crowd but it was a good one. I am appreciative of everyone who showed up and all those who have sent congratulatory messages and text today.

After an hour there, I walked over to work to square away some stuff concerning my position there. I got all the materials from there I owned and headed out for home. It was a short flight; without thinking about it I reached for the iPad instinctively but then put it back. I didn't need a chart for this flight. I took off and looked for the landmarks that I use while flying between home and school, following them all the way back towards Carthage. Instead of flying straight in and landing, I made one "victory lap" around town before turning back into the afternoon sun and setting up for landing. It was the first full-flap landing I have done in a month and honestly wasn't the prettiest one. I flared a little high causing an increased sink rate but not too excessive. I was just glad to be back on familiar turf (literally). The first thing I noticed once I got home was the grass had not been mowed. With everyone else already having plans for tomorrow, looks like I've a date with a zero turn of the majority of the day. Living on a farm has its advantages; one of those is 1,200 feet of runway on the side of a hill.

And so this chapter comes to a close. The project is not entirely complete. Yet it is the next chapter that will be the real adventure! I will be working on the actual paper for the

thesis; either turning it into book or possibly writing a book after the thesis is written (should it be of interest to a publisher). I plan to tell Rodgers' story in more depth and relate each leg of his flight to mine looking at the overall change that has occurred in aviation. This has been a trip of a lifetime, and I can't thank MTSU, the Honors College, the Aviation Department, Dr. Paul Craig (my mentor), Dr. Vile (honors college dean), and Dr. Phillips (thesis committee chair) for the assistance and encouragement they have provided along the way. It will be something that I cherish and have many stories to tell in the future. I will probably post either a reflective post in a week or so just talking about the highlights and my "favorites" of the trip. After that, I plan to keep the blog updated as I write my thesis and then will post a final post on the thesis defense in late October signifying the completion of the entire project. I was asked by one of the reporters if would I do it again, and without hesitation I said "yes." The caveat was I needed a few weeks to rest and Molly is begging to be put down for an annual inspection so we both will be taking a rest... for at least a day or two. The other question was one that sparked my mind into thinking; "so what next...?" I gave a generic answer as I thought myself well, what is next? I have been praying about a few areas in my life and seen God answering those prayers even today so I guess the honest answer is "I don't know..." It honestly is just "the end" of the flight; with many potential opportunities ahead of me. We will see what the future holds for me over the next few months and years but right now I will take time to be grateful and thankful for the successful completion of my Thesis Project.

Published 17 June 2016.

Appendix B – Standard Operational Procedure Manual

The Standard Operational Procedures for the *Vin Fiz* Flight

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Author's Note:

This manual was included as an Appendix in the proposal for this thesis project and was utilized to ensure safe and sound decision-making during the flight itself.

Mission Statement:

This document will be the guide for making safe and practical decisions for the pilot of the *Vin Fiz* flight scheduled to be conducted in summer of 2016. All protocol presented here will not only conform to the legal requirements as presented in the Federal Aviation Regulations (FARs) but also incorporate safe procedures that the FARs fail to address. It is the goal of this project to facilitate a more personal and a deeper knowledge of the first transcontinental flight and to do so with minimal issues. The following protocols have taken into account pilot competency, aircraft ability, and physical factors pertaining to both. It is highly probably that the pilot will encounter an issue that is not outlined in these pages. When this occurs, the pilot will have the ultimate say concerning the proper resolution for such a problem. These protocols have been approved by the Department of Aviation at Middle Tennessee State University and have been accepted as the standard for the flight by the pilot.

Faculty Advisor

Pilot in Command

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Weather

Weather is always a critical factor when considering the safety of a flight. The FAA has published several documents concerning weather that the pilot has read, and he has also been trained with the standard procedures used by Commercial Pilots. While the pilot plans to follow the Federal Aviation Regulation basic weather minimums while on the flight, safety (not just legality) will be the primary concern for the flight. Under this procedure manual, the pilot plans on flying with the following conditions:

Time of day: DAYTIME ONLY

Visibility: at least 5 miles

Cloud separation: at least 2,000 feet from them. (except when IFR)

Winds: Less than 15 Knots. (Gust must not exceed 20 Knots)

It is the goal of the pilot to recreate the weather issues Rodgers faced by only flying in clear, “good” weather. With that being said, the aircraft and pilot are both capable of flight into clouds and still maintain safe, positive control of navigation. Should the need arrive, it will be standard practice to avoid inclement weather even if it means diverting to an unanticipated location. Deviation from the previously mention standards will be at the pilot’s discretion based on the requirements of a situation.

Planning

All the planning for the trip will be accomplished prior to the first departure of the flight. The bulk of this project will be planning and researching airports near Rodgers original landings sites. The pilot will utilize the modern assets of electronic charts, GPS, and Air Traffic Control assistance for this flight. As a backup for the previously mentioned, paper charts will be at the pilot's disposal and previously marked for usage. While planning these "legs" of the total flight, the pilot will make note of the following items and use these for the planning of the actual flight:

- Departure airport
- Planned altitude
- Magnetic Course to destination
- Estimated Time En Route
- Estimated Fuel Usage
- Destination Airport

Also in the planning will be a notation of any specific airspace considerations (Restricted area, Military Operation Area, controlled airspace, etc.), flight restrictions, and possible geographic hazards (especially in mountainous areas). Once each flight leg is to be flown, the final computations of wind direction, velocity, and correction angle will be calculated to give the accurate times and fuel consumption calculations as well as magnetic heading information.

Preflight Inspection

The preflight inspection is a critical part of the success of any flight. This allows pilots to determine if the aircraft is suitable to fly. The pilot on this flight will follow the following **manufacture recommend** and **FAA approved** checklist each day before the first flight of the day to determine if the aircraft is in an airworthy condition. If the aircraft does not conform to this checklist, the pilot will not fly until an investigation of the problem can be conducted to determine if there is an issue. The Preflight Inspection is as follows:

Aircraft Papers: Airworthiness, Registration, operator's manual, weight and balance.

All documents must be present at each flight.

Master: ----- ON
Fuel Gauges: ----- Check indications
Aux. Pumps: ----- ON, then off (listen for pump)
Electrical Switches: ----- OFF
BAT Switch: ----- OFF
Flaps: ----- Extend to max.
Fuel Drains: ----- Drain
Left Flap: ----- Inspect
Aileron: ----- Inspect
Left wing top: ----- Inspect
Left wing Main fuel tank: ----- Drain and inspect level
Wing tip and lights: ----- Inspect
Landing Light: ----- Inspect
Pitot Tube: ----- Inspect
Stall Warning switch: ----- Inspect
Left Gear: ----- inspect for proper air and leakage
Left Cowl: ----- Inspect security
Prop: ----- Inspect security
Oil: ----- Inspect (level and quality)
Air intakes: ----- Inspect for foreign objects
Right gear: ----- Inspect for proper air and leakage
Right wing: ----- Inspect same as left
R. Fuel tank: ----- Drain and check level
Right Fuselage: ----- Check for general airworthiness

Right static ports: ----- check for clearance
Stabilizer: ----- Check
Elevator: ----- Inspect
Tailwheel: ----- Inspect for damage/issues
Left Fuselage: ----- Inspect for general airworthiness
Left static port: ----- clear
360° Walk around: ----- Check lights and general appearance

After completing this checklist, the aircraft will be considered airworthy until a problem arises giving the pilot reason to suspect otherwise. Before subsequent flights occurring on the same day that the previous checklist has been used, the following checklist may be used at the pilot's discretion:

Master: ----- ON
Fuel Gauges: ----- Check indications
BAT Switch: ----- OFF
Flaps: ----- Extend to max.
Fuel Drains: ----- Drain
Left wing Main fuel tank: ----- Drain and inspect level
Pitot Tube: ----- Inspect
Stall Warning switch: ----- Inspect
Left Gear: ----- inspect for proper air and leakage
Prop: ----- Inspect security
Oil: ----- Inspect (level and quality)
Air intakes: ----- Inspect for foreign objects
Right gear: ----- Inspect for proper air and leakage
R. Fuel tank: ----- Drain and check level
Right static ports: ----- check for clearance
Tailwheel: ----- Inspect for damage/issues
Left static port: ----- clear
360° Walk around: ----- Check lights and general appearance

In lieu of the excluded portions of the previous inspection, the “360° Walk around” will be of the utmost diligent to inspect the lights and general appearance as well as the entire structure of the aircraft for problems.

Equipment

Equipment for this flight will be divided into two categories: normal and emergency. The normal equipment is that equipment which the pilot will use to complete the flight under the planned conditions. This equipment consist of but is not limited the charts, plotter, iPad, and various other items included in the pilots personal flight kit used regularly to conduct safe flights. The emergency equipment will consist of a kit in reach of the pilot while sitting at the controls and consist of cellphone, food, water, and a survival kit. This would be for the unlikely event of an emergency landing in an area that rescue will be delayed up to 48 hours. Proper clothing and gear for the region (especially mountainous) will be taken into consideration, and the pilot will plan accordingly.

En Route

While en route to the destination, the pilot will minimize all distractions to maintain a safe flight outcome. While the flight will be recorded via electronic mediums, these will only be used when the pilot's attention is not as critical an issue. The pilot will utilize the proper checklist and instruments scan as the flight progresses and use a timer for regularly spaced intervals to verify accurate and correct readings. Should anything be deemed critical or requiring further attention, the pilot will follow his training as both a mechanic and pilot to determine the cause and best course of action for combating the situation.

Emergency Procedures

Emergencies are one of the most dreaded issues in aviation. It is the crux of most flight training regimens and has been for the pilot's training as well. Having over 300 hours in the aircraft to be flown, the pilot has experienced several emergencies already and knows the Immediate Action items by memory. The extensive list of emergency procedures listed in the aircraft's flight manual will be followed should the need arise. Upon completing the emergency procedures, the pilot will prepare for an immediate landing to resolve whatever issue required addressing.

Personal Behavior

The pilot acknowledges that he is an extension and ambassador of Middle Tennessee State University, the Honors College at Middle Tennessee State University, and the Aerospace Department while on this trip and will act in such a manner as to represent these to the most professional level possible. At all times, he will be considerate of others and how the public might consider actions or comments. He will strive to have a reputation with individuals as a gentleman no matter what the situation and always act in such a way as to honor and delight the University, Honors College, and Aerospace Department.

Overall Safety

The overall safety of the flight hinges on the preparation of the pilot. It is the pilot's goal to maintain a constant situational awareness and use proper aeronautical decision-making skills for the success of the trip. No matter what the issue, the pilot will never consider an option that leads to imminent danger to himself, the aircraft, or others. The old adage is "better to be on the ground wishing to be flying rather than be flying wishing to be on the ground."

Mechanical Problems

Mechanical issues will almost certainly arise while on the trip. When these issues arise, the pilot who is also preparing to be a mechanic will seek help from a local mechanic to consider the issue and take the most efficient course of action to resolve the problem. The aircraft will only be flown when it is operating properly. This should minimize any dangers of the flight to nonexistent. A current parts catalogue will be at the pilots disposal should the need arise to replace a part. A basic set of tools including screwdrivers, wrenches, sockets, and safety wire pliers will be carried on the trip as well as safety wire, a proper oil filter for replacement, and a spare tailwheel tire along with any other items deemed necessary by the pilot.

Physical Problems

This flight will most likely take the majority of a month due to the planned stops along the way. The pilot is not ignorant of the stresses flying can bring upon an individual. The pilot accepts those as the natural, human reaction to the physical exertion of flight and plans to combat those by only flying for 6 hours in a day. This will allow 2 full tanks of fuel to be used in a day allowing for plenty of progress while also providing for personal rest. Should the pilot ever simple feel incapable of flying for whatever reason, he will simply rest until he feels capable of continuing. The pilot will be camping under the aircraft at most locations but when the Fixed Base Operator has a lounge or rest area these will most defiantly be utilized. The pilot does not plan on taking any medication while on this trip and will not do so if it will hinder the safety of the flight.