

Appendix H – Aviation Experiences in South Dakota

This appendix includes eight narratives that offer insight, experiences, and reflections on aviation in South Dakota by local residents. These narratives were captured during one-on-one interviews that gave each interviewee an opportunity to share their experiences and the ways they are impacted, rely on, or contribute to aviation in the state. Interviewees were selected based on input by members of the Project Advisory Committee (PAC) and the South Dakota Department of Transportation (SDDOT). The interviewees represent a diverse group of individuals who were willing to share their personal and/or professional experiences of how aviation impacts their lives. Interviewees include an aerial firefighter, an emergency medical transport patient, airport managers, a South Dakota Aeronautics Commissioner, medical transport pilots, and more. Each person interviewed had a unique and important story to share that captures the positive impacts airports across South Dakota make to people’s lives and the social and economic fabric of the state. These stories demonstrate ways that communities are made stronger, more resilient, and safer because of individuals dedicated to the aviation system in South Dakota.

H.1. Dedicating a Career to Aviation Safety and Embracing a Passion for Aviation

Dave Timmons has dedicated over 30 years to the State of South Dakota, working as an aviation mechanic and pilot for the state’s fleet. Dave’s passion for aircraft, and aviation, started at a young age when he and his dad would visit the local airports to watch the planes take off, and he’d watch in admiration as his dad expertly carved model planes out of balsa wood. His childhood interest in aviation carried through his school years, and as a high school student he dreamed of being a pilot. He got his pilot’s license the old-fashioned way, working hard to get his hours and spending time at the local fixed base operator (FBO). He’d help around the shop where needed, learning as he went, and earned additional licensing and ratings while on the job.

Dave started his aviation journey in Pierre, and still resides there today, as the chief mechanic to the state’s aviation fleet. Dave is responsible for all matters of maintenance and repair for the state fleet, which consists of three King Airs, a Bell 206, and a Cessna 172. A regular day for Dave begins with assessing what routine maintenance procedures need to occur on the fleet, completing those procedures, making sure all the necessary parts and equipment are stocked or ordered, and managing any repair needs that may occur outside of routine maintenance. Dave talks about his job in a casual sense which likely comes with the confidence and comfort of thirty years of knowledge and experience, but the reality is he and another mechanic are responsible for ensuring that all official state business air travel can occur safely with aircraft in optimal condition. Outside of his maintenance responsibilities, Dave also puts in about 100 hours of flying annually for state officials. When asked what his favorite part of the job is, he noted he enjoys so many things. He feels proud of the work he does for his state. Dave also added that flying on a beautiful day just can’t be beat.

Dave recognizes that not everyone in the state shares his passion for aviation, and sometimes the public doesn’t realize the importance of their local airport. He wishes the public could understand how vital the aviation industry is and the benefits provided to a community, a region, and a state. One such example is the fairly new based medical operation by Avera at the Pierre Regional Airport. Prior to this service being available, he said Pierre had to make do with makeshift medical transports. One of Dave’s most rewarding experiences as an aviation professional was when he piloted an emergency medical flight to

transport a mother experiencing an emergency delivery of twins. The transport was a success, the delivery was a success, and 20 years later, by chance, Dave got to meet one of the twins whose mother he helped.

H.2. Improving the Community through Commitment to the Local Airport

Doug Hansen is the staunchly passionate and committed airport manager at Clark County Airport in South Dakota. With over forty years of experience in the aviation industry, he is committed to the continued improvement of the community's local airport. Doug is proud of the Clark County Airport and takes his responsibility of it seriously. Recently, the airport has benefitted from multiple facility and service enhancements, including a new general aviation (GA) terminal building that provides airport users with a heat-controlled area to rest and use the restroom after their travels, new, uniform hangars, and new snow removal equipment (SRE) that is standing ready to remove snow during South Dakota's harsh winters.

The Clark County Airport is intricately woven into the social and economic fabric of its surrounding community. The airport supports several important industries in the region, including agriculture, manufacturing, and tourism (particularly during pheasant hunting season) to name a few. Moreover, the airport has a hard surface runway, an Automated Weather Observing System (AWOS), and GPS approach, that allows for medical flights during a variety of weather conditions. Doug sees the value of the airport to the local community and works hard to convey that value to the local residents, as he understands that community awareness and support is important to the continued success of Clark County Airport. One of the ways that Doug promotes community awareness is by hosting the now annual Fly-In Breakfast with one of the aircraft mechanics at the airport. The Annual Fly-In Breakfast occurs in conjunction with the early August celebration of "Potato Days," which is a weekend long community event in celebration of the popular potato and agricultural industry. During this jovial weekend-long celebration, Doug opens the airport up to the public, hosts a luncheon, displays a WWII P-51 aircraft for public viewing, and even offers up free rides on an R-44 aircraft, sometimes completing as many as 100 rides during the event. He also advocates for the first South Dakota chapter of "Pilots for Christ," which is a faith-based organization that provides free flights to those in need in the community. Chapters for "Pilots of Christ" exist all over the country, and Clark is proud to have the first chapter in South Dakota.

Doug has committed a lifetime of support for aviation in South Dakota and advocates for his local airport. Doug said the most rewarding aspect of his work at Clark County Airport is seeing the looks of inspiration and awe in children's faces when they attend the Fly-In Breakfast. He said it best when he noted "it only takes a moment to make a moment," and if he can take a moment out of his day to create inspiration and excitement about aviation in someone else then that is a success. His next project is getting a flight-school up and running at Clark County Airport once again. The airport was previously home to a flight school that dissolved when the instructors left the area. Doug's commitment and passion for the airport and aviation education will be vital to the re-establishment of the flight school operation – a resource needed to train the next generation of pilots that are so desperately needed in the industry and within South Dakota.

H.3. Wearing Multiple Hats to Serve Communities Across the State

Kassidy Nelson has a deeply-rooted interest in South Dakota aviation, serving as a pilot for Avera Careflight medical transportation and as a Commissioner on the South Dakota Aeronautics Commission.

Kassidy has always had an interest in policy and drafting legislation for state aviation resources, so his path to the Aeronautics Commission was a somewhat natural one. Known by many for his ambitious spirit and knowledge of the state's aviation system, he was appointed to the Commission by the Governor of South Dakota. Kassidy is one of the only active professional pilots serving on the Commission and brings a fresh perspective to the Commission's work. Kassidy is excited for the future of aviation in South Dakota and understands the importance of drafting legislation that aligns with the ever-evolving aviation trends and technologies so practical improvements can be made at the state's airports. Kassidy's first-hand knowledge of how much rural communities across the state rely on air medical transportation brings a critical perspective to the South Dakota Aeronautics Commission that works diligently to support the continued operation of these critical community assets.

Kassidy is particularly passionate about airport improvements that support emergency medical transportation flights. Kassidy is working diligently to support AWOS implementation at all airports across the state. AWOS availability allows pilots to land at an airport despite less than ideal weather conditions; without an AWOS, a pilot may not be cleared to land at an airport until the weather improves. It is that weather delay that can be a matter of life and death for a patient in need of emergency medical transportation. This issue is particularly important for the many rural communities that do not have an urgent care or trauma treatment facility nearby and rely on medical flight transportation during emergencies. Kassidy advised that the best way to enact policies that support AWOS implementation at South Dakota airports in need is to raise community awareness. Sometimes communities are reluctant to support airport improvements because they do not see the value of the services the airport supports, but when community members can understand that these improvements mean a more accessible emergency medical system, the more likely they are to understand the need for these improvements.

Kassidy is also passionate about supporting the collegiate level aviation programs in South Dakota and advises that the programs available at South Dakota State University (SDSU) and the Lake Area Technology Institute are both successful and well-rounded programs. Kassidy also spoke about the SDSU Aviation Mobile Simulator that is used throughout the state to educate and inspire elementary through Grade 12 students and young adults on aviation career opportunities. The simulator had its debut at the Career and Technical High School in Sioux Falls in early 2017 and also made an appearance at the SD Airport Conference in 2017. The program allowed people of all ages and backgrounds to be introduced to and inspired by careers in aviation. Overall, the program reached almost 2,000 participants at 32 different events. The program still receives frequent requests to bring the Aviation Mobile Simulator to events across the state.

Kassidy brings the same type of passion and commitment to his work as a medical transportation pilot as he does to his work as a Commissioner. Avera Careflight is a pro-community, patient-care, and mission-oriented organization dedicated to the work of providing necessary medical transportation to the rural communities in their network. As a supervisor and pilot for Avera Careflight, Kassidy works out of the Aberdeen base, and advised there are also teams at Pierre Regional Airport and Sioux Falls Regional Airport. Kassidy and other team members at the Aberdeen base conduct approximately 30

patient flights a month, which is 30 lives potentially saved because of the services Avera Careflight provides. Most of the flights Cassidy conducts are for adult trauma transport, which requires a team including a pilot, a trauma nurse, and a certified paramedic. However, the organization also provides specialized teams, such as a Neonatal Intensive Care Unit (NICU) team. At times, the teams respond directly to medical emergency scenes instead of responding to a hospital or airport, which is most common. When on duty, Cassidy and his partners must be prepared at any moment to be dispatched to an emergency. It takes a special type of person, who can think quickly, be mission-oriented, remain calm under pressure and solve problems to work on medical transportation units.

H.4. Keeping Communities Safe from Wildland Fires

Kevin Merrill is an Aviation Officer for the U.S Forest Service and is responsible for overseeing the Black Hills Helitack program. The Black Hills Helitack program is the second longest program running in the country, starting in 1959. The Black Hills National Forest Helitack program is based in Custer County, South Dakota with an agency-owned hangar on site at the Custer County Airport. During the mandatory availability period of mid-June to late-September (120 days during peak fire season) there is a helicopter stationed at Custer County Airport for Helitack's exclusive use. During the mandatory availability period there are approximately 12 – 15 crew members on site at the airport, ready to be deployed at a moment's notice. Outside of the peak period, there are three to five crew members made available full time. The Rapid City Regional Airport is home to a large air tanker base that is used for large aircraft that store fire retardant substance and drop it from the air over wildfires. Outside of the mandatory availability period, both sites continue to operate on a "as needed" basis, meaning the Helitack crew has to be ready for deployment at any time. The Black Hills Helitack program also operates out of Hot Springs Municipal in Hot Springs, South Dakota and Black Hills – Clyde Ice Field, in Spearfish, South Dakota.

The crew Kevin oversees is made up of specialized and highly-trained firefighters and pilots who operate at a level of preparedness that meets federal standards. For this reason, pilot and firefighter shortages can occur, but Kevin advised they have a system in place that allows them to quickly assess state and national needs to overcome any possible shortages and get the crew and the aircraft where they need to be, when they need to be there. Once an incident commander has relayed the message that aerial firefighting assistance is needed, there is a great sense of urgency to get the crew and the aircraft dispatched. Helitack operates with an aggressive approach to aerial firefighting, which means they always operate at launch preparedness levels and are so active in their approach that they resolve fire hazards before the community may even notice. Kevin advised his operations, and operations of other wildland firefighting units, will continue to change as fire seasons become longer, operations become more technical, and aircraft change. The Helitack unit is well supported, and relies on inter-agency coordination at the federal, state, and local level. Helitack works closely with all Federal, state, and local agencies including Bureau of Land Management, National Park Service, South Dakota Game, Fish and Parks, and South Dakota State Wildland Fire. Moreover, the Helitack must operate at their full capacity while also being mindful and respectful of other GA operations occurring at the sites they are located. The better the relationship between the Helitack and other agencies, the greater the benefit to the community.

Kevin shared that one of the more recent developments for their unit is occurring because of the strong relationship they have formed with the Custer County Airport and Custer County. Custer County is

wanting to undergo a large expansion of their airport and involved Kevin during the planning process of that expansion. The hope is that by utilizing available funding resources, the County can include an expansion of the Helitack operations on site, creating a new dedicated base with more operational capacity so the Helitack can increase their effectiveness. Kevin sees this decision to expand the airport as a benefit not just in terms of improved fire protection, but also as an opportunity to boost tax revenue and economic benefit to the surrounding community.

H.5. Committing 50+ Years of Aviation Experience to the Local Airport

South Dakota's Huron Regional Airport is one of the busiest GA airports in state and is managed by Larry Cooper – a South Dakota native with over fifty years of experience in aviation (most of which has been at his hometown airport, Huron). Larry's father worked at the airport when Larry was in grade school. He spent his young adult years working at the FBO and learning how to fly. He went on to SDSU's Air Force Reserve Officer Training Corp (AFROTC) and served six years in the Air Force as a pilot before returning home to Huron. Upon returning, Larry managed the FBO at the airport, served on the Airport Board, and has been successfully managing the Huron Regional Airport for twenty-nine years.

Losing commercial service in 2016 has done little to slow down Huron's bustling GA airport, which now primarily serves as a hub for agricultural spraying operations, an air ambulance transfer point, and the local and regional business community. The largest aerial agricultural spray operator in the state, and possibly even the country, Wilbur Ellis, is based at Huron Regional Airport. Wilbur Ellis is a \$3 Billion business that started in San Francisco and ten years ago moved their agricultural spraying operation to Huron. The business serves over 20 different crops and golf courses. In addition to Wilbur Ellis, Huron Regional Airport supports the operations of Agtegra Cooperative, another agricultural company providing aerial agricultural spraying. Both firms help to make the airport more self-sufficient and provide economic opportunities to the local community as the businesses hire locally when possible. Huron Regional Airport is also very busy with air ambulance operations and serves as a transfer point to and from the local and surrounding community hospitals. On average, the airport sees about one medical transportation flight every day at the airport, with Sanford Health once conducting 356 medical operations out of Huron Regional Airport in one year.

Despite the incredible GA activity at the airport, Larry is working hard to reinstate air service for Huron and the surrounding communities. Huron has a unique history as one of the premier airports in the state. Until 2016, the airport had air service dating back to 1926, ten or so years before Sioux Falls Regional Airport. Huron has notable aviation facilities, including the third largest runway in South Dakota, along with the largest GA hangar in the state. Larry is committed to supporting the aviation community by making it an absolute priority to always be open; he remarked that Huron has often been the first airport open after a big snow and pilots have opted to land there over surrounding commercial service airports because the pilots can trust the runway is safe and clear for landing.

There's recently been a change in ownership of the airport's FBO and the new owner (formerly of Skyways) is bringing an ambitious vision to the Huron Regional Airport, under the Fly Jet Center subsidiary of Jet 60. Jet 60 is a national maintenance and charter service that is settling into the Huron Regional Airport and hoping to establish a state-of-the-art, one-stop maintenance center for everyone, serving aircraft from small Lear Jets to Airbus 300s. Establishing this maintenance center will put Huron on the map in far reaching ways, further advancing the self-sufficiency of the airport. Not only is the new FBO working diligently to improve the capabilities and services at Huron Regional Airport, but they are

working with the Chamber of Commerce and the local community to rally support for the airport. The FBO hosts fly-in events open to the public as a way to demonstrate the value of the airport to the community, particularly by demonstrating its positive economic impact and future opportunities. Larry understands the importance of building a strong and positive rapport with airport users and community members and is optimistic that the new FBO ownership will provide just that. He is looking forward to the growth occurring at Huron Regional Airport and is optimistic for the continued success of the airport.

H.6. Closing the Gap on Rural Healthcare Takes a Team

South Dakota's air ambulance programs are an essential component to emergency health care that is available to residents across the state. Every second counts when life-threatening health circumstances occur, and the rapid and reliable response of these air ambulance pilots make sure no minute is wasted. These pilots and support staff are always at the ready for an emergency call that could take them half way across the state at a moment notice; not being prepared is not an option. The patients in need come from all different walks of life, but one thing is always for certain, their needs are emergent.

In a rural state like South Dakota it is possible that a resident's local hospital will not be equipped to manage emergent health needs from certain traumas like severe burns, cardiac emergencies, obstetric and neonatal emergencies, and more. In these instances, medical transport pilots are dispatched with trained medical staff to the local airport to meet the ground ambulance, where medical teams work quickly to load the patient into the aircraft so that the pilot can safely and efficiently transport them to one of the larger facilities in South Dakota or another nearby state.

Medical emergencies occur at any given time and as such, pilots are often faced with flying in adverse weather conditions. Sometimes, they must operate at airports without weather reporting equipment on site. When this happens, pilots must reach someone locally to inquire about runway conditions. Their first attempt is usually to contact an airport manager, but with many airport management positions being voluntarily or a subset to a full-time local government position, there are many instances when the airport manager cannot be reached. The pilots must then reach out to local law enforcement to dispatch an officer to the airport to assess and report the weather conditions at the airport. While this system isn't ideal, it is often the only way for pilots to get the information they need about the condition of the runway. It is often a community effort to ensure the safe takeoff and landing of these emergency medical flights.

This teamwork was evident in one such incident where a medical pilot made a call to local law enforcement to inquire about the weather conditions at an airport. The pilot was advised there was about one inch of snow on the runway and the pilot felt confident he could make the landing. While his landing occurred without incident, the weather was worse than originally reported and the snow built up quickly to more than five inches. In order for the aircraft to depart safely and quickly, the airport manager responded to the scene and plowed the runway enough for the pilot to safely execute the take off with the patient.

Managing less than ideal weather conditions in a time of need is just one of the challenges faced by the brave medical pilots who work to keep South Dakotans safe. Having partners in communities across the state to support these critical missions is vital for pilots, medical teams, and patients who rely on these life saving operations.

H.7. Relying on Aviation to Save a Life

Monna Von Lint is the Financial Officer for the City of Philip and is dedicated to creating a community that provides services for all its residents. One of the more critical services for residents of Philip is the Philip Municipal Airport, which provides economic benefits, supports local farmers, and provides lifesaving emergency medical transport. Monna not only has a professional understanding but also a personal understanding of how important the Philip Municipal Airport is to her and her community.

On October 13th, 2013 Monna started her Sunday like any other Sunday, except she had some minor complaints about feeling a little tired. She attributed it to her long week of work and travelling so went about the rest of her morning. She enjoyed her morning at church and headed home after the service. It was not too long after arriving home that her husband heard a noise from downstairs. He rushed to the top of the steps to see Monna writhing in pain on the floor, speechless, and clutching her head. Her husband assessed the situation quickly as an emergency and rushed her to the local hospital. The doctors at the hospital diagnosed her with a burst brain aneurysm and worked quickly to get her stable. This serious, and potentially fatal, medical emergency can happen suddenly and progress quickly. The hospital did not have an in-house neurosurgeon but worked diligently to find a nearby hospital that could assist with Monna's emergent and life-threatening condition. It was decided she would be flown to a hospital in Sioux Falls where she could receive the medical attention she desperately needed. Monna and her husband were taken by ambulance three miles from the hospital to Philip Municipal Airport where the medical pilots quickly loaded her into the fixed-wing medical aircraft and began their 270-mile journey to Sioux Falls. Once at Sioux Falls, Monna was taken inside, and doctors worked to ensure her condition was still stable, only to learn that Sioux Falls was unable to complete the necessary procedures for Monna as they were short-staffed. Doctors and pilots needed to find another solution for Monna, and she was again transported by fixed-wing aircraft to the University of Minnesota Medical Center in Minneapolis. By the time Monna arrived in Minneapolis it was Monday morning and she was rushed into surgery. Once Monna made it through surgery, doctors were still unsure about what her condition and quality of life would be post-surgery, leaving her loved ones to wait. After some time, Monna made a full recovery.

Six years later, Monna still works diligently for her community and understands more than ever the importance of medical transportation services at rural airports. Monna says she was a supporter of the airport before her medical emergency and continues to rally behind the airport because she sees it's potential to not only save lives but boost economic opportunities and support the agricultural industry in her community. Monna is proud of the Philip Municipal Airport, saying it's the best airport in the region because of its central location and services available for pilots. Monna keeps a guestbook at the airport so that she can track pilots and visitors' experiences there. She loves reading all the comments – both positive and negative – because it helps her know what is working, and what needs improvement. Monna uses the guestbook to address needs at the airport and to demonstrate the importance of the Philip Municipal Airport to the community.

H.8. Advancing Aviation Through Education, Management, and Service

Morris Riggin wears many hats to support aviation in South Dakota. Not only is he the Madison Municipal Airport manager, he is the owner of the Riggin Flight Service (the FBO at Madison Municipal Airport), and a Federal Aviation Administration (FAA) examiner. Morris' family has a rich history in aviation, which inspired him to follow in the family footsteps and pursue a career in aviation. His great uncle served as a fighter pilot in World War I and his father served as a flight instructor for World War II. When his father returned home from the war, he began a flight service. Morris is proud of his family's heritage and has carried it forward, owning an FBO of his own, with his son, William, working alongside him. Morris moved his FBO business to Madison Municipal Airport and eventually became the manager of the airport.

As the FAA examiner at the flight school based at the airport, he accompanies student pilots as they take their practical piloting exam. Morris goes above and beyond to make sure the student pilots feel comfortable on the day of and during the test, but he says it is understandable that the students get nervous – certainly more so than taking a driver's exam. The flight school at Madison Municipal Airport attracts student pilots from all over the world. Morris began a tradition at the school where new students would place a pin on a map of where they came from, and every continent except Africa and Antarctica is represented on that map today. He says people come from all over the world to fly in South Dakota, and at Madison Municipal Airport, because there is nowhere else better to learn. South Dakota has four distinct seasons, and sometimes they all happen in one day, so students who train in South Dakota are well rounded pilots who are prepared for any type of weather condition. Morris says the most rewarding aspect of his career is getting to watch students progress through their flight training and become licensed pilots. When they begin, the students don't know how to turn the aircraft on, and within a matter of months, their hard work and dedication pays off.

The benefits of aviation to the business community and the public is far reaching. Morris says it is no coincidence that a municipality with manufacturing, or other large-scale industry, is also going to have an airport nearby. He sees the correlation between the aviation industry and economic development and the value that commercial service and GA airports bring to communities. At Madison specifically, Morris has seen jet traffic increase as more businesses use the airport – he credits their cheap fuel, low fees, and friendly smiles. He says one of the most important things about his job is being friendly and approachable; working in the aviation industry is all about relating to the public, and making people feel welcome.

Morris has dedicated his career to aviation in South Dakota, continuing to work hard and learn new skills. Morris is currently training for his helicopter pilot's license and says it has been an absolute joy. He has not only enjoyed learning the new aircraft, but also enjoys visiting different airports and seeing how things are done elsewhere. He enjoys interacting with other airport staff, realizing how much of a difference a warm welcome at an airport can make.