A tragedy within : An evaluation of the legal realities concerning the Wichita State football team crash of October 2, 1970

A Tragedy Within: An Evaluation of the Legal Realities Concerning the Wichita State Football Team Crash of October 2, 1970.

by

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A TRAGEDY WITHIN: AN EVALUATION OF THE LEGAL REALITIES CONCERNING THE WICHITA STATE FOOTBALL TEAM CRASH OF OCTOBER 2, 1970.

BY

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B.A. HISTORY, UNIVERSITY OF GEORGIA, 1993

Submitted to the Department of History
and the faculty of the Graduate School of
Wichita State University in partial fulfillment of
the requirements for the degree of
Master of Arts

December 2001

A Tragedy Within: An Evaluation of the Legal Realities Concerning the Wichita State Football Team Crash of October 2, 1970.

I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Masters of Arts with a major in History.

Dr. H. Craig Miner, Committee Chair

We have read this thesis
and recommend its acceptance:

Dr. Judith R. Johnson, Committee Member

Michael T. Kelly, Committee Member

DEDICATION

To Mary Ann and Alexander
Thank you for your patience and support

Acknowledgements

I would like to thank Dr. Craig Miner, Dr. Judith Johnson, and Mike Kelly for their guidance and assistance in this work. I am especially grateful to my wife, Mary Ann, for her patience and continued understanding throughout this endeavor. I am greatly indebted to Ronald Skipper for his assistance in understanding the events of the crash plus his point of view regarding all the events that encompassed this work. I would also like to thank the following individuals for their help with my research: Danette Adamson of the California State Polytechnic University Library Special Collections, Lisle Brown of the Marshall University, Marron Library Special Collections, Dorothy Harmon, former executive secretary for the athletic department, Wichita State University, Roger Lowe, Wichita State University vice president of administration and finance. Finally I would like to thank Mary Nelson and all the staff of the Wichita State University Special Collections for their assistance.

Abstract

This thesis attempts to evaluate the National Transportation Safety Board (NTSB) hearing held in regard to the Wichita State football team crash of October 2, 1970. From the exterior, it appeared like a normal investigative hearing in any crash, but a closer analysis displayed hidden agendas. It is these agendas that drove the hearing in the direction it went and in the safety board's final conclusions regarding the crash. This thesis looks at the evidence presented and attempts to evaluate whether the arguments of the interested parties were valid or not. In the end, the NTSB came out with its final report regarding the crash. In it the pilots of Golden Eagle were blamed for the crash, but the Federal Aviation Administration and the National Transportation Safety Board, in their rush to judgment, overlooked or ignored important information that could have led to different conclusions regarding the crash.

The research for this work included the National Transportation Safety Board's final report concerning the crash, newspaper clippings, the audiotapes from the hearing itself, and interviews with persons who had direct contact with the hearing. This research material was used in an attempt to build the true story of what happened regarding the crash and the hearing held to find its cause.

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Introduction

There is an aircraft crash site about forty miles west of Denver, Colorado, just east of the Loveland Ski area and the Eisenhower Tunnel. This crash site is above I-70 on the north side of the highway. It sits on public land in the Arapahoe National Forest. Just past the mile marker 217, and off the westbound lanes of I-70, is a bronze plaque that memorializes this crash. The plaque lies flat on the side of Mount Trelease, near a small creek. The plaque's inscription states "AS TIME GOES BY, MEMORIES WILL FADE, BUT WE WILL NEVER FORGET...."[1] The crash site itself is near mile marker 216. There is an old construction road that goes off the westbound side of the highway to an area called Dry Gulch. If you follow the old construction road to a washed-out bulldozer trail that goes off on the left and heads up the mountain. The trail follows up a steep forty-five minute climb, and then enters a clearing near the tree line. The wreckage of the crash is still plainly visible. What is truly surprising about this scene is that after over thirty years the surrounding forest has yet to fill in the stark clearing created by the airplane crash. The site is more than 500 feet long and 350 feet wide and still littered with fallen evergreens and torn, twisted, and melted metal. Only a covering of fine green grass and the occasional clump of wild flowers grow on the rocky slope. The burnt-out swath on the side of this mountain displays the unhealed wound remaining from the crash.[2]

High on the mountainside, it appears the passage of over thirty years has brought little change to this area. It is as if time had stood still leaving a natural monument to those that died and a living reminder to those who were allowed to live on. What makes

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[1] *Wichita Eagle*, September 30 1990.

[2] Ibid

this crash site so different from the many thousands of crash sites around the world? Many would probably say "nothing" but they would not understand the events that took place to create this living memorial. The crash itself is a reminder of the loss of life. The site does not even begin to tell the story of how this all came to be.

On October 2, 1970, a Martin 404 aircraft was used to transport the Wichita State University football team from Wichita, Kansas to Logan, Utah for a football game. Following a refuel stop in Denver, Colorado, the flight proceeded via the Clear Creek Valley, toward Loveland Pass and the Loveland ski resort area. At approximately one o'clock, the aircraft crashed into the base of Mount Trelease, eight miles west of Silver Plume, Colorado. Of the forty persons on board, thirty, including the captain and a stewardess received fatal injuries. Two of the surviving passengers later succumbed to injuries received in the crash.

Not much had been written about this disaster, but what has been ,focused primarily on the description of the crash and the loss of life. There have been newspaper articles over the years that discussed the crash. Each year Wichita State University holds a memorial for the families and friends affected by the crash, and right around this time more stories regarding the crash and those who survived it are published. One aspect of the crash, which has not been analyzed, has been the legal realities regarding it.

Nineteen days after the crash, the National Transportation Safety Board (NTSB) held an investigative hearing into the causes of the crash. This hearing was purportedly "held solely for the purpose of discovering the facts, conditions and circumstances concerning the accident."[3] With pressure from the public and impending lawsuits, soon

[3] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita State University Football Team

the agendas of each of the responsible parties began to cloud this purpose. After this, the hearing took on the appearance of a witch-hunt, with the Federal Aviation Administration as the accuser and Golden Eagle Aviation as the "witch" on trial. Though the hearings were held on the campus of Wichita State, the university appeared from the onset to be the outsider, still trying to comprehend its predicament and to legally protect itself. The FAA used the testimony of the witnesses not only to blame Golden Eagle for the crash, but to also place all legal responsibility for the crash solely on that company. Golden Eagle could do little to put up a defense from the massive attacks of the FAA.

In the end, the NTSB came out with its final report and concluded that the pilots of Golden Eagle were to blame for the crash, but the Federal Aviation Administration and the National Transportation Safety Board, in their rush to judgment, overlooked or ignored important information that could have led to different conclusions.Did Golden Eagle truly bare sole responsibility for the crash? If not, what were the motives of the FAA? What did it have to achieve by focusing all responsibility of the crash on Golden Eagle? The answers to these questions demonstrate how the NTSB hearing of October 19, 1970 can be considered a tragedy within the tragedy of the crash itself.

To gain a better understanding of the Wichita State University football team crash and the investigation that ensued, the crash must be put in context with others crashes of its type. There have been three aircraft tragedies similar to the one Wichita State endured in 1970; the California State Polytechnic College football team crash of 1960, the Marshall University football team crash of 1970, and the Oklahoma University basketball team crash of 2001. Each had similarities and differences to the WSU football team

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Airplane Crash Collection, Special Collections, Ablah Library, Wichita State University, Wichita, Kansas. Box 5, file 1, tape 1

crash. Although each crash was different, each was investigated in a similar fashion, with the hope that each investigation would bring about changes in air safety regulations to ensure that these types of tragedies would not happen again. The first aircraft disaster of this type happened in 1960 and was one of the first aircraft crashes that resulted in the death of collegiate athletes being carried by charter service across country.

In 1960, on the evening of Saturday, October 29, 1960, an Artic-Pacific Airline plane with the California State Polytechnic College football team aboard crashed and burned during take-off at the Toledo, Ohio airport. The football team had been returning from an afternoon game with Bowling Green State University. The accident killed sixteen members of the football squad, the student manager as well as five other persons, including a member of the local citizens' booster club. Nineteen students and three staff members were injured. The Associated Student Body had contracted with the Air Charter Traffic Exchange for air transportation in a Curtiss C-46. This aircraft had been capable of carrying forty-five passengers, and crew, and forty pounds of baggage for each person.

The Artic-Pacific Airline was assigned by the Exchange to provide the plane. Both the Air Charter Traffic Exchange and the Artic-Pacific Airline were duly licensed by the Federal Aviation Agency. Many colleges and universities had used the Exchange for the transportation of their football teams. Prior to the crash, the airport had reported dense fog in the area, which only allowed for 500 feet visibility. The investigation later revealed later that the plane had been overloaded by 1000 pounds and that one of the engines of the twin-engine plane had been defective. Eventually the disaster became a catalyst for changes in FAA policy, especially in giving air traffic controllers, rather than

pilots of non-scheduled charter flights, the authority to authorize departures.[4] Ten years later and only a few months after the WSU crash, Marshall University suffered a similar tragedy.

On Nov. 14, 1970, after a football game with East Carolina, the Marshall University football team was preparing for its forty-minute trip back to the Tri-State Airport in Huntington, West Virginia. The team boarded the Southern Airways DC-9 in Greenville, N.C. It had been a rainy, windy, and foggy night, and none of the crewmembers had ever attempted a landing at the Tri-State Airport. This airport was located on a tabletop plateau close to the Kentucky-West Virginia-Ohio border. At 7:42 p.m., as the plane approached the airport, it struck the treetops of the Appalachian hillside just west of Runway 11, near Highway 75. With a full load of fuel, the aircraft somersaulted in a deep ravine and burst into flames. There were no survivors; in all seventy-five died, including thirty-seven members of the football team, twenty-five supporters, eight coaches and five crewmembers.

Among those lost in the crash were head coach Rick Tolley and athletic director Charles Kautz, four physicians, a city councilman, a state legislator, a car dealer and several prominent businessmen. The precise cause of the disaster may never be determined, but it is known that the plane descended under adverse conditions "below the minimum descent altitude during a non-precision approach." Federal authorities theorized that the most plausible reason for the premature descent of the plane was "improper use

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[4] *Summary Report of October 29th Air Crash at Toledo, Ohio*, January 28, 1961, Ahlberg Papers (MS 89-16), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas, box 7, folder 4.

of cockpit instrumentation or an altimetry error."[5] It took thirty-one years until another similar crash occurred, this time the tragedy struck the University of Oklahoma.

On January 27, 2001, the University of Oklahoma basketball team was returning from a game in Colorado. The school had chartered three aircraft to fly the team home, two corporate aircraft and a Beech craft King Air 200. At around 5:35 P.M., the King Air, crashed during a snowstorm after taking off from Jefferson County Airport, about forty miles east of Denver. Wreckage was strewn for about a quarter of a mile across a snowy field. All ten people aboard died. The FAA reported that the King Air 200 turboprop would have been "less prone to get above the weather" than the other two planes chartered by the team. The Beech Air was registered to North Bay Charter of Reno, Nev. The privately owned plane was one of three planes flying the team to and from Colorado. It has been implied that there might have been some electrical failure. The altimeter found in the wreck was stuck at a reading of 23,220 feet and the control tower also stated that they lost the aircrafts transponder signal right before the crash. Both of these indicate that there was a probable electrical failure on the aircraft but the NTSB report as of the writing of this work has yet to be released.[6]

These tragedies are linked in that each dealt with some type of charter system and involved the carriage of athletic teams. The difference in these events and the Wichita State crash was that in the three cases discussed, there was no scandal that followed the crash. In each case, the crash was investigated and recommendations were made to ensure that this type of disaster would not happen again. In the case of Wichita State, the

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[5] Lisle G. Brown, Curator, Special Collections, Marron Library, Marshall University, interview by David L. Johnson, E-mail correspondence, August 23, 2001.

[6] *Wichita Eagle*, January 29, 2001.

investigative hearing was held on the campus of Wichita State and was made open to the public. As will be demonstrated there appeared to be a specific agenda in how these hearings were held and the results that ensued. One of the focuses of the hearing was the charter agreement itself. It is important to understand exactly what the forces were that drove Wichita State to choose a charter service over a major airline. To understand this, one must understand the history of the Wichita State football program.

Chapter One

Development to Disaster

The history of Wichita State University's football team has been one filled with many events. Consistency is not a word that comes to mind when one thinks of Wichita State football, but it can not be said that Wichita State football did not leave its mark on collegiate football history. The sport of football came to Fairmount College, Wichita State University's predecessor, in 1896, one year after the school was founded. In that same year, an athletic association was organized, and run entirely by the students. The students were responsible for selling the tickets, contracting for the construction of fields, scheduling games, and hiring and fired the coaches.[7] In its first nine years, the Fairmount football team displayed a lackluster record. From 1896 to 1904, the team had won twenty-five games and lost twenty-one, with three ties. In 1904, Roy Kirk, the student manager of the football team coined the nickname of the team. He called them the "Wheat Shockers," since most members of the football team earned money for shocking wheat during the summer.[8]

In 1905, even though the experiment failed, the "Wheat-Shockers" went down in history as being the first team to play a night game in the Midwest. The Hydro-Carbon Company Lanterns provided by W.C. Coleman lighted the field. The lanterns were placed at ten-yard interval on the sidelines.[9] In the same year, Fairmount football was also a part of the first game in football history to ever record the first forward pass that

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[7] Craig Miner, *Uncloistered Halls* (Wichita: Wichita State University Endowment Ass., 1995) , 51-52

[8] Ibid.

[9] Ibid.

was ever thrown. Most people believed that the first forward pass was accomplished by St. Louis University or Wesley College during the 1906 season, but it had really been achieved one year earlier in a game between Fairmount and Washburn College. " The pass was a result of rule changes intending to open up the game of football and eliminate injuries."[10]

From 1905 to 1908, the Wheat-Shockers and head coach Willis Bates won a total of twenty-eight games. From the years 1930 through 1941, the Shockers won sixty-eight games with the help of their most successful football coach, Al Gebert, an ex-Notre Dame Quarterback, who played under Knute Rockne. In 1945, the Wheat-Shockers joined the Missouri Valley Conference (MVC). Three years later in 1948, the Shockers found themselves playing not one but two bowl games. On January 1, 1948, the Shockers played in the Raisin Bowl. They lost 26-14 to the College of the Pacific. On the 30th of December of the same year, the Shockers played in the Camelin Bowl, where they lost 49-9 to Hardin-Simmons. The Shockers did not find themselves in another bowl game until 1961, when they played in the Sun Bowl. The Shockers lost that game to Villanova 17 - 9. From that point on, the Shockers had few winning season until the program was eventually dropped in 1986[11].

When discussing the history of the Wichita State football program the word "success" should not be taken metaphorically. There were few winnings seasons, and the school never produced more than fifty National Football League caliber players and those

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[10] Bliss, Isely, "I saw the first Forward Pass", *This Week: The National Sunday Magazine*, October 7, 1956, 43, 45.

[11] *Wichita Eagle*, December 3, 1986

that were drafted or picked up, never stayed more than a few years.[12] There were those coaches who came through Wichita State in their early career and went on to have great coaching careers. In 1960, Bill Parcells, who is best known as the head coach of the New York Giants, New England Patriots, and the New York Jets, was recruited to play offensive end for the Wichita State Shockers under coach Hank Foldberg. Parcells was on the 1961 team that went to the Shockers last bowl game. In 1965, he returned to the school as a defensive line coach, and coached at WSU from 1965 to 1967.[13] Another coach at WSU was the famed Jimmy Johnson, head coach of the National Champion Miami Hurricanes and the Super Bowl Champion Dallas Cowboys. Johnson was a defense coach at WSU in 1967.[14]

The record of the Shockers' football program cannot be construed as successful. Even with this lack of success, the program endured, the hope never failing that right around the corner, the program would hit the right combination of strategy, coaching and players to make a successful and prominent program. The main problem with the program prior to the 1968 football season can be best summed up in one word, inconsistency. The program continually searched for consistency; consistency in coaching staffs, players, fans and most of all victories. In May of 1968, the school hoped all this would change when Albert C. "Bert" Katzenmeyer became Wichita State's athletic director. Katzenmeyer had spent twenty-one years at the University of Michigan as administrative assistant to H.O. "Fritz" Crisler. He had hoped to bring new life into the

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[12] Ibid., December, 26, 1986

[13] Ibid., January 18, 1987.

[14] Ibid., November, 7, 1997

athletic program. He was well thought of and he was viewed as a man with a strong business sense and daring foresight. He was well known for his fundraising ability and envisioned making Wichita State's athletics program a national powerhouse.[15]

Katzenmeyer had hoped to build a athletic program for winning; he had started this with improved facilities for the football and track teams. His first step had been to expand the football stadium; the second was to bring in a new football coach, Ben Wilson. Katzenmeyer thought that by hiring Wilson, he could begin a great "athletic family."[16] In spite of all his abilities, Mr. Katzenmeyer had one major obstacle, money. The athletic department did not have a lot of money. Intercollegiate athletic activities were not supported by state appropriations. Therefore, a separate, independent, non-profit Wichita State University Physical Education Corporation (WSU/PEC) had been organized to manage Wichita State's intercollegiate athletic programs.[17] Most of the money the athletic department received was from fundraisers, alumni and the proceeds from the sporting events. That meant there was no large budget for Katzenmeyer to fund his dreams. He had to balance his dreams of making Wichita State a powerful athletic program with the limited budget he had inherited.

The first steps toward the tragedy in Colorado came in 1969, when Bert Katzenmeyer began looking for a new travel option for his athletic teams. His primary goal was to get a means of travel for the football teams away games during the 1970

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[15] 1970 Wichita State University Football Guide, Wichita State football team file 05-07-00-02, University Archives. Special Collections, Ablah Library, Wichita State University, Wichita, Kansas, 4

[16] Ibid., 4

[17] NTSB Aircraft Accident Report, report number- NTSB-AAR-71-4, December 24, 1970, Wichita State University Football Team Airplane Crash Collection (MS 87-11), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas. 25

football season. The main obstacles he faced were a limited budget and the fact that most scheduled air carriers were expensive and did not accommodate the needs of universities. Katzenmeyer had difficulties in arranging satisfactory contracts with scheduled air carriers for charter service. These difficulties related to the cost, commitments to cover all games, and the inability to schedule departures that would have permitted the football team to practice prior to their games.

Katzenmeyer's dilemma was directly linked to the fact that most scheduled, regional airlines had begun operating large, expensive, jet airliners. For economic reasons, these airlines could no longer service many small towns and cities, nor could they afford to provide the occasional charter service. Those few airlines that still offered the service offered it as an extremely high rate and the flights were scheduled based on the airlines needs, not the universities.

It is at this time that Katzenmeyer and his staff began taking bids for a charter service contract to take the football team to all away games for the 1970 season, for a total of six games. The athletic department received bids from Four Winds Travel Club, Golden Eagle Aviation Inc, and two other charter companies. In the end, on the basis of the bids received, the contract for charter service was awarded to Golden Eagle Aviation Corporation.[18] There were advantages to this charter contract in that it allowed the football team to arrive and depart all away games as they wished. It also saved the athletic department money, but it came with one main drawback.

The contract with Golden Eagle was a service contract. It provided for the crew, fuel, catering, and other services, but it did not provide for an aircraft. Golden Eagle

[18] Ibid., 27

offered to act as Wichita State's aviation consultant and promised to find and arrange for them to lease the best aircraft available. This understanding called for Wichita State to sign two separate contracts, the first, a service contract with Golden Eagle, and the second, a dry lease for an aircraft from a separate company. Golden Eagle referred Wichita State to the Jack Richards Aircraft Company. Katzenmeyer signed a lease with Jack Richards to provide Wichita State with a DC-6 for all the away games.

This arrangement was somewhat complicated, but the advantages the contract offered outweighed any of the possible negatives. The combined cost of the lease and the service plan was much less than the athletic department was accustomed to paying regular airlines for team transport. It also had the additional convenience of dictating the aircraft's schedule. According to Ron Skipper, Chief operating officer of Golden Eagle, Mr. Katzenmeyer had only one stipulation. He preferred that the dry lease and service contract be paid with one check.[19] Golden Eagle offered to be the conduit for payment of the lease cost and other cost incurred by the leased plane. This was requested to simplify bookkeeping. Golden Eagle invoiced Wichita State for the total cost of both the aircraft lease and the service contract, then turned around and paid for the aircraft lease to Jack Richards. With this agreed upon, the contract was set and Wichita State had charter service for all its away games for the 1970 football season. Unfortunately this agreement would come back to haunt all those involved.

Before continuing, it is important to understand who exactly Golden Eagle Aviation Inc. was. After the crash, Golden Eagle was referred to by many as a rag tag, fly by night organization. Wichita State was given much bad press for dealing with them.

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[19] Ronald Skipper, Interview by David L. Johnson, Phone Interview, Wichita, Ks., 15 September 2001

The FAA administrator, John Shafer pronounced, even before the investigation had begun, that Golden Eagle's separate crew and plane arrangements were merely a façade to evade FAA regulations.[20] Were these accusations a true depiction of Golden Eagle? Throughout the investigation, the FAA attempted to portray Golden Eagle in this light, but as will be demonstrated, it was far from the true portrait of this company.

The core of Golden Eagle consisted of three men, Ronald Skipper, Bruce Danielson, and Jack Kennedy. The three men had met in 1967 while flying DC-6's for Saturn Airways. Saturn Airways operated a DC-6 fleet that transported cargo to military installations throughout the United States. All three men had been based in Oklahoma City, Oklahoma. In 1968, one year after these men had started flying for the company; Saturn Airways yielded to Air Force pressure and ordered a fleet of new Lockheed L-382 (C-130) aircraft. While waiting for the new fleet, Saturn parked its DC-6 fleet and furloughed all their DC-6 pilots. Skipper, Danielson, and Kennedy began flying for firms, which leased or owned aircraft, but had no pilots.

Within a year of the three men being furloughed by Saturn Airways, Kennedy and Danielson approached Skipper with the idea of trying to win a United States Post Office contract to provide overnight airmail service. The contract would have called for them to provide overnight airmail service between small cities and large postal centers. The research for the bid took many months and a lot of money. While waiting for the postal bid to be finalized, the men decided to offer out their services as pilots in and around

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[20] *Wichita Eagle*, 21 October, 1970,

Oklahoma City. The three continued flying as individuals for other firms while spending fourteen hour days doing homework and preparing bids on the air mail contract[21]

The three men knew there was a need for charter service in and out of small towns. They decided if they could organize, they would be able to offer some passenger service as well as fly the airmail routes. They had noticed that university athletic teams were finding it ever more difficult to find affordable air transportation. Skipper, Danielson, and Kennedy proposed acting as consultants, arranging for schools to lease suitable, older aircraft. They also would undertake a separate contract, to provide crews, fuel and all the necessary services.

Jack Kennedy and Bruce Danielson had flown the Wichita State University basketball team the year before with leased aircraft from the Four Winds Travel Club. They knew that Katzenmeyer was searching for an airplane to transport the basketball team for their 1969 season. The men believed that if they could get a DC-3, it would be ideal for the team's use. The men came up with details of a service contract, then called Bert Katzenmeyer, athletic director of Wichita State, and made an appointment with him to discuss their proposition. Skipper borrowed a DC-3 from a friend and the three men flew to Wichita.

It was during the trip to Wichita that the three men came up with their company name. They decided to call themselves Golden Eagle Aviation. If the officials at Wichita State showed enough interest to make it worthwhile, the men of Golden Eagle planned to incorporate upon returning to Oklahoma. According to Ron Skipper,

> Several officials from WSU met us at the airport in Wichita to inspect the airplane. The officials approved of everything, so we drove to WSU.

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[21] Ibid., 19 October 1970

> There, we explained our proposal to the athletic director, Mr. Katzenmeyer, and his staff. We offered to act as Wichita State's aviation consultants. We also offered to find and arrange for them to lease the best airplane available.[22]

In addition to leasing an aircraft, Wichita State would sign a separate service contract with Golden Eagle for crew, fuel, catering, and other services. Ronald Skipper stated, "Katzenmeyer agreed to the terms but requested that Wichita State pay for all air transportation with one check."[23] Golden Eagle was to invoice the university for the total cost of both the airplane lease and the service contract. Skipper stated

> With the understanding that they would receive leases and separate contract documents later; everyone shook hands. Then without our asking and to our surprise, Mr. Katzenmeyer handed us a payment in the form of a check for $10,000.[24]

With that check, Golden Eagle Aviation was now in business. When the three men returned to Oklahoma, they retained the services of a law firm and began the task of incorporating.

Golden Eagle Aviation was incorporated on November 26, 1969. The Corporation consisted of Ronald Skipper, President and Chief Operating Officer, Bruce Danielson, Secretary/Treasurer, and Jack Kennedy, Vice President of Operations. As Golden Eagle became more widely known in the academic and aviation communities, others called for

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[22] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 4.

[23] Ibid., 5.

[24] Ibid., 5.

its service. Golden Eagle arranged leases for a wide variety of companies and separately signed service contracts with them. During a truck strike, Golden Eagle transported more than three quarters of a million pounds of critical cargo for the Western Electric Company. It provided crews and service for "Dare to be Great." Flying leased aircraft, Golden Eagle flew people into Reno, Nevada from all over the western United States. Golden Eagle also did the same for the rock band, Crosby, Stills, Nash, and Young on their first national tour.[25] Golden Eagle used a DC-6 and a C-47, leased from Jack Richards, to transport the band and it's equipment on the tour.

Golden Eagle acted as a consultant to organizations that needed operation manuals, and it secured certificates of operation for several flying clubs. It brokered the sale of aircraft. If customers desired to lease an aircraft, Golden Eagle would get them in touch with someone who could offer them a lease, such Jack Richards Aviation Company. In each case, Golden Eagle provided crews, paid for fuel and other services, and presented lessees with a single invoice to cover the customer's air transportation cost. Skipper stated, "This activity brought the cash flow that enabled us to pursue airmail contracts, and it also provided a badly needed service in a niche that was not being offered by others."[26]

Golden Eagle became a force to be reckoned with in the aviation community by the summer of 1970. People called from far and wide, proposing that Golden Eagle provide various services, all proposals having to do with large or small aircraft. Skipper stated,

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[25] Ibid. 14

[26] Ibid.

> While every other aviation enterprise in the country was losing money, we were thriving. We had quickly built a profitable, blossoming niche business. The check WSU gave us jumpstarted our business and allowed us to continue to grow.[27]

Within the first year of business, Golden Eagle purchased a local air academy with twenty small aircraft, mostly two-seat trainers. The academy also had a handful of larger single and twin-engine planes as well. This acquisition helped Golden Eagle with it's future plans of starting a pilot training school.

Golden Eagle was awarded the airmail contract, however it's airmail delivery operation did not get off the ground until September 2, 1970, until federal agencies completed investigations into the firm's background. "Being the new kid on the block, the federal government took a hard look into the firms background." Skipper stated, " The big boys didn't want us to have this business. We beat the two biggest carriers by hundredths of a cent...."[28] In the end, the federal government approved Golden Eagle's airmail operation. Financial institutions provided the funds for nine additional airplanes to be used in the airmail operations. The airmail operation covered nineteen cites in six states. Golden Eagle also began preparing to go into the daytime freight delivery service and pilot training.

By September 1970, Golden Eagle had approximately a hundred pilots, maintenance, and staff employees. More than fifty of the employees were associated with the airmail operation and the remainder with service contracts on large aircraft. Growth over the previous months had been phenomenal and its future looked bright. Golden

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[27] Ibid.

[28] Ibid.

Eagle was flying more than fifty aircraft, large and small. The company owned nine small twin-engine Beech aircraft. It provided crews and other operational services for a number of large aircraft that were owned or leased by several customers. Golden Eagle had a large hanger at Will Roger Airport, Oklahoma. The hanger also contained shops and offices. Golden Eagle also had facilities for a training school at Wily Post Airport. The future was looking very good for Golden Eagle, when Wichita State University entered the picture again.

Earlier in 1970, before Golden Eagle had received the airmail contract, Bruce Danielson had put in a bid to fly the Wichita State football team to all the away games for the 1970 season. Golden Eagle had won the bid, and now it was time to start preparing for the flights. The details were the same as to the ones Golden Eagle had made with Wichita State the previous year. Skipper stated, " Our plates were full, but unfortunately, we had committed ourselves and despite the fact that it would cost us both precious time and money, we owed much of our success to them."[29]With that, the destiny of Golden Eagle and the Wichita State football team was set on a path of devastation that each would soon have to come to terms with.

[29] Ibid.

Chapter Two

Tragedy upon Mount Trelease: The Crash and Investigation

On the morning of October 2, 1970, the crews of both N470M and N464M were busy preparing for the flight to Wichita to pick up the Wichita State University football team and ferry them to Logan, Utah for a football game against Utah State University. Golden Eagle Aviation Inc. per contract was to provide the crews for the flights. The crews for aircraft N464M were Danny Crocker, pilot, and Ronald Skipper, co-pilot. The crews for N470M were Leland Everett, pilot, and Ralph Hill, co-pilot. The co-pilot of N470M, Ralph Hill, accomplished flight planning for the entire trip and Leland Everett reviewed and gave final approval to the flight plan. There was good weather for the entire flight so Hill's flight plan provided for a direct heading from Oklahoma City, Oklahoma to Wichita, Kansas, and from Wichita to Denver, Colorado under visual flight rules (VFR).[30] Once in Denver, both aircraft were to stop for fuel and catering service.[31]

Upon leaving Denver, Hill proposed a route that would provide both aircraft a flight plan parallel to the mountainside ranges in Colorado. This would have allowed ample time for both aircraft to reach a safe en-route altitude prior to turning westward over the mountains in Colorado toward its final destination of Logan Utah. Once Leland approved the flight plan, he gave it to the co-pilot of N464M, Ronald Skipper. Supplies were loaded and the pre-flights were accomplished, both aircraft were ferried to Wichita

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[30] See appendix D for explanations of VFR and IFR.

[31] The story of the flight and crash is a derived from the *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 3-16 and testimony of witnesses given during the hearing, which can be found on the audio tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita State University Football Team Airplane Crash Collection, box 5, file 1, tapes 1 through 10.

Kansas. At approximately 8:00 in the morning, both aircraft arrived in Wichita. Soon after the arrival of the aircraft, the Wichita State football team assembled by the aircraft, and the football gear and supplies were loaded. It is at this time that the aircraft were assigned nicknames for the team. N470M was named the "black" plane and N464M the "gold" plane. The designation was used to determine into which aircraft the players would be loaded. The "gold" plane was assigned for the starting football players. Along with them flew the athletic director, head coach, certain staff members, their family, and specified "friends of the university." The "black" plane carried all of the other football players, coaches and staff.

At 9:00 A.M. the "black" plane, N470M, departed Wichita with thirty-five passengers and a crew of three. Soon after this, the "gold" plane, N464M, departed with thirty-six passengers, a regular crew of three, and a friend of the crew who was serving as an additional flight attendant. The flight-plan called for both aircraft to stop at Stapleton International Airport in Denver, Colorado. En-route to Denver, the co-pilot of N464M, while visiting passengers in the cabin, advised them that the flight from Denver to Logan would take a scenic route and that the he would point out to the passengers significant points of interest, such as ski resorts and such. The planned layover in Denver for both planes was approximately ten minutes for fuel and catered meals.

As it turned out, both aircraft were delayed approximately forty-five minutes. Both aircraft had been serviced with fuel and oil, but the gold plane had required minor maintenance on the main landing gear shock struts. While on the ground the co-pilot of the "gold" plane, Ron Skipper, went into the terminal to deal with business. While there, he purchased some aeronautical sectional charts. Skipper advised the crew of the "black" plane of the change in the "gold" plane's route. Skipper informed Captain Everett and

another passenger that they were planning to deviate from the original flight plan and were going to head out via Loveland Pass. Everett informed Skipper that the "black" plane would continue on the proposed flight-plan and would see them at Logan, Utah. On departure from Denver, N470M proceeded northbound according to the original flight plan. This was the last time the crew of the "black" plane, N470M would have contact with the "gold" plane, N464M. Subsequently N470M would land safely in Logan, Utah.

As the crew of the "gold" plane began to board, Ronald Skipper, the co-pilot, entered the aircraft and occupied the left seat or pilot's seat. He stated his reason was to log some flying hours in the Martin 404. With this, Captain Crocker occupied the right seat. With Skipper at the controls, Flight N464M departed Runway 35 from Stapleton International Airport at 12:35.

When the aircraft was approximately half a mile from the departure end of the runway, the crew of N464M received a radio call from air traffic control (ATC) from Stapleton. The air traffic controller questioned the crew on their low altitude.[32] He also remarked that he had observed black smoke coming from the right engine and asked if they were having any problems. The crew of N464M responded that they were having no problems and that the smoke was from the engines running rich and that they were fine. The Stapleton control was satisfied by their response and dropped the issue. In fact this was the last communication contact anyone ever had with flight N464M[33]. The same

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[32] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 4

[33] It must be remembered that while flying VFR, ATC does not have to be in contact with the crew so the lack of communication between ATC was normal, see Appendix C for VFR Rules.

Stapleton air traffic controller stated later during the investigation that he observed the aircraft for around four miles and it appeared to stay on a northerly heading.

Flight N464M proceeded north until it intercepted the airway between Denver and Kremmling, Colorado. At this point the aircraft was turned west. Once on the westerly airway, Captain Crocker began to give flight directions. Flight N464M was turned slightly south off its westerly airway to allow the aircraft to follow a valley. The aircraft then proceeded past Nevadaville and intercepted Clear Creek Valley in the vicinity of Idaho Springs, Colorado. Once in Clear Creek Valley, N464M proceeded along U.S. Highway 6, on a heading that would take them by Georgetown and Silver Plume, Colorado heading toward Loveland Pass.

Skipper testified that while in Loveland pass, in the vicinity of Dry Gulch, "it began to look to me that we were not going to have clearance, sufficient clearance, over what I now know to be the Continental divide ahead of us. I said something to the affect to Captain Crocker that maybe we should reverse course and gain some altitude."[34] Skipper stated, " We were slightly to the left side of the valley."[35] Skipper then initiated a right turn of approximate forty-five degrees change in heading, a somewhat medium bank between twenty and thirty degrees and was rolling out of the turn when Captain Crocker all of a sudden yelled; "I've got the airplane."[36] Crocker then initiated a sharp left bank, soon after the aircraft began to vibrate, he then put the nose of the aircraft down, and shortly thereafter Flight N464M slammed into the side of Mount Trelease.

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[34] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 5

[35] Ibid.

[36] Ibid., 6

The aircraft first struck trees along the side of the mountain and then began descending down its slope. Flight N464M finally came to rest on the ground some 425 feet beyond the initial point of impact. Many pieces of the aircraft were torn off as it descended through the trees. The wings were ripped off at their attached points and the fuselage lay on its side with a gapping hole. It appeared the aircraft had been ripped right down the bulkhead. As the aircraft slid to a halt on the side of Mount Trelease, survivors of the crash began to slowly climb out. The fuselage was relatively intact, with a small hole on the right side and a large hole on the left. The hole just behind the right wing had a fallen tree lying against it that made a crude exit ramp to the ground.[37]

The right side of the cockpit had been ripped away, Captain Crocker, who had not been wearing his seatbelt, was thrown out through the side. His body lay in front of the aircraft on the needles of the forest floor; his neck had been broken. The force of the impact had thrown Skipper's hands into the instrument panel. There was no skin left on his knuckles. Blood pored out down into his eyes from gashes in his head. He had a terribly mangled nose where his face had hit the glare shield. His shoes had been knocked off by the impact. He had also fractured his leg. He slowly unbuckled his seatbelt and attempted to rise.[38]

As Mike Bruce and John Taylor[39] climbed out of the aircraft, Bruce realized that of all the survivors, he was in the best condition. He left Taylor behind with the others and headed down the mountain to get help. A pick- up truck came by and took him to a

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[37] *Wichita Eagle*, September 30 1990.

[38] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, authors copy, Wichita, Kansas, 16

[39] These men were members of the football team. See appendix G for a list of all the passengers aboard the "gold" plane.

construction site where he called for help.[40] As the rescuers were arriving, the survivors began their decent down the mountain. A rescuer on the scene related that he saw passengers on the floor in the forward section of the cabin. "They were moving but made no effort to extricate themselves."[41] He also noted that the seats in the aircraft resembled "broken furniture." The co-pilot, Ronald Skipper stated he had seen and talked to passengers lying in the forward baggage compartment through a partially open cockpit door, but the opening in the door was too small to reach them. He stated,

> I stood at a crack on the right side of the door between cockpit and cabin. Passengers pushed against the door, trying to come into the cockpit. They pushed the door the wrong way, closed, and I was helpless to make them understand that they must back away. I could not make them realize, in their panic, that the door opened towards them. I could touch one of them, through the crack, but I could not make them back up into the heat.[42]

It appears that high-octane fuel from the ruptured wing tanks came in contact with hot engine parts and had begun to burn. The burning fuel had begun to run and pool under the fuselage's left side, next to the tail of the aircraft. The fire was beginning to advance toward the front of the wrecked aircraft.

In the back of the plane, Bob Renner's legs had been pinned beneath seats and wreckage. Near him was Randy Kiesua, Dan Christian and Jack Vetter. Each was also trapped and could not get free. After freeing himself, Renner tried in vain to free his friends. After several attempts Renner could not free any of them. The plane was getting

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[40] *Wichita Eagle*, October 3, 1990.

[41] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 17

[42] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper",16

hotter and hotter; finally Jack Vetter looked at Renner and told him "Bobby, I'm burning, get out of here!"[43]

Tom Reeves, the team trainer, organized the survivors outside the plane and led them down the mountain in a group. There must have been some fire spreading throughout the airplane initially because several of the survivors had suffered burns. Most of the survivors had started down the mountainside by the time the planes nearly full fuel tanks finally exploded. " It seemed like we were halfway down the mountain when we heard two explosions, that was when the fire really started."[44] One of the rescuers related that he observed fire in the forward baggage area. "The rescuer, in an attempt to assist survivors, was about two steps inside the fuselage when an explosion occurred, and flames traveled aft into the cabin."[45]

In the end, Bob Renner left the aircraft. He left alone, without his friends. In fact, he was the last to leave the aircraft. He had attempted in vain to save his friends, and reluctantly left only minutes before the full fuel tanks exploded, engulfing the aircraft in flames. These flames burned until the aircraft became nothing but molten metal.

Skipper had left the aircraft through the missing cockpit side. He assisted in moving survivors away from the flames, and then checked on the body of Crocker. Afterwards, he made his way down the mountain barefooted and was picked up by a truck and taken to a hospital.

A construction worker who had been helping build the Eisenhower Tunnel on I-70 met John Hoheisel and a few of his teammates on the mountain side. The worker

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[43] *Wichita Eagle*, October 3, 1990.

[44] Ibid., September 30, 1990.

[45] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 17

offered to call for a helicopter, but Hoheisel and his teammates opted to slide down the mountainside instead. Hoheisel stated, "We slid down the mountain on our rear ends, we were moving pretty good down the mountain, we weren't feeling much pain until we got to the bottom."[46] Once reaching the bottom of the mountain, Tom Reeves only after ensuring that all the survivors had made it down the mountain, lost consciousness.[47]

All of the survivors were taken to a medical clinic near Silver Plume. After all was said and done, twenty-nine people had died at the scene of the crash. Two additional persons later succumbed due to complications. Eight football team players and the co-pilot had survived the crash and were placed in local hospitals. Among the dead were the athletic director, Bert Katzenmeyer and his wife; the head coach, Ben Wilson; the dean of admissions, Dr. Carl Fahrbach; the ticket manager, Floyd Farmer; State Representative Ray King and his wife; plus thirteen members of the Wichita State football team. While the injured survivors were taken to hospitals, the firefighters and rescuers tried in vain to put out the fire in hopes of finding more survivors. At the same time, the investigative teams began arriving on the scene. The next phase in this disaster was about to begin.

Shortly after the crash, the National Transportation Safety Board (NTSB) sent investigators to the scene of the accident to inspect the crash site.[48] By the time the investigation began the aircraft fires were out, the survivors were all in hospital care, and the deceased were in the process of being removed. Within days of the start of the

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[46] *Wichita Eagle*, October 1, 2000.

[47] Reeves remained unconscious for sixty hours until his death. He had sustained mortal injuries, but maintained his composure and sense of duty to the end. To get a better understanding of this man's heroic deed read the article titled "Crash Survivors Relate Story of Reeves' Heroism", in the October 4, 1970 issue of the *Wichita Eagle*

[48] See appendix B for a brief history of the NTSB.

investigation, the Federal Aviation Administration (FAA) began to clamp down on the Golden Eagle Aviation Corporation and accusations began to fly.[49] Soon afterwards the press began releasing information from the crash investigation and discussing the inter-relationships of all parties involved. It became apparent that this was not going to be a simple accident investigation when it was released that federal investigators had uncovered what had appeared to be a number of violations in the wake of the plane crash in the Colorado Rockies.[50]

Since the words "unworthiness" had been leaked out during the beginning stages of the NTSB investigation, the FAA had begun handing out a rash of fines, certification suspensions, and other enforcement acts against the people, and or companies involved in the crash. The Jack Richards Aircraft Company was fined $50,000 resulting from sixteen maintenance defects found on the second Martin 404, which had landed safely in Utah. Twenty-three additional aircraft owned by Richardson were grounded pending a more intense investigation into their airworthiness.[51] The FAA also suspended the air-taxi operator certificate of Golden Eagle. It claimed that the charter agreement with Wichita State to supply the crews was a "façade to duck air safety regulations."[52] No action had been taken towards the pilots who had piloted N464M, but the FAA had pulled Leland Everett's pilot certificate on the grounds that he had been flying with an out of date medical certificate. The Secretary of Transportation, John A. Volpe, also ordered a

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[49] See appendix A for a brief history of the FAA.

[50] Kansas City Associated Press release, October 6, 1970. Wichita State University Football Team Airplane Crash Collection (MS 87-11), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas, box 1, file 6.

[51] *Wichita Eagle*, October 21, 1970.

[52] *New York Times*, October 9, 1970

sweeping investigation of the air-charter industry and the methods by which the FAA regulated it. This investigation was aimed at only those companies that operated large aircraft[53] and were not established and reliable.[54] Basically the FAA had been having trouble determining which aviation companies were operating by the Federal Aviation Regulation (FAR) and which ones were not.

The problem for the FAA was that it was having trouble determining whether Golden Eagle had actually leased the two planes from Jack Richards or had only supplied the crews to fly the aircraft. If Golden Eagle had leased the two aircraft from Richards, it would have acted in the capacity of a full service charter company and in doing so would have violated the FAR because it was not licensed to operate large aircraft. The FAA was uncomfortable with this type of operation, but could not determine if the type of arrangement between Golden Eagle and Wichita State constituted a violation of the FARs.

Arthur Dunbar, FAA Investigator, stated that "the FAA was putting a lot of effort into this investigation to make sure this type of thing never happened again".[55] For the first few weeks, the FAA leaked information to the press concerning the accident investigation and information on those involved. Slowly all parties involved began to release press statements. The battle lines were being drawn.

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[53] The FAA defines a large aircraft as any aircraft that has a gross take off weight of 12,500 lbs. or more

[54] *New York Times*, October 27, 1970.

[55] "Kansas City Associated Press release", October 6, 1970. Wichita State University Football Team Airplane Crash Collection, box 1, file 6.

The Jack Richards Aircraft Company and Golden Eagle Corporation began to present their defense to the public. Jack Richards stated that he had "leased the airplanes to the university and the university had supplied its own crews."[56] He also leaked out that he had only acquired the titles to the two airplanes the day before the crash.[57] Golden Eagle had declared that it had only hired the aircrew. Golden Eagle also issued a press release that stated the crews who had flown the doomed aircraft had been "flying as individuals."[58] Bruce Danielson, Vice-President of Golden Eagle stated; "Both pilots were licensed as individual pilots to fly Martin 404 aircraft, although the firm was not."[59]

He stated that six flights had been contracted with Wichita State University for a total of $24,000, part of which was to go to the Jack Richards Aircraft Company. Danielson denied that Golden Eagle had leased the planes from the Richards's Company. He said that the contract dealings with Wichita State had been with former business manager Bob Kirkpatrick, Floyd Farmer, and the athletic director, Bert Katzenmeyer. All three of these men were now deceased. Danielson stated that Golden Eagle had acted as a consultant or employment agency in finding qualified pilots to fly planes; it was not authorized by FAA to lease planes.

Within the first two weeks of the crash, lawsuits totaling $4.9 billion had been filed against Golden Eagle, Jack Richards, and the Martin-Marietta Corporation. At this point in the investigation, there were many accusations, but no one had any real answers

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[56] Ibid.

[57] *Wichita Eagle*, October 7, 1970

[58] "UPI Press release", October 6, 1970, Wichita State University Football Team Airplane Crash Collection (MS 87-11), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas, box 1, file 6.

[59] Ibid.

to the important questions of how this had happened and how it could have been prevented.

The broad question the Federal Aviation Administration had to answer was how to prevent future tragedies like the Wichita State crash from ever happening again. After the crash, the FAA began proposing rule changes. One would have required that a university or other group, which leased a large aircraft from one source and hired a crew from another, were to be considered the operator of the aircraft and would be required to have an FAA certificate. This proposed rule would have regulated more strictly the leasing of large aircraft by educational institutions and similar groups. This proposal would have placed the educational institutions and similar groups under the Federal Aviation Regulation (FAR) Part 123 when acting as operator of a large aircraft.[60]

The proposal would have imposed operational and maintenance requirements that would be the same as those placed on air travel clubs. FAA administrator, John Shaffer stated,

> In particular, we are concerned about those situations in which an educational institution or other group may obtain a large aircraft under a dry lease (without crew) and obtain pilot services separately. Under such an arrangement, it is possible for such a group to become the operator of a large aircraft, not withstanding the fact that it has no experience in the operation of such aircraft. [61]

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[60] *Wichita Eagle*, November 5, 1970

[61] Ibid.

Most schools which charter large aircraft for athletic trips use certified supplemental air carriers, which also supply the crews, a process known as a "wet lease." A firm which only provides the aircraft is considered "dry leasing" the aircraft. In this instance, the FAA does not regulate a dry lease as it would an air carrier operation. The FAA had been concerned that certain firms could evade regulations as an air carrier by the device of providing crews through a separate firm. [62]

The heart of the crash investigation for the FAA was the question of who had operational control of the aircraft when it crashed. The Jack Richards Aircraft Company of Oklahoma City had owned the Martin 404. Golden Eagle Aviation Inc. of Oklahoma City had provided the crew. The FAA contended that Golden Eagle had been the operator of the plane. Its view was that the separate crew and plane arrangement had been merely a façade to evade FAA regulations for commercial operators.[63] Golden Eagle, as a firm, had not held the certifications to fly any plane as large as the Martin 404. Golden Eagle contended that Wichita State was the operator of the aircraft and that the crew was hired as individuals by the university.

FAA regulations had not placed any responsibility on the firm leasing out an aircraft, but with the crash, and the public interest piqued, the FAA slowly began moving in that direction. In 1970, prior to the NTSB hearings in Wichita, three firms, Business

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[62] National Transportation Safety Board, "Safety Enforcement Case EA-205, Golden Eagle, Inc. Respondent." *National Transportation Safety Board Decisions,* Washington D.C.: Government Printing Office, 1971, Goverment Stacks, Ablah Library, Wichita State University, Wichita, Kansas, 1029

[63] *Wichita Eagle*, October 21, 1970

Aircraft, Inc, Beech craft Sales and Charters, and Basler Flight services, Inc were charged with operating large aircraft for compensation or hire without proper certification.[64]

In one case, the University of Wisconsin football team was carried to a game in Iowa through arrangements with a firm in an airplane owned by the Jack Richards Aircraft Company. The FAA fined the firm $ 39,000 and placed $ 14,000 in liens against three other aircraft owned by this firm. Two of these planes were Martin 404s once owned by Jack Richards. During the hearing on this case, the government and the defendants agreed that all future lease agreements offered by the firm had to include a clause under which the group or institution leasing the aircraft expressly recognized it was assuming full responsibility for the aircraft operation.[65]

In other enforcement actions prior to the NTSB hearing, the FAA had levied a $4,000 civil penalty against Aire Internationale Inc. of Louisville, Kentucky. The penalty was levied because the company had operated a Martin 404 on four flights for compensation when it did not have a commercial operators certificate. The flights had carried the Murray State University football team between Paducah, Kentucky and Ottumwa, Iowa. The firm also received additional penalties because the pilot in command had not held the appropriate rating to fly a Martin 404.[66] Jack Richards's had formerly owned this Martin 404 aircraft as well. With these actions by the FAA coming soon after the crash, it was only too apparent that it was going to make Golden Eagle it's poster child for ensuring more strenuous changes were made to the FAR. Now it only needed a podium to sell its case to the public.

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[64] *Wichita Eagle*, November 5, 1970.

[65] Ibid.

[66] Ibid

On October 11, 1970, The FAA was given that podium. Mr. Edward E. Slattery, Jr., Information Chief for the NTSB, informed the nation on that date, that the NTSB would be holding a formal hearing. He went on to say that the hearing would be held in Wichita, Kansas on October 21, 1970 and would be open to the public. This hearing was to determine the cause of the Wichita State football team plane crash and determine if there was any wrongdoing.[67] Several important facts had already been released from members of the FAA investigation team. The Martin 404 that crashed had not been properly certified as air-worthy.[68] The engines had required an abnormal amount of oil at the refueling stop in Denver. The plane had been overloaded by as much as four thousand pounds. The charter service, Golden Eagle, had not been licensed to fly planes as large as the Martin 404 airframe. Golden Eagle had not even been authorized to do business in Kansas.[69] Not only would the cause of this crash be determined, but the outcome of the hearings itself would play a role in other events relating to the crash.

Golden Eagle was awaiting an appeal hearing of the FAA's revocation of its Part 135 Certificate.[70] Another matter that was pending the outcome of the hearing was the question of whether or not Wichita State had failed to obtain a proper licensed aircraft. If

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[67] "Kansas City Associated Press release", October 6, 1970. Wichita State University Football Team Airplane Crash Collection, box 1, file 6.

[68] As it turned out, the last inspection completed on N464M had not been signed off prior to the flight by a FAA certified mechanic in Dallas, Texas. The inspection had been completed, just not signed off

[69] "WIBW Editorial", # 281, October 11, 1970, Wichita State University Football Team Airplane Crash Collection (MS 87-11), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas, box 1, file 11.

[70] *Wichita Eagle*, October 25, 1970. See also *The Sunflower*, October 27, 1970, Wichita State University Football Team Airplane Crash Collection (MS 87-11), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas,, box 1, file 5.

this was proven to be true, it could have rendered invalid the NCAA life insurance policies ranging from $25,000 dollars per player to $250,000 dollars on the life of the athletic director.[71] The outcome of this hearing would also affect the outcome of the $4.9 billion in lawsuits still pending.

[71] *Wichita Beacon*, November 19, 1970, Wichita State University Football Team Airplane Crash Collection (MS 87-11), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas, box 1, file 11.

Chapter Three

The NTSB Hearing: Part One

On October 21, 1970, the NTSB began conducting a hearing on the Wichita State football team crash. The hearing was held at the Duerkson Fine Arts Center on the campus of Wichita State. On the first day alone, there were an estimated 230 people in attendance as mere observers. The hearing was originally cited to last three days, but was stretched out to four to accommodate the calling of more witnesses. The members of the NTSB board of inquiry consisted of retired Coast Guard Admiral Louis M. Thayer, chairman and member of the of the NTSB; Charles O. Miller, director of the NTSB bureau of aviation safety; Fritz L. Pulls, general council of the NTSB; and Thomas K. Mcdill, chief of the hearing and reports branch of the NTSB. In conjunction with the board of inquiry, there was a technical panel. The panel consisted of men of technical expertise who would be asking the questions.

The technical panel consisted of Richard G. Rodriquez air safety investigator; Russell Abbot, NTSB investigator in charge of the probe; Martyn B. Clarke, assistant chief of the central investigation division of the bureau of aviation safety; and Frank T. Taylor, chief of the air worthiness branch, central investigation division, bureau of aviation safety. Also invited were representatives of the of the major parties involved in the air crash: Wichita State, Golden Eagle Aviation, Inc, and Jack Richards Aircraft company. Wichita attorney Phillip Kassebaum represented Wichita State. He had been assigned as a special assistant attorney general. Also in attendance were Kansas politicians, State Representative Robert Woody, U.S. Senators James B. Pearson, and Robert (Bob) Dole. Each of these men looked to these hearings to help drive legislation to help ensure that this type of disaster never happened again.

The hearing opened at precisely nine a.m., Thayer, chairman of the board of inquiry read a prepared statement. In this statement, the ground rules for the inquiry were set.

> This hearing is being held solely for the purpose of discovering the facts; conditions and circumstances concerning the accident which will enable the board to determine the probable cause of such accidents and to ascertain those measures, which will best prevent similar accidents in the future.[72]

Thayer also emphasized, "this inquiry is not being held for the purpose of determining the rights or liabilities of private parties, and the board makes no attempt to do so."[73] In Thayer's statement he affirmed that "this is not a court, it's not a trial, we are not lawyers. We are a board of inquiry here to gather information, we are not here to assign blame."[74] The inquiry according to Thayer was to focus on the management, operations, airworthiness and regulatory controls associated with the accident. Under these procedures of the hearing, witnesses first would be questioned by the board's technical panel and then could be questioned by the spokesman from each of the concerned parties. Thayer stressed this was not a courtroom, so witnesses could be questioned not cross-examined.[75]

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[72] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 1. Also see *Wichita Eagle*, October 21, 1970

[73] Ibid

[74] Ibid

[75] *Wichita Eagle*, 21 October 1970

This statement set up the rules to be followed by the participants. It became apparent with the first few witnesses that these guidelines were weak and were totally ignored. What was supposed to be an inquiry into the crash turned into a circus. With all that was pending after the hearing, it was impossible to hold to these standards. Each of the parties knew this was their opportunity to state their case in public concerning the situation. After weeks of public attacks from each side and blame for the crash being tossed around, there was no way there could have been any other outcome other than to find fault with one of the companies involved. The hearing would find the guilty party and settle that question for once and for all. The battle lines were set among Jack Richards, Golden Eagle, Wichita State, and the FAA. The main question leading to the hearing was what had caused the crash: mechanical or pilot error? The NTSB alluded to its conclusions soon after the hearings got under way.

In the opening testimony of the NTSB hearings, Russell Abbott, the NTSB investigator in charge of the probe, stated that because of the short period since the accident and the hearing, much of the exhibit material had not yet been compiled. Abbott gave a brief account of the proceedings of the investigations. He stated:

> The National Transportation Safety Board received notification of the accident about 1330 on October 2, 1970. An investigation team departed from Washington, D.C. at 1930 that evening. It arrived at the crash site the following morning. Work groups were established for operations, witnesses, structures, systems, power plants, and human factors.[76]

[76] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 1.

Abbott confirmed that the on-scene investigation had lasted six days. The engines and propeller blades had been taken to Frontier Airlines facility in Denver, Colorado where power experts had broken them down for inspection. He emphasized that there was still no evidence of malfunction of either engine. Both engines had been turning and producing power at impact. He also stated that the crashed aircraft had been 3,265 lbs above its specified weight capability. During the stopover in Denver, the aircraft had also been filled with seven hundred and twenty-one gallons of fuel and had received twenty-four gallons of engine oil. The left landing gear strut was also serviced with air. Abbott stressed that up to that point that the investigation was still continuing.

Abbott appeared to set the tone for the rest of the hearing. From his statements, he implied that actions other than mechanical failure were to blame for the crash. Throughout the time since the crash, the main theory regarding its cause had been that the aircraft had somehow mechanically failed. Now in the opening minutes of the hearing, the chief investigator of the crash had invalidated this theory. This was a view opposite that of the co-pilot, Ronald Skipper, who had been flying the aircraft prior to it crashing. He had stressed throughout the investigation that the right engine had failed right before the crash had occurred.

After Abbott's testimony, three more witnesses were called. These witnesses were ground observers who had witnessed the aircraft flying through the valley shortly before it crashed. Each had a slightly differing view of the aircraft as it snaked its way through the valley. Each witness's testimony also appeared to differ a little. The NTSB panel hoped that each witness's account would reveal a better understanding of what had happened, or at least what appeared to have happened.

One of the witnesses called was Donald R. Eberle of Georgetown, Colorado. He observed the Martin 404 while on his roof doing repairs. His home was at an elevation of 8,500 feet. Eberle testified that the aircraft appeared to be 1,000 to 1,500 feet above ground at Georgetown and it appeared there was exhaust coming from the left engine.[77] He stated that the exhaust appeared to be like that which would come from a turbo-jet. Eberle, who had been a flight engineer and pilot for United Airlines, reiterated later under questioning by the FAA attorney, Charles Peters, that the exhaust could have been from a rich mixture of fuel. Eberle affirmed that the aircraft appeared to have had usual airspeed of an aircraft climbing, but that it was much lower than he would expected to have seen an airplane flying in that area. He declared " I thought it was someone viewing the area as the proposed site for the upcoming Olympics." [78]

Another witness, Jerry Meyer of Silver Plume, Colorado, observed the aircraft flying toward him as he drove up Loveland Pass. Meyer estimated he was about 11,900 feet elevation and the aircraft had been flying below his level. He stated that he could see the tops of the wings and fuselage as it flew by. Meyer also witnessed the aircraft as it struck the side of Mount Trelease. He testified that it hit the side of the mountain with its nose-up and tail- down.[79] Meyer testified that he observed the propellers as the aircraft slammed into the side of the mountain. He affirmed that the propellers were not rotating before it crashed. He stated; "It had looked like the pilot might have cut the

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[77] *Wichita Eagle*, 21 October 1970

[78] Ibid.

[79] At this angle, it would be apparent that the aircraft had been trying to gain altitude and was still climbing when it hit the mountain.

motors right before it crashed."[80] Meyers did not observe any smoke or buffeting from the aircraft before it crashed. His statement appeared to contradict Abbott's opening statement that the propellers had been spinning and the engines had been producing power. Many of the witnesses' observations seemed to differ slightly from the information NTSB investigator's had uncovered during their ground investigation. This would later lead to some questions regarding how the NTSB came up with some of their conclusions. One witness's testimony that seemed to differ the most was that of Jerry Scurlock.

Jerry Scurlock had been heading up Loveland Pass with his two boys. He had been going on a fishing trip towards Vail Pass when halfway between Bethel Campgrounds and Silver Plume Campgrounds he observed the aircraft. He stated that he had stopped his vehicle and observed the aircraft with his binoculars. Jerry Scurlock had been a rated pilot. He stated that the aircraft had been in a "slow flight position;" it then became "nose heavy," with a nose down attitude and began to misfire. He observed the plane seconds before it crashed. He noticed "the audible misfiring of the engines and a visual vapor trail from it." He could not determine which engine was misfiring, but he had heard a very noticeable misfiring. Scurlock testified that the aircraft "went into a forty-five to fifty degree right bank, the nose came up as if grasping for altitude, then it made a sudden left bank, and started to buffet severely. The buffeting was a severe

[80] *Wichita Eagle*, 21 October 1970

buffet, a stall indication, in my opinion."[81] Up to this point, the technical panel had treated most of the witnesses pretty gently, but Mr. Scurlock was not so lucky.

The panel appeared to harden towards Scurlock as they continually questioned him about his observations. They drilled him on specific questions that at times did not seem to have anything to do with the crash investigation. Scurlock was asked what type of vehicle he had driven, what the traffic was like? How fast had he been driving? Then the questions moved toward the aircraft itself. These questions required Scurlock to have been paying special attention to the aircraft. An example of this is the testimony below,

Panel: "Were flaps extended, if so, what did they appear to be set at?"
Scurlock: "Yes, they were extended, ten degrees I assume."
Panel: "Was the landing gear down?"
Scurlock: "No"
Panel: "Did you get a good look at the aircraft from your position?"
Scurlock: "Yes"
Panel: "Please describe it for us please."
Scurlock: "As the aircraft proceeded away from my position, I observed the entire aircraft fuselage, it was dark green and the markings "4" and "M" were visible on the fuselage directly forward of the tail section."
Panel: How loud was the backfire?
Scurlock: Loud!!
Panel: Was it loud enough to that the passengers in the aircraft could hear it?
Scurlock: The passengers should definitely have been able to hear it"[82]

The questions by the panel had been direct and the responses were quick and precise. Finally it appeared the panel had finished with its questions, when Richard G. Rodriquez, a member of the technical panel stood up and fired a question towards Mr. Scurlock that appeared to come out of left field. The question asked was, had he assisted the crash survival crew? The room suddenly became silent.

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[81] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 3.

[82] Ibid.

This odd question silenced the room of over 250 people. Not a whisper could be heard as all attending waited for Scurlock's response. As if caught off guard, Scurlock shifted in his seat and waited for the words. His response was just as precise as the ones before. He responded "No". Rodriquez then asked if Scurlock had continued on with his fishing trip after observing the crash. Scurlock responded, "Yes."[83]

Scurlock was asked why he had not assisted the crash victims; he responded that he did not particularly enjoy situations of this nature, so he traveled on to the campgrounds after he observed others on their way to assist. Then Scurlock's interrogators led the interrogation in a new direction. Scurlock was asked how he came to be at these hearings. He responded that he had called the FAA flight service station in Denver a week ago to inform the FAA of his observations. He confirmed that had he left a message and his call was never returned. After waiting a week, he then contacted agents in Golden Eagle and they referred him to the NTSB. The FAA responded almost immediately that all calls to FAA service stations were logged and there was never any record of Scurlock calling that station or any other station.[84] It appeared the FAA had been prepared for this line of questioning and Scurlock's possible responses. It was the FAA's turn to interrogate Mr. Scurlock.

The FAA attorney, Charles Peters, asked Scurlock what had prompted him to call in the first place seeing that he had waited two weeks to get involved. Scurlock stated that he had read in the newspapers many different observations concerning the cause of the tragedy, but none of them had discussed anything about misfiring engines. He

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[83] Ibid.

[84] Ibid. Also see reference to this comment in the *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 7-8

thought it was vital to the investigation.[85] Peters appeared to scoff at Scurlock's statement. The FAA's and NTSB's whole line of questions appeared to be an attempt to discredit Scurlock, but why?

The attorneys for Golden Eagle were the last to question Scurlock. They quickly attempted to clarify Golden Eagle's position with this witness. They stressed that the officials of Golden Eagle had only passed the witness's name to the NTSB; they had no other dealings with him. Then the attorneys for Golden Eagle attempted to end the Scurlock testimony on a high note for their cause. Golden Eagle had all along been screaming that the aircraft had crashed because of mechanical failure. Now it hoped to strengthen its case with Scurlock's testimony. Golden Eagles Attorney, Mr. Mee, asked Scurlock, "In your understanding of the situation, do you feel the aircraft was malfunctioning? Scurlock replied a precise 'Yes!" The attorney left it like that and the witness was excused.[86]

Thus ended the testimony of Jerry Scurlock, but what had it demonstrated? It is interesting to note that there was the implication from the NTSB and the FAA that his testimony could have been a charade. It was quite apparent that neither believed Mr. Scurlock's testimony and that was most likely the reason for the intense questioning. If they did not believe him, then the more questions they asked, the better opportunity to discredit him later. Some of the questions had nothing to do with Scurlock's observation of the plane as it crashed. Why was it important that he had not stayed and assisted? What relevance could that have had?

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[85] Ibid.

[86] Ibid.

Each witness's testimony had had differing views on what they had observed, and Mr. Scurlock's testimony had not been any different. Was it how he was introduced to the panel? Was it that his testimony differed so much from the opening testimony from Russell Abbott? Scurlock had been the only witness who had declared that the plane had crashed because of mechanical failure. Golden Eagle was quick to try to deny any and all involvement other than passing the witness to the NTSB. What would have been Scurlocks gain in making up his testimony? But then again, what could the FAA or NTSB have had to gain by discrediting him? The end of Scurlock's testimony brought to a close one of the more interesting and intriguing testimonies of this hearing. His testimony was a key of things to come; it was the first indication that the idea of a non-impartial hearing had never existed. It was apparent that there were hidden agendas, and they were beginning to slowly reveal themselves.

The next two witnesses called were surviving passengers on the doomed aircraft. The NTSB hoped they could give a glimpse into what had happened inside the aircraft right before it crashed. The first witness called was David Lewis, a Wichita State junior defensive end from Duncan, Oklahoma. Lewis was one of the surviving members of the football team. He stated that the flight from Wichita to Denver had been routine. While at the scheduled stop at Denver, he had noticed men doing maintenance on the struts of the aircraft. The team had been delayed about thirty minutes while the aircraft was refueled and maintenance was accomplished.

After taking off from Denver, Lewis said that the passengers were served box lunches and observed the scenery. "The mountain peaks were towering above the

aircraft."[87] Lewis had noticed that the plane followed the road then made two quick turns. After the sudden turns, he stated, the aircraft began to shake "very violently."[88] Lewis related that the stewardess informed the passengers to fasten their seatbelts and not to worry. "A few seconds later, we went into the mountain." "The shaking of the plane alarmed everyone and I was very scared."[89] Lewis testified that he knew something was wrong when the plane started shaking. When the plane had come to a stop after the crash, he looked around the fuselage and noticed tree trunks all around him. Lewis's legs had been pinned underneath many of the seats, but he managed to free himself before the fire reached him.

During one point in his testimony, Lewis was asked about his weight. He replied that his weight had been 245 pounds.[90] This was interesting in that the official record had stated that his weight was only 205 pounds, a forty-pound difference. This was one of the points the investigation had found that had led to the possibility of the aircraft being incorrectly configured for its weight and why it might have been over the weight allowance of the aircraft. Lewis then entered into an interesting point in his testimony.

He stated that during the stopover in Denver he had overheard a conversation between Wichita State athletic trainer Tom Reeves and one of the pilots. Reeves, who was fatally injured during the crash, and this pilot had discussed taking a "scenic route"

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[87] *Wichita Eagle*, October 21, 1970

[88] Ibid.

[89] Ibid.

[90] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 2

from Denver. Lewis testified that he overheard the pilot say he would get some maps so he could point out scenery to the passengers.[91] Lewis stated that he had noticed the pilot return to the aircraft with maps before taking off from Denver. Later when asked, Lewis pointed out Skipper as the pilot who had talked to Reeves and had returned to the aircraft with the maps. After the board finished questioning Lewis, they called their next witness, Richard Stevens.

After calling his name, there was a sudden hush in the room as Richard Stevens was wheeled into the room on an ambulance cart into the center stage of the auditorium to testify. This was a dramatic moment in the hearing. There were muffled voices, and a shuffling of people in an attempt to observe Stevens as he was wheeled into the room. Stevens was junior guard on the football team. He had suffered a dislocated hip, a double fracture of one leg and a cracked sternum. It is curious that in this condition he would have been called to this hearing. This appeared to some to be a publicity stunt.[92] What was it that drove the NTSB to roll a young man on a stretcher on to a stage in front of almost 300 people to testify? Richard Stevens turned out to have been one of the few people who observed exactly what had happened in the cockpit seconds before it had crashed.

Stevens testified that the flight had been "fairly routine," but he had noticed on the flight from Wichita to Denver that a "black liquid" had been flowing from the top of the left engine. Upon landing in Denver, Stephens asked one of the pilots about what he had thought was oil leaking from the engine. The pilot replied, "They (the engines) were

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[91] *Wichita Eagle*, October 21, 1970

[92] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, 25.

put together loosely." He went on to say that it was normal for them to leak.[93] Stephens then described the flight from Denver; he stated that the aircraft had headed west. "Everybody noticed that we were flying lower than the hills. When the hills became higher, we weren't getting any higher."[94] Stephens stated, "The tops of the mountains were quite a ways above us."[95] It was at this point that Stephens got curious. He was concerned about the altitude so he decided to go to the cockpit. Stephens described what he observed in the cockpit,

> The pilot and co-pilot didn't seem overly concerned, the guy (co-pilot) on the right had out maps, topographical maps with elevations. They checked out a hill on the right. The other guy said "13,500." That's when we made a quick steep turn to the right and then a sharp turn back left. The aircraft began slapping like when a boat slaps against waves as it moves over water. That's when it seemed the plane started to drop. At that time, I started back into the passenger compartment and the next thing I knew was when I woke up on the ground seventy-five yards from the wreckage.[96]

Stephens was knocked unconscious when he was thrown from the aircraft. He had been in the front of the aircraft when it crashed and was thrown clear of the aircraft before it exploded. A majority of the survivors of the crash had been in the rear of the

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[93] *Wichita Eagle*, October 21, 1970

[94] Ibid.

[95] Ibid.

[96] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 2

aircraft when it crashed. In fact, Stephens had been standing on the part of the aircraft that split on impact and was thrown clear. He was very lucky to be alive.

Both of the last two witnesses were asked if they had heard any of the engines backfire or sputter. Each stated that the engines had sounded fine until the second sharp turn. Thus ended another chapter in the hearing. From this point on the hearings appeared to enter a new phase. So far, the witnesses had given the board little images of what had happened, but there were still large gaps of information missing. David Lewis's testimony had hinted at the possible reason why the aircraft was flying at the low altitude. Richard Stephens's testimony had given some insight to what had occurred seconds before the crash, but what had made the pilots put the aircraft in such a maneuver? The NTSB board of inquiry hoped that the next witness would be able to shed some light on the remaining questions concerning the flight.

Ronald Skipper, president of Golden Eagle, had been the co-pilot on the doomed aircraft. His testimony is what many in attendance had been waiting on. He had been the one flying the aircraft seconds before it crashed. Skipper appeared to remain calm and collected throughout much of his testimony. To some he appeared a little too collected.[97] He became emotional only once when discussing the people that had perished. Via questioning by Rodriguez, Skipper related what he could remember of the ill-fated trip. He was either unable to remember or did not know answers to many of the questions relating to air speeds, altitudes, power settings, fueling, weight and balancing or engine

[97] As it turned out, Skipper was in a state of shock during his testimony, for seconds before he took the stand, Charles Peters of the FAA had handed him the revocation order which stripped Golden Eagle of its air-taxi certificate, which meant that Golden Eagle was out of business. Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, 24.

oil replenishment.[98] Skipper did remember having trouble with the left landing gear strut and made sure it was looked at in Denver.

In answers to many of the questions poised by Rodriguez, Skipper stated that Crocker had been the captain and it was his responsibility for much of the duties. From the beginning of his testimony, Skipper was treated like a hostile witness. He underwent a barrage of questions. He was on the stand for more than eight hours of the four-day inquiry. It must be remembered that this hearing had begun on the 21st day of October; only nineteen days had passed since the crash had occurred. Skipper had suffered a concussion from the crash and major lacerations to the face and head. He had required 150 stitches just to his face alone. Ronald Skipper appeared at times to have trouble remembering basic information, but at other times, he remembered detailed accounts of events that had occurred. He reiterated time and time again that he had only been the co-pilot of the Martin 404 that had crashed.

At the time of the crash, Skipper had around thirty hours flying time on the Martin 404; most of these hours were as co-pilot. He had not held a type rating for this airframe. Skipper appeared at times during the investigation to be a rather cocky and confident man. He answered most of the questions with a simple yes or no, matter of fact tone. He got into verbal exchanges with Charles Peters of the FAA. He stressed that the flight planning and routing for the flight had been up to the captain, not him. He also stressed that it was the duty of the captain to accomplish the weight and balance for the flight.

When questioned about the route they had taken, Skipper stated, " We took off north and flew towards the airway...I believe it was vector 4, then turned west."[99]

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[98] *Wichita Beacon*, October 22, 1970, Wichita State University Football Team Airplane Crash Collection, box 1, file 1.

Skipper's memory from this point seems to wane. He could not remember the aircraft's rate of climb, power settings or altitude throughout the flight. It is very important for any crew to know these settings, especially when flying through mountainous terrain. It must also be stressed that Skipper could not recall the settings at the time of the hearing; but he stated later that that did not mean he did not know them at the time the plane was flying. Skipper was asked why they had used a southwesterly route to fly from Denver to Logan? He stated that it was simply to clear the terrain.[100]

Skipper had been flying the aircraft when it had taken off from Denver in route to Logan. He stated that after taking off from Denver, the "flight proceeded north until they intercepted the airway between Denver and Kremlin, Colorado at which point we made a turn to the west on the airway."[101] Skipper testified that from then on, he was given heading directions from Captain Crocker. Skipper could not recall the direct route, but stated that the aircraft was turned slightly south, off the airway, in order to follow a valley. He believed that the flight "proceeded past Nevadaville and intercepted the valley in the vicinity of Idaho Springs, Colorado. After intercepting Clear Creek valley, the flight proceeded along U.S. Highway 6, slightly south of it, past Georgetown and Silver Plume, Colorado towards Loveland Pass." As the aircraft flew into the vicinity of Dry Gulch, Skipper stated he began to become worried about the terrain.[102]

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[99] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 4

[100] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 4

[101] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 4

[102] Ibid., 5

To get a better understanding of the aircraft attitude in relation to its surrounding, the elevation at Georgetown was 8, 512 feet and at Silver Plume was 9,118 feet. From there on the valley floor continues to rise reaching an elevation of 11,990 feet at Loveland Pass. In the area west of Georgetown, the mountains on either side of Clear Creek valley range from 12, 477 feet to 13,000 feet in height. Across the end of the valley at Loveland ski resort area, the ground rises rapidly from the valley floor at 10, 600 feet to 12,700 feet at the Continental Divide.

An example of steepness in elevation of this area can be seen in the famous "Georgetown Loop", one of the wonders of the nineteenth century engineering. The "loop" was a rail line built to connect Georgetown and Silver Plume, Colorado. It was built in a spiral loop around the mountains in order for the trains to gain the elevation without stressing out the rail engines. Only two miles separate the towns of Georgetown and Silver Plume, but the elevation difference is over 600 feet. The rail line twisted and turned for over four and half miles of track to gain the elevation to pass the mountains and reach Silver Plume from Georgetown.[103]

Pilots of an aircraft proceeding westward along Clear Creek Valley at an attitude of 11,000 feet or less would not have a view of the end of the valley until in the vicinity of Dry Gulch,[104] since it would be cut off by Mount Sniktue (elevation 13,234 feet).[105]

This appears to be exactly what happened in this case. As the aircraft reached the Dry Gulch area, Skipper realized he would not have enough altitude to clear the

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[103]Gary Morgan, "The Georgetown Loop, Colorado's Scenic Wonder." www.gtownloop.com/history.html (30 October 2001) 2

[104] See appendix F for topographical map

[105] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 4

Continental Divide directly ahead of them. Skipper then told Crocker that they should reverse course and gain altitude. It is at this time that Skipper initiated a turn to the right. "We were to the left side slightly of the valley. I initiated a turn of approximately forty-five degrees change in heading. A medium bank turn, which in my mind is somewhere between twenty to thirty degrees, and as I was rolling out of the turn, Captain Crocker said, "I've got the airplane."[106] He initiated a left turn, the aircraft began to vibrate, he put the nose down and shortly after we crashed."[107]

Skipper testified that the aircraft had been operating properly until the second turn, and then it began to fail. Many questions remained concerning Skipper's testimony. He had denied flying the route for a scenic tour, but each of the witnesses stated that the aircraft was flown low to the ground; each stated that the aircraft was between 1,000 and 1,500 feet from the ground at Georgetown. Skipper himself could not remember the exact altitude through out the flight from Denver. He denied ever talking specifically to Tom Reeves, the team trainer, about a specific scenic tour, but he was the person who went into the Stapleton airport in Denver and purchased the topographical maps.

In a recent interview with Ronald Skipper, he reiterated that the routing of the flight had not been chosen specifically for a scenic trip. He did acknowledge that he had told the team trainer that they would be flying over some nice areas of interest and would try to point out some of the more scenic ones, but he never chose that route for that

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[106] Ibid., 5

[107] See appendix F for description of the turn.

specific purpose.[108] He also stressed that throughout the hearing the FAA had referred to a formal flight plan. The FAA had accused him of deviating from this flight plan. In fact, no formal flight plan was ever posted. Both crews had flown using visual flight rules (VFR).

Accordingly, if the weather had been bad, both crews would have been forced to fly instrument flight rules (IFR). Only when flying by IFR is it required that a formal flight plan be posted. Skipper reiterated that the weather had been great and there was no need to post a flight plan so one never was.[109] He also stated that he had purchased topographical maps, but that had not been his sole purpose for going into the terminal at Stapleton Airport. Skipper stressed he had gone into the airport terminal to deal with business; the purchase of the maps had been incidental. He stated concerning the stop over in Denver,

> We deplaned passengers during the time the aircraft were fueled and serviced. The captains oversaw those activities while I dealt with Combs Aviation, our fuel provider. Out of curiosity I bought some sectional maps that contained details of the Rocky Mountains. Upon my return to the crowd of passengers, I stated that I would point out places of interest as we flew the scenic area.[110].

Another looming question was why had he attempted the turn? Because he thought he could maneuver an 180 degree change in heading? Why did Crocker take the

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[108] Ronald Skipper, Interview by David L. Johnson, Phone Interview, Wichita, Ks., 15 September 2001

[109] Ibid.

[110] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, 15.

aircraft from Skipper? Did he not think that Skipper could complete the maneuver? According to Skipper, he was coming out of the turn, when Crocker took the aircraft. What the NTSB perceived was that since there was little or no conversation in the cabin throughout the flight, when Skipper attempted to turn the aircraft, the aircraft would have been preceding toward the rising ground of Mount Bethal. The NTSB's view was that most likely Captain Crocker observed this, thinking the aircraft was going to crash, initiated a sharp left bank to avoid the mountain. In the process, the aircraft began to stall; this stall resulted in a loss of altitude and thereafter crashed into the side of Mount Trelease.[111]

Skipper denied this primarily because he felt that the engines had failed. In Skipper's opinion the engines had not stalled; they had failed.[112] When asked why Crocker had taken control of the aircraft from him, Skipper responded he did not know. He stated that he had plenty of room to maneuver the aircraft in the valley.[113] " I said Captain Crocker, maybe we should turn around and gain some altitude. I started a right turn. At the altitude we had, we had sufficient room to make the 180 degree turn I planned."[114] "After he assumed control, my memory even up to the day after the accident is very vague. It is sort of like a badly developed film."[115] So far the witness had not

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[111] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 29

[112] See appendix E for explanation of stall.

[113] See appendix E for explanation of turn.

[114] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 4

[115] Ibid.

given much evidence to support his claims, but he stood by his view that the aircraft crashed due to an engine malfunction.

Skipper never stated on the stand why he thought Crocker had taken control of the aircraft. It all resided in his theory that there had been an engine malfunction. On the Pratt and Whitney R2800 engine, which powered the Martin 404, accessories were mounted on pads that were located on the rear of the engine case. A system of internal gears, a gear train, drives the accessories. These accessories are, the generator, the starter, the supercharger, and the hydraulic pump. Skipper stated, "I told investigators that an accessory bearing or shaft bearing most likely seized."[116] What would this have done to the aircraft?

Skipper stated that as the engine continued to run, the shaft would have continued to turn in the bearing, the friction from this would have generated great heat and this heat would have continued to increase. Once this heat had built sufficiently, the engine's rear case, the metal of which consist of magnesium alloy, would have begun to burn. Skipper theorized, "The vibrations we felt were caused by the failure of the accessory, the case, or the gear train. As the vibrations rapidly increased, Danny looked out at the engine and saw it smoking. This smoke would have been white rather than black and would not have necessarily been obvious from a distance."[117] Skipper affirmed, "Danny assumed control and made a descending left turn. He probably, but I have no way of knowing, intended to

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[116] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, 20.

[117] Ibid.

land on the highway below, and was unable to maneuver so as to do so."[118] If this was a possibility, why did the investigation never report this?

As it turned out, Golden Eagle was never asked to be a part of the investigation of the engine recover. Skipper stated that members of the FAA and employees of the engine manufacturer had disassembled and inspected the engines in a hanger in Denver. During the hearing, the notion of engine failure was brushed aside. The team that had dismantled the engines had stated that the engines had been operating at a thrust of 1400 horsepower when the plane struck the ground; the engines were at full power.[119]

Upon closer analysis of the NTSB report, it is possible that Skipper may have had a point. The report stated that the front section of the right engine was intact. It stated the following regarding that engine:

> The engine was identified through a partially attached section of a supercharger, which comprises the pressurization system that is mounted on the right engine accessory pad of this model aircraft. The power section was basically intact except for some separated cylinder heads. The accessory section was almost totally destroyed by ground fire. The impeller drive shaft remained attached to the power section and was extensively damaged by ground fire. Several burned components were found adjacent to the right accessory area. These accessories included several accessory drives gears and a separated main oil screen. The

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[118] Ibid.

[119] This is derived from the opening statement of Russell Abbott during the NTSB hearings. It is also explained in more detail in the description of the engine information in the *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 12

housing of this screen was burned away. A separated generator was also found. The generator was completely burned and would not rotate.[120]

Many facts leap out from this report. These facts appear to support Skipper's claim. The power section of the engine, the portion that would have been damaged by impact, was largely intact. The rear case, not damaged by impact, was largely destroyed by fire. It is unlikely that neither a gasoline nor a oil fire could burn at a temperature that would melt, let alone "burn away" the steel of accessories or the alloy of an engine case.[121] The magnesium fire in the right engine had damaged the rear case before the impact. Why was this theory never heavily considered? There was no evidence to support it, or was there?

The day after the crash, the FAA and NTSB investigators began their inspection of the crash site. Chuck Graves, Golden Eagle's maintenance supervisor, and David Barnholtz, an employee of Golden Eagle climbed up the slope of the mountain and attempted to follow the path of the plane from where it first hit the mountain to where it finally came to a rest. Looking for debris, the men moved to the area well before the Martin 404 began damaging trees. They found several burned spots on the forest floor caused by and containing molten metal. Skipper theorized that this pre-impact damage could have only meant that an engine had been burning before impact. The two men went to the investigators with this discovery, but the inspectors never got a chance to look into this finding.

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[120] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 13

[121] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, 20.

In fact before the investigators could look into it, bulldozers, which had been used to bring down the engine remains, were used to cover the aircraft and put out any possible smoldering fires. In doing this, any evidence of a pre-impact fire was accidentally destroyed.[122] Skipper stated that no official ever admitted to looking at or investigating the burned spots found on the forest floor by Golden Eagle employees. Skipper felt that this lack of action prevented Golden Eagle from proving that the right engine had been burning, which would have proved a mechanical rather than a pilot induced cause of the crash.

Probably the most startling and some of the most technical testimony of the hearings came with the calling of the FAA's star witness, Edward Gaydos, chief of aircraft performance section of the federal aviation administration flight standards branch. In 1951, Gaydos had been responsible for seeing that the Martin 404 aircraft performed satisfactory in order to gain certification from the FAA.[123] Gaydos testified that he had computed the maximum rate of climb required to clear the mountain terrain. He testified, "There was no chance that the aircraft could have cleared the mountains."[124] His computations were based on the 11,000-foot altitude at which the FAA and NTSB stated the aircraft had been flying, and the power required to clear the terrain, an additional 1,700 feet in elevation. Gaydos testified that if the pilot had been using maximum available power, he would have been able to only climb 240 feet per minute or

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[122] Ibid., 21

[123] *Wichita Eagle*, October 25, 1970

[124] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 15

a total of 600 feet. This was still 1,100 feet below the altitude needed to clear the peaks. The aircraft would have had to gain an additional 1,000 feet in a distance of one and ¾ miles in order to safely fly through Loveland Pass.[125]

What of Skipper's testimony that he had plenty of room in the valley in order to maneuver a 180-degree turn? Gaydos stated, "A 180 degree turn to get out of the valley would have been difficult."[126] Even with this, he did not completely rule out such a maneuver was possible. He stated,

> An 180 degree turn in a 3,000 foot span between the mountains, would have required a 1,500 foot turn radius, and could have been accomplished only with a sixty degree bank. At that steep bank angle, the aircraft would have been losing altitude at a rate of 340 feet per minute.[127]

Gaydos stated if the aircraft were moving at 140 knots (162 mph) and a sixty-degree bank, the aircraft would have required 2,980 feet in circumference to turn around. This would have left just only ten feet on either side of the aircraft. At a slower rate speed of 130 knots (150mph) and a sixty-degree bank, this would have left 200 feet on either side of the aircraft." Gaydos stressed that a turn such as this would have been extremely hazardous, since the Martin 404 stalls at a speed of 128 knots.[128] He also stated "the pilot could expect a stall buffet (vibrations) at 134 knots and would entail some loss of

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[125] *Wichita Eagle*, October 25, 1970

[126] Ibid.

[127] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 28-29

[128] Ibid. 29

altitude."[129] As if he had been building to this moment, Gaydos then declared, " I can only conclude that under the 3,000 feet dimensions, a 180 degree turn could not have been made with any degree of safety associated with passenger carrying."[130]

Golden Eagle's attorney, R. C. Josling, asked Mr. Gaydos if such a turn could have been made safely at 12,500 feet altitude? Gaydos stated that he thought it could have been accomplished very safely at that altitude.[131] Josling's reasoning was that the aircraft had not been flying at 11,000 feet altitude right before it crashed, but was at least 1,000 to 1,500 feet higher in altitude. The higher the altitude around the mountain, the less terrain there would be. This meant that when the aircraft went to turn, at a higher altitude, the aircraft would have had more room to make the turn because there would been much less terrain to clear.[132]

Skipper stated that he never really got his point across to the board regarding the clearing of the mountain or the altitude he had been flying. His testimony read, "It began to look to me that we were not going to have clearance, sufficient clearance, over what I now know to be the Continental Divide ahead of us....[133]" His phrase "sufficient" clearance must be stressed. He had agreed with the witnesses that at the early stage of the flight they might have been flying low, but as the aircraft reached the peak (Continental Divide) "we were above the tree line and still climbing routinely when we decided to

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[129] *Wichita Eagle*, October 25, 1970

[130] Ibid

[131] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 15

[132] See appendix F for slope of terrain.

[133] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 4

circle for more altitude. We could see more and more of the terrain on the west side of the pass, so we knew we were well above 12,000 feet, we wanted an absolute minimum altitude of 13,000 feet."[134]

Skipper stated that the whole reason he had decided to make the turn was not that the aircraft could not have made it over the mountain range, but rather he did not think he could have made it over the range top safely. He stated the plane was around 12,000 feet altitude, but he wanted to be 1000 to 1,500 higher because of possible downdrafts conditions from flying over the mountain range.[135] It is when Skipper began his turn that the controls began shaking in his hands. "A deep vibration came from the right side of the airplane. It grew stronger. Turning to question Crocker, "I found him looking out toward the right wing. That is when he took the aircraft."[136]

Another point to support Skipper's claim was in Crocker's action before he took control of the aircraft. The NTSB cited that he had taken control most likely because he had seen the mountain terrain coming towards them and turned to avoid it. In fact, Captain Crocker died because when the aircraft crashed, he had not been wearing his seat belt. Skipper stated that Crocker had removed his seat belt in order to look out the window right before he took control of the plane. If he had been looking out the window at the terrain as the NTSB speculated, he would not have had to remove his seat belt in order to see it through the window, but if he was going to look at the right engine, Crocker would have had to lean forward and look back out the window in order to see the

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[134] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, 15.

[135] Ibid.

[136] Ibid

engines clearly, especially if he was trying to see the back of the right engine, which Skipper stated was most likely on fire.

Skipper's theory regarding the crash was feasible except for two main points. The first was how could Golden Eagle reason that the aircraft had been at an altitude of 12,500 feet instead of the 11,000 feet that the investigation had derived? Its only witness, Ronald Skipper had testified during the hearing that he could not remember what altitude or rate of climb he had been at during the flight. The second point was that Jerry Meyer had testified that he had been on Loveland Pass, which was listed as having an elevation of 11,900 feet and he had testified to looking down on the aircraft as it went into it's banks and finally crashed. Skipper denied this view as he stated it would be almost impossible for anyone to be able to tell from that distance what altitude any aircraft could have been flying. Skipper's view coincides with the fact that each of the ground witnesses testimony differed slightly in what they saw.

In analysis of the NTSB report, it appeared to hint at something odd. The report read as follows.

> Most ground witnesses and the surviving passengers thought that the engines were operating normally. However, two witnesses described a backfiring sound from the aircraft. In considering their testimony, the safety board notes that one of the witnesses who reported the backfiring was situated in Georgetown. Five other witnesses in the same location, including the father of the witness in question, and a pilot employed as a

flight Engineer by a major airline, all stated that the engine sounds were normal.[137]

The second witness who reported hearing the plane backfiring was Jerry Scurlock; the Board appeared to discredit all of his testimony.

> The other witness, located 1-1/2 miles east of Dry Gulch, stated that the backfiring sound was so loud that passengers in the aircraft definitely should been able to hear it. However, none of the surviving passengers recall anything unusual about the operation of the engines. This witness also testified that as the aircraft proceeded away from his position, he observed the entire aircraft fuselage was dark green and the markings "4" and "M" were visible on the fuselage directly forward of the tail section.[138]

The board reported that registration numbers on small aircraft were painted on the fuselage in the position described by Scurlock, however they were seldom found in that location on airline aircraft. As it turned out, N464M's registration numbers were located on the vertical stabilizer, not on the fuselage. The board concluded that the registration number would have been nearly unreadable from the postion that Scurlock had testified to have been standing. The board also reiterated that as far as the fuselage was concerned, the top had been painted white, a green stripe had run down the center and the bottom had been unpainted. The board concluded that since Mr. Scurlock had been incorrect as to the location of the registration number and the exact location of the

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[137] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 28

[138] Ibid.

painted colors on the aircraft that he must also have been mistaken by the source of the sounds he heard. The board concluded that he had most likely heard the backfiring of trucks or road construction machinery that had been operating in the vicinity.[139]

But wait, had not Jerry Meyer testified that the propellers of the plane were stilled and not rotating as the aircraft slammed into the side of the mountain? The NTSB never attempted to disavow his testimony; in fact, they used his testimony to calculate the aircrafts altitude as it flew into Loveland Pass. They also never attempted to explain his observations concerning the stilled propeller blades.

What of Scurlock's observation of a visual vapor trail coming from one of the engines right before it crashed. He had not been the only person to testify to seeing a vapor trail. Donald R. Eberle had also testified that there had been exhaust coming from one of the engines. The NTSB reported that,

> While some witnesses reported a small amount of black smoke coming from the right engine, those familiar with large aircraft did not consider it excessive, and most described it as similar to a "rich" mixture but not of any concern. The fact that a rich mixture existed on take off at Denver was acknowledged by the crew. However, there is no evidence that the rich mixture condition seriously affected the engine performance. Examination disclosed ...that both engines were turning and producing power at impact.[140]

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[139] Ibid.

[140] Ibid., 29

Donald Eberle acknowledged the idea of a rich mixture only after the attorney for the FAA, Charles Peters, encouraged him that this was what he had seen.[141] Ronald Skipper had testified that Crocker had "leaned the mixture"[142] after taking off from Denver. In other words he had adjusted the rich mixture. Scurlock and Eberle never referred to what they observed as "black smoke," they referred to it as a vapor trail.[143] A magnesium fire, one which could have been coming from the right engine, would have burnt a whitish vapor-like smoke, not black. It also would not have been easy to see from the ground. In regard to the NTSB report concerning the engines producing power, a fire could have still existed and the engines still provide power or thrust. Skipper believed the fire came from a seized bearing. The shaft would have still been spinning and power would have still been produced at the time of the crash.[144]

In the end, one must look at all the conditions that brought about the crash. The board concluded that the probable cause of the crash was "the intentional operation of the aircraft over a mountain valley route at an altitude from which the aircraft could neither climb over the obstructing terrain ahead, nor execute a successful course reversal."[145] Though a lot of information was left out of the report that could have led to different conclusions, the fact remains the aircraft was flown in a mountain valley at a altitude that

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[141] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 2

[142] See appendix E for explanation of rich and lean fuel mixtures.

[143] *Wichita Eagle*, October 21, 1970.

[144] Ronald Skipper, Interview by David L. Johnson, Phone Interview, Wichita, Ks., 15 September 2001

[145] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 32

was too low. Whether the aircraft had been at 11,000 feet or 12,500 feet, the fact remains a reversal in course had to be accomplished. It is this reversal of course that was the determining point in the crash. Whether because of an engine fire, or an over-reacting pilot, the aircraft crashed. If another route had been chosen, this crash would have most likely never happened. This concluded the portion of the hearing that dealt specifically with the crash investigation.

Chapter Four

The National Transportation Safety Board hearing: Part Two

The next phase of the NTSB hearing focused on the contractual arrangements among Golden Eagle, Wichita State, and Jack Richards. The NTSB concentrated on these arrangements for two main reasons. The first was to find out if any laws had been circumvented and the second was to ascertain who had been the legal operator of the aircraft.[146] It is at this point that the hearing's focus began to alter. The hearing shifted from "fact finding" and became more like a trial. The attorneys began badgering the witnesses. The primary badgering came from the FAA, more specifically, its attorney, Mr. Charles Peters. It was apparent that the FAA had already come to its conclusions on both of these areas of concern and Peters was going to use this hearing to substantiate the FAA's case to the NTSB and the public.

Prior to the hearing, the FAA had already stated that Golden Eagle had, without the FAA's knowledge, held itself out as an airline, even though it had not had the certification to do so. Only days after the crash the FAA administrator, Shaffer had made public statements where he avowed the actions of Golden Eagle had been " a facade to duck air safety regulations."[147] The FAA's position had been made clear, but the NTSB still did not have all the information required to make such a judgment. During the last days of the hearings, witnesses from each of the interested parties came to the stand to testify. The attorneys for Golden Eagle had requested that Bruce Danielson and Jack Kennedy testify to the contractual agreements made with Wichita State primarily, because these men had been the key personal involved in those arrangements.

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[146] *Wichita Beacon*, October 23, 1970

[147] Ibid., October 21, 1970

Bruce Danielson's testimony and that of John P. Kennedy, vice president of operations for Golden Eagle, established that Golden Eagle had commenced its dealings with Wichita State during the 1969 football season. At this point, there had not been a Golden Eagle, just John Kennedy. He testified that while in Detroit in September of 1969, he had learned that Wichita State University had been looking for a qualified pilot and crew to fly a DC-6. Kennedy ended up flying the Wichita State team to Tallahassee, Florida. He was also the pilot on several other football trips. In each trip, Kennedy piloted a DC-6.[148]

Kennedy stated he had hired himself out to fly the DC-6 for Wichita State. He had flown five of the six trips that season. He paid the crewmembers after he received a check from each trip. The checks were made out in the name of Aero Data Link. Aero Data link was not incorporated, Kennedy stated, "it was just me."[149] He testified that he had done this as a matter of convenience so the university would not have to make out individual checks. The DC-6, a multi-engine aircraft with a capacity of seventy passengers, was leased by Wichita State University from Four Winds Travel Club. The next agreement between Kennedy and Wichita State was for the transportation of the basketball team for the 1969-1970 season.

In November of 1969, Kennedy, Danielson, and Skipper met with Bert Katzenmeyer, and Floyd Farmer, at that time the ticket manager, in Wichita to talk about transportation for the basketball team. The men came up with an agreement. The agreement called for Golden Eagle to provide crews for a DC-3, which carried twenty

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[148] *Wichita Eagle*, October 23, 1970

[149] Audio Tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita Sate University Football Team Airplane Crash Collection, box 5, file 1, tape 17.

passengers. It is about this time that Golden Eagle as a corporation entered into the picture. The company was incorporated on November 26, 1969. Kennedy testified that the company business included:

> Consulting services to potential users of large aircraft, the supplying of flight crewmembers to operators of large aircraft, and airmail operations in small aircraft pursuant to an air-taxi certificate issued in accordance with Part 135 of the Federal Aviation Regulation.[150]

He also testified that the company had flown several flights for Wichita State in the spring of 1969. He declared, "Pilots hired by Golden Eagle to fly the large aircraft were hired on an one trip or sets of trips, individual basis and were not on the Golden Eagle payroll." This was the only way the company could legally do this business without having a Part 121 certificate.

Then on July 21st, 1970 an "Aviation Service agreement" was signed between the Golden Eagle and Wichita State University for the transportation of the football team for the 1970-1971-football season. According to the agreement, the total cost for the six trips was set at $24,388.30. Half was paid up front; the other was to be paid by Wichita State on October 5, 1970, which turned out to be three days after the crash. Danielson testified that the $24,388 figure included the price for leasing of the aircraft, a DC-6. Of the $24,388 figure, $ 5,000 was to go to Jack Richards.[151]

Danielson also testified that it was his understanding that the DC-6 mentioned in the contract would have been secured by Wichita State from the Jack Richards Aircraft

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[150] *Wichita Eagle*, October 23, 1970

[151] See appendix G for a copy of a similar service contract signed between Wichita State and Golden Eagle.

Company. He stated that by verbal agreement between himself and Katzenmeyer, Wichita State University would write one check to Golden Eagle, who in turn would forward the lease payment to Richards. Danielson stated these arrangements were for the purpose of "simplifying the bookkeeping."

As it turned out, Wichita State had contracted for a DC-6, but the aircraft had been damaged in a windstorm. Jack Richards then agreed to supply two Martin 404 aircraft for the same price as the DC-6. At the same time, Golden Eagle also agreed to supply two additional crews to fly the two Martins at no additional cost. If the two companies had been in this deal purely to make money, this would have an opportunity to have added additional fees to the contract. They did not.

Golden Eagle's main defense had been that it had only agreed to provide the pilots. Wichita State had to lease the aircraft from a second source, which turned out to be Jack Richards. Golden Eagle also stipulated that "Pilots hired by Golden Eagle ... were hired on an one trip or sets of trips, individual basis and were not on the Golden Eagle payroll."[152] There was no difference in this agreement and the one the Wichita State had signed with Golden Eagle a year prior.

An example of what Kennedy meant when he said "the pilots were hired on a one trip or sets of trips" could best be described in Golden Eagle's hiring of Danny Crocker. He had been hired by Golden Eagle as an aircraft maintenance man. When the time came to fly the Wichita State team to its games, he was hired as an individual pilot for that one trip. He received payment at the end of the trip. He was not hired by Golden Eagle to be a regular pilot for the corporation. Danielson agreed that Golden Eagle as a corporation did not have certification to fly the large aircraft, but Crocker as an individual was

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[152] *Wichita Eagle*, October 23, 1970

certified to fly the Martin 404. Throughout the NTSB investigation, Golden Eagle had stressed the point that it had only provided the pilots. It had never leased an aircraft. This was a major point because the FAA accused Golden Eagle throughout the hearings of misleading its clients into thinking they were receiving a full service contract. The members of the NTSB hearing hoped that the calling of the next witness would provide more insight to this contractual quandary.

That next witness was Jack Richards. He had been the president and sole stockholder of the Jack Richards Aircraft Company. He avowed that his company had been involved in aircraft sales and both long and short term leasing of aircraft. In regard to short-term leases, Richard testified that "I'm really not looking for their business, but while my aircraft are sitting there, I will lease them out at times...."[153] Richards stated that all agreements as to price and availability of aircraft were accomplished verbally. No agreements in writing in respect for any charges were ever made. With respect to the leasing of the Martin aircraft for Wichita State's 1970 football season, he stated:

> During the summer of 1970, I spoke with Mr. Bert Katzenmeyer concerning the leasing of airplanes for the coming football season. Although Mr. Katzenmeyer wanted to lease an airplane for the entire season it was agreed that if the company had planes available, we would lease them on a single trip basis. I explained to Mr. Katzenmeyer that this was the only way that I could do it because the company was primarily interested in selling airplanes and could not possibly tie up a plane for an entire season at the price the university was willing to pay.

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[153] *Wichita Eagle,* October 24, 1970

Mr. Katzenmeyer stated that he understood and agreed to lease planes from us when available at an hourly rate of $125.00.[154]

Richards testified that all contact with Katzenmeyer had been by telephone, that he had never visited Wichita State nor had any officer of Wichita State ever visited him. He had never personally meet Bert Katzenmeyer. All contact had been initiated by Katzenmeyer, by means of one call in November 1969, and another in July 1970.[155] In each of these phone calls verbal agreements were made concerning aircraft leases. Richards testified that he initially intended to supply a DC-6, but it had been damaged and could not be repaired in time, so two Martin 404 aircraft were substituted. The FAA continually pointed to the fact that no payment was ever billed for the use of any Jack Richards aircraft nor did Jack Richards ever bill Wichita State. Instead all payments to the Jack Richards Aircraft Company were made by Golden Eagle. The FAA reiterated during the hearing that a search of the long distance telephone calls from Wichita State, or charged to the WSU/PEC[156] credit card held by Katzenmeyer never disclosed any telephone calls to Jack Richards aircraft company or to Mr. Jack Richards home phone.[157] Was this another attempt by the FAA to discredit a witness? What did Richards have to gain from falsifying his testimony?

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[154] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 19

[155] *Wichita Eagle,* October 24, 1970

[156] It is interesting to note that each contract entered into with the name Wichita State University, not WSU/PEC. Katzenmeyer had no authority to sign for or bind Wichita State University to any contract. He could only execute contracts for services to the WSU/PEC. Katzenmeyer was paid by the PEC as well as with all other athletic personnel.

[157] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 23

Regardless of the FAA attempts, Richards's testimony achieved one thing. It all but nullified the FAA's contention that Bert Katzenmeyer had been unaware of the type of contracts he had signed. This does not mean to say that he truly understood that the school could have been held as the legal operator of the aircraft. Richards's testimony directly disputed the FAA's argument that Wichita State thought it was getting a full service charter contract. Jack Richards's testimony made it apparent that Katzenmeyer had dealt with Richards on two different times concerning the leasing of aircraft. He had specifically tried to get an aircraft for the entire season. It must also be remembered that this was not the first time Katzenmeyer had dealt with arrangements of this nature. In 1968, it was Kennedy who had been hired by the Wichita State University/Physical Education Corporation (WSU/PEC) to pilot a DC-6 that Katzenmeyer had leased from Four Winds Travel club. This and the testimony of Jack Richards leads to the idea that though he may not have known the implications of his actions, Katzenmeyer had dealt with Richards and Golden Eagle separately.

With the testimony of Dr. Clark D. Ahlberg, President of Wichita State University another interesting fact surfaced concerning the contractual arrangements between Golden Eagle and Wichita State. As it had turned out, Bert Katzenmeyer had signed all contracts as a representative of Wichita State University, but as was discovered, Katzenmeyer never had the authority to sign a contract for the University. As has been stated earlier, intercollegiate athletic activities were not supported by state appropriations. A separate, independent, non-profit Wichita State University Physical Education

Corporation (WSU/PEC) had been organized to manage Wichita State's intercollegiate athletic program.[158]

Bert Katzenmeyer had been the athletic director and business manager of the WSU/PEC. Robert Kirpatrick had been the assistant athletic director and assistant business manager of the WSU/PEC. The corporation had originally employed Floyd Farmer as a ticket manager, but upon the death of Kirpatrick in May of 1970, Farmer became the assistant athletic director.[159]

These were the only persons in the WSU/PEC who had entered into contractual agreements with Golden Eagle for the transportation of Wichita State's athletic teams. These men were also the only officials having any direct contact with the officers of Golden Eagle or Jack Richards. Mr. Kirpatrick died earlier in 1970 and Mr. Katzenmeyer and Mr. Farmer both perished on the Martin 404 that crashed in Colorado. So the fact remained that no one had survived from Wichita State that had any detailed knowledge of the dealings with Golden Eagle or Jack Richards.

During the testimony of Dr. Clark D. Ahlberg, he reiterated that he had no knowledge of the details of the contract. His understanding of the agreement was that the WSU/PEC had entered into an arrangement with an organization that provided aircraft and pilots to perform certain services and that the organization had operated and owned the aircraft. He also stated that he had never heard of the Jack Richards Aircraft Company. Ahlberg stated in his discussion of the contract,

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[158] Ibid., 21

[159] Ibid.

> It is my assumption, and the assumption of others here at the University that Mr. Katzenmeyer was simply agreeing to accept planes which Mr. Richards company would furnish Golden Eagle...as they were unable to supply there own aircraft at that time...Looking at a contract which carried no provision for payments to Mr. Richards, it is hard for me to believe that Mr. Katzenmeyer was doing anything more than agreeing to accept these two Martins instead of a DC-6.[160]

Ahlberg appeared to agree with the FAA contention that Katzenmeyer most likely thought he had signed a full charter service contract. The only problem was, as he had stated, his entire interpretation was based on his own assumption; he had known little to nothing of the details of the contract.

So from the testimony of these witnesses, had Golden Eagle circumvented any laws? It depended on the interpretation of the regulation. In order for Golden Eagle to operate as an airline, they must have held a Part 121 or Part 135 certificate. If an air carrier service intended to use aircraft with more than 12,500 pounds gross take off weight, they would need to hold a Part 121 certificate from the FAA. Golden Eagle held a Part 135 certificate, but this only allowed it to fly aircraft with a gross take-off weight of less than 12,500 pounds. So in that context, Golden Eagle would had broken the regulation because the Martin 404 that crashed had a gross take off weight over 43,000 pounds, but this would have only been true if Golden Eagle had offered themselves out as an airline. For this to happen they would have had to offer Wichita State a full service contract, and in doing so would have had to have provided both the crews and the aircraft. Again, in order to do that legally, Golden Eagle would have had to hold a Part

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[160] *Wichita Eagle*, October, 25, 1970.

121 certificate. With Wichita State dealing with Richards for the dry lease of the aircraft, this kind of arrangement did not fall under the Part 121 of the FAR.

The attorneys for Golden Eagle argued that Golden Eagle never offered any of its clients a full charter service. They contended that since the pilots were flying as individuals, not employees, and since the company had only provided the crews, not the aircraft, Golden Eagle had operated legally.[161] The thrust of Golden Eagles argument was that they had never leased the aircraft for Wichita State. The testimony of Jack Richards appeared to support Golden Eagle's claim. There was no provision in the FAR to handle this kind of situation. In other words, there was no law that stated that the contractual arrangements between Golden Eagle and Wichita State were illegal.

One of the key components of this portion of the NTSB hearing was not only to find out if any laws had been circumvented but also to find out who had been the legal operator of the aircraft, or in other words, who had operational control. The FAA or more specifically the Federal Aviation Regulations (FAR) refers to the term "Operate" with respect to aircraft, to mean use, cause to use, or authorize to use aircraft, for the purpose of air navigation including the piloting of aircraft, with or without the right of legal control (as lessee, or otherwise.)[162] The FAR also defines "Operational control" with respect to a flight, to mean the exercise of authority over initiating, conducting or terminating a flight.[163]

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[161] Ibid., October 24, 1970.

[162] National Transportation Safety Board, "Safety Enforcement Case EA-205, Golden Eagle, Inc. Respondent." *National Transportation Safety Board Decisions,* Washington D.C.: Government Printing Office, 1971, Government Stacks, Ablah Library, Wichita State University, Wichita, Kansas, 1030.

[163] Ibid., 1031

The FAA contended that Golden Eagle had been the operator of the plane. The FAA had declared that the separate crew and plane arrangement had been merely a façade to evade FAA regulations for commercial operators. The FAA also concluded that Golden Eagle was in operational control of the aircraft, and in so, it had violated section 121.3(f) of the FAR because it had acted as a commercial operator without being licensed. The FAR defined a commercial operator as

> A person who, for compensation or hire, engaged in the carriage by the aircraft in air commerce of persons or property, other than as an air carrier or foreign air carrier or under the authority of part 375 of the FAR. Where it is doubtful that an operation is for 'compensation for hire', the test applied is whether the carriage by air is merely incidental to the person's other business or is, in itself, a major enterprise for profit.[164]

Golden Eagle, as a firm, had not held any certifications to fly any plane as large as the Martin 404. It contended that Wichita State had been the operator of the aircraft and that the crews were hired as individuals by the school. The transportation by air of the Wichita State football team and other persons had involved separate contracts for the aircraft and crew, although the lessor of the aircraft (Jack Richards Aircraft Company, Inc.) was in fact an entity separate and independent from Golden Eagle. Nevertheless, the FAA felt the correspondence between Golden Eagle and Wichita State, along with the testimony of persons involved in the negotiations demonstrated that the proposal

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[164] Ibid.

presented by Golden Eagle to Wichita State involved a complete air transportation charter service, including procurement of a suitable aircraft.[165]

As provided in the contract between Golden Eagle and Wichita State, payment for the entire service was made to Golden Eagle, who in turn paid Jack Richards. Wichita State personnel testified that there had been no record of any contact with Jack Richards, other than the signing by Katzenmeyer of the aircraft lease contracts presented prior to each flight by Golden Eagle. The situation above in itself compelled the FAA to the conclusion that Golden Eagle, in its carriage of the Wichita State football team, was acting as a commercial operator and was therefore again in violation of section 121.3(f) of the FAR.[166]

Golden Eagle's primary objection to the FAA contention was that they had never leased an aircraft; Wichita State had leased the aircraft. In doing this, the aircraft would have been classified as a corporate aircraft and the crews would have operated as corporate not air taxi or airline pilots.[167] The FAA contended that Golden Eagle had operational control of the aircraft but the FAR defines "Operational control" with respect to any flight, to mean the exercise of authority over initiating, conducting or terminating a flight.[168]

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[165] Ibid. 1035

[166] Ibid, 1031

[167] *Wichita Eagle*, October 25, 1970

[168] National Transportation Safety Board, "Safety Enforcement Case EA-205, Golden Eagle, Inc. Respondent." *National Transportation Safety Board Decisions*. Washington D.C.: Government Printing Office, 1971, Government Stacks, Ablah Library, Wichita State University, Wichita, Kansas, 1031

To strengthen this point, during questioning, Danielson stated that it had been Bert Katzenmeyer who went on the flights and it was the university that told Golden Eagle where the flights would go to and when they would be flown. He stated "Golden Eagle never made these decisions."[169] Throughout much of Danielson's testimony he insisted that Wichita State had leased aircraft directly from the Jack Richards aircraft company and Golden Eagle had only provided the services and crews. The members of Golden Eagle understood that they were not an airline yet, they did not have their Part 121 certificate, so the only way they could operate was to offer the services of pilots, who were hired by Golden Eagle to fly as individuals. There was no law or regulation that stated this could not be done and Golden Eagle was certainly not the only company doing this kind of business.

Again Golden Eagle argued that by entering into an arrangement whereby the aircraft lessor was a separate company, Golden Eagle had divested itself of the responsibility of the "operator" and shifted it to Wichita State. The FAA argued that Wichita State had neither the intention nor the experience to assume such responsibilities. Golden Eagle countered that, in its capacity as aviation consultant, it had advised Katzenmeyer that Wichita State was the operator of the aircraft and Katzenmeyer had informed the members of Golden Eagle that he had consulted with his people on the compliance of FAA regulations and understood them.[170] No Wichita State official ever witnessed this action ever happening. The FAA denied this and accused Golden Eagle of misleading its customers into thinking that it had provided a full service contract. The

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[169] Ibid., October 24, 1970

[170] *Wichita Eagle*, October 23, 1970

next witness called by the NTSB gave more insight to the contractual dealings of Golden Eagle. Melvin Hanson's testimony also led to the Western Electric/Golden Eagle contractual debate.

The NTSB next called Melvin R. Hanson; chief of the Oklahoma City based general aviation district office (GADO) to testify. Hanson told the safety board that he had been aware that Golden Eagle had been pilots of large aircraft and was free-lancing to fly them. " I specifically told them as long as they held proper certificates and were properly qualified, I could not prohibit them from operating large aircraft. However, I told them not to use the name Golden Eagle in connection with large aircraft because they were not certified."[171] Hanson also told of an investigation presently underway by the FAA of an arrangement between Golden Eagle and Western Electric. FAA attorneys stated that this arrangement had been a violation of the FAR. Hanson testified of a meeting with Golden Eagle personnel in mid-May during which a contract it had with Western Electric was discussed. He stated that he had asked for and was furnished a copy of the aircraft lease agreement and he forwarded it to Norman E. Plummer, FAA attorney in the Fort Worth southwest regional office. After a short while, Plummer sent a memo back to Hanson that stated the FAA's position. It read like this,

> This situation presents a new aspect of the well-worn aircraft leasing -to avoid certification agreement ...Had Western Electric used its own employees as crew or had it simply obtained crew members through use of normal crew-hiring assignments, we do not believe certification would have been required for this operation. However, the nature of the

[171] Ibid., October 25, 1970.

> arrangement between Western Electric and Golden Eagle substantially changes the nature of the operation. The fact that the aircraft itself is not owned or provided by Golden Eagle does not change the fact that the contract was drawn in such terms that the resulting services...being performed are identical to those that would be performed if Golden Eagle did supply the aircraft itself. From the foregoing, we conclude Golden Eagle's operation...constitutes a commercial operation and that a Part 121 commercial operation certificate is required.[172]

Hanson testified that the officers of Golden Eagle were informed that an investigation was pending against them and they were given twenty days to respond. Golden Eagle had responded in the time allotted and that was where the situation had rested at the time of the crash.

This incident is what the FAA used to allude to Golden Eagle's possible illegal action or motives. It is in this agreement that the FAA had determined that Golden Eagle's activities in connection with the flights for Western Electric had been of a nature that had required Golden Eagle to hold a commercial operators operating certificate. Again the agreement for the flights had been with separate contracts. Golden Eagle and Western Electric had signed a contract for flight services, and Western Electric also signed a contract with Aero Data Link for the lease of the aircraft to be utilized on the flights. To the FAA, Western Electric had been negotiating for an entire air transportation

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[172] Ibid.

service to be furnished by Golden Eagle, Golden Eagle had procured the aircraft used in the flights as well as provided the pilots and related services associated with the flights.[173]

In this situation, Golden Eagle appeared to have been in error. The FAA appeared to have a case with this arrangement. Again it came down to how the aircraft lease had been accomplished. The services mutually agreed upon by Western Electric and Golden Eagle had been the same as those provided to Wichita State. The main problem was that Kennedy had signed for the aircraft in the name of Aero-Data Link.[174] By all outward appearances, John P. Kennedy, a.k.a. Aero Data Link, had leased the DC-6 from Concare Aviation, Tulsa, Oklahoma. Later the name Aero Data Link was given to Donald R. Pinger who subsequently signed the lease for Western Electric.[175]

It was true that Western Electric had signed two contracts, one for aircrew and services, and another for the lease of an aircraft. The problem was it appeared on paper that Western Electric had signed a service contract with Golden Eagle and an aircraft lease from Aero Data Link, who had in turn leased it from Concare Aviation. The FAA contended that in this arrangement, Golden Eagle had provided both services for Western Electric. Golden Eagle officials stated that "Aero Data Link" had been nothing but a conduit through which Golden Eagle could disburse payments for the aircraft lease from Western Electric to Concare aviation.

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[173] *Wichita Eagle*, October 25, 1970

[174] A good explanation of this discussion can be found in the audio tapes from the NTSB hearings relating to the Wichita State University football team airplane crash, October 22-25,1970, Wichita State University Football Team Airplane Crash Collection, box 5, file 1, tape 17.

[175] *New York Times*, November 24, 1970

The arrangement where two contracts were used is what the FAA felt best demonstrated Golden Eagle's attempt to avoid the "commercial operator" status by creating the appearance that the aircraft supplied for the service came from another source.[176] Again the FAA stated that all along Golden Eagle had misled its customers into thinking that it was providing a full service contract. The FAA suspended Golden Eagle's Part 135 certificate, which was only good for aircraft weighing less than 12,500 pounds gross take off weight, because Golden Eagle had not had proper authority to fly the larger aircraft.

Golden Eagle contested this notion, and declared that it had been operating legally. Again under the FAA, Golden Eagle was regarded as an air-taxi operator. Under these regulations an air-taxi operator is authorized to operate aircraft weighing less than 12,500 pounds gross take off weight. Now there were exceptions to this regulation, a waiver could have been granted that allowed a company to operate over this weight, but Golden Eagle never applied for nor was one granted such an exception. This debate ended the last portion of the hearing

On the fourth day of the hearing and with the hearing coming to an end, the NTSB called one last witness. This witness had the last word on the hearing. The NTSB board called Joseph A. Ferrarese, chief of the FAA operations division in Washington D.C., He testified that it was his belief that the aircraft had been operated in a "careless and reckless manner."[177] With these last comments, the NTSB hearing into the Wichita State football team crash of October 2, 1970 concluded.

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[176] *New York Times*, October 5, 1970

[177] *Wichita Eagle*, October 25, 1970

The NTSB in its final report stated that it could not conclude who had been the operator and that was one of the major causes of the crash. The report stated: "None of the participants in this flight, the owner of the aircraft, lessee, or the company providing the crew...acknowledged that they were the operator and accepted responsibility for the safety of such flight."[178] It went on to describe one of the significant factors of the crash to be "the lack of operational management to monitor and appropriately control the actions of the flight crew."[179]

The NTSB never answered the question of who had been the operator of the aircraft. Why? From the NTSB's own response it was apparent that Wichita State had been the operator, but only by default. It is mostly the case that Katzenmeyer had acknowledged the school as operator, but could not have known what that had truly entailed. If the contractual agreement had been arranged as Golden Eagle had stated and Jack Richards had supported with his testimony, Wichita State could have been the only entity that could have been the legal operator of the aircraft. In their recommendations, the NTSB stated that

> The testimony given during the public hearing held in connection with the accident indicated that a widespread misunderstanding by the educational institution and business concern personnel of the problems and regulations involved in the operation of large aircraft, or the responsibilities of lessees of an aircraft.[180]

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[178] *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, 32

[179] Ibid.

[180] Ibid.

This statement all but acknowledged what the NTSB had not openly divulged in its final report that; most likely without its knowledge; Wichita State had become the legal operator of the aircraft. What about the FAA? It had furiously attacked Golden Eagle and labeled it as the operator of the aircraft, but that was not the direction the FAA went after the hearing ended.

The FAA, after the hearing was finalized, began to focus on distributing information and guidance to companies, schools, clubs, athletic teams and other groups. This came in the form of an "Advisory Circular."[181] It provided information concerning the chartering and leasing of aircraft and how to use them safely. This "advisory" stated, just as the NTSB had, that a study of air charter operations had been conducted,

> The report...indicated that in many instances lessees and conditional buyers of aircraft did not realize that they were legally responsible for the operational control of the aircraft as defined in part one of the Federal Aviation Regulations (FARs). In other cases, the report indicates that even if the lessee or conditional buyer did realize it, very few recognized their responsibilities for compliance with the FARs.[182]

If the FAA had acknowledged that Wichita State had been the legal operator of the plane that crashed, why had it been so determined to find Golden Eagle the operator of the plane during the public hearing. The word "public" is the key to answering that question.

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[181] Department of the Transportation, Federal Aviation Administration, "Truth in Leasing." *Advisory Circular,* November 1972, Ahlberg Papers (MS 89-16), Special Collections, Ablah Library, Wichita University, Wichita, Kansas, box 7, file 10

[182] Ibid., 1

Throughout the investigation and the hearing, the FAA had denounced the contract arrangements of Golden Eagle as a facade to duck FAA regulations. It had also declared that this had been done without its knowledge. These statements in themselves demonstrated the motives of the FAA. The FAA had taken massive steps since the crash to prevent this kind of arrangement from happening again. It had begun an immense study into these types of charter arrangements. The FAA had levied many fines, on companies for the same kind of contract arrangements; the problem was it attempted to fix the problem after the fact. The FAA had known it had a problem with this type of so called "subterfuge." The FAA's knowledge of this kind of action is best demonstrated by the letter that Norman E. Plummer, FAA attorney, sent to Mel Hanson. He had stated, "This situation presents a new aspect of the well-worn aircraft leasing -to avoid certification agreement...."[183] The FAA had known there was a problem, but had done nothing to prevent it. It is apparent that the Federal Aviation Administration had known the regulation was too vague.

The FAA had professed that this kind of action had been carried out without the agency's knowledge. This statement again was incorrect. Skipper stated in his testimony that during Golden Eagles first trip to Wichita, Billie Abrams, principal inspector of the General Aviation District Office (GADO) office in Wichita, had accomplished a ramp inspection. A ramp inspection is where the inspector inspects the aircraft and pilot documentation. Skipper stated that he had given Abrams the service contract and the lease contract. Abrams had no problems with the contracts and allowed them to continue on their business. Skipper stated "From that day until the crash a year later, the FAA was

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[183] *Wichita Eagle*, October 25, 1970

perfectly aware of what we were doing. They knew how and why we were offering our services, and they certainly had the authority to shut us down at any time."[184]

Skipper also stated, "the officers of Golden Eagle had, at one point, asked the Air Carrier District Office in Fort Worth for advice on the subject of their operations with large aircraft, explaining exactly what we were doing. We asked that they describe the necessary steps for our obtaining a Part 121 Air Carrier Certificate."[185] Skipper stated that he went on to describe their complete operation with large aircraft. After a complete explanation of what, how, and with whom Golden Eagle did business, Skipper then asked if they had any problems and asked that they explain some obscure regulations. Skipper stated that they refused to give Golden Eagle a written interpretation of their own Federal Regulations right away but stated that they would get back to them in a short while. They never did.

If Golden Eagle had broken any FAA regulations, at any time, the FAA could have pulled the plug on its business. It never did. It was apparent that the FAA had known of Golden Eagle's operation, but could not determine if what it was doing was illegal or how to handle it. What a better way to hide your own faults by blaming the entire event on somebody else. It was clear from the start that Golden Eagle was going to be the FAA's scapegoat. This is by no means to say that all fault lay with the FAA, or that Golden Eagle held no blame for the crash, but the hypocrisy the FAA displayed in its ferocity towards Golden Eagle was almost mind-boggling. In the end, Golden Eagle was completely destroyed. It was destroyed not because thirty people died atop a mountain in Colorado, but because it had offered arrangements that the FAA considered a "facade to

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[184] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 28 August 2001, 7.

[185] Ibid., 10

duck FAA regulations." The FAA could not interpret it's own regulations quickly enough to let Golden Eagle know if in it's opinion, Golden Eagle had been operating illegally.

Admiral Thayer commented afterwards that the hearings might have been the most extensive into any crash in U.S. aviation history. He stated, "I don't know if we got any answers or solutions, but we certainly have to try."[186] When asked if he thought there were any loopholes in the FAA's regulations, Thayer responded, "I don't know that we can say there are loopholes. The rules may be adequate; it may be how the rules are applied. I think it's evident we need the cooperation of the aircraft industry."[187]

It is obtuse to think there were not loopholes. The regulations were written in such a way as to allow Golden Eagle to avoid obtaining a Part 121 certificate and still be able to operate large aircraft. The FAA could not even determine if any of the FARs had been broken, so it used the word "duck" or "circumvent." Golden Eagle used the FARs to determine what it could and could not do, and when it was not sure about an interpretation of a regulation, the members of Golden Eagle asked the FAA. The FAA failed to interpret its own regulation.

Thayer ended his thoughts by saying, "I think the ordinary way to look at it is that if every ship observed the rules of the road, you wouldn't have any collisions."[188] This was a simplistic way to look at this event. What if the rules of the road had been written in such a way as to allow different interpretations of the same rule and those who wrote the rule could not agree on an explanation of that rule? Who is to blame for any accidents that come from this event?

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[186] *Wichita Eagle*, October 25, 1970.

[187] Ibid.

[188] Ibid.

Chapter Five

Conclusion and Final Thoughts

After all was said and done, the hearings ended. The report was released a year later and as had been forecasted, "crew error" was named the major cause of the crash.[189] Many years went by, and each of the major interested parties went on with their lives.

In regard to the FAA, though it had attempted to pass new proposals that would have tightened the regulations concerning the chartering of large aircraft, all that was accomplished was the circulation of "Circular Advisories." These were passed out to schools and businesses informing and warning them of how a proper air charter contract should operate and their possible responsibility in those contracts. With all the public outcry, political bantering[190] and FAA condemnation of this type of arrangement, no new policies were implemented that would have prevented this type of action from happening again, other than the attempt to educate the educational institutions and businesses. No laws truly changed.

Now it appears that the laws at present time are more confusing than before. The FAA had wanted to change the FARs to be more strict. In doing this, it would have been easier for the FAA to regulate the airways, but because of its large bureaucracy, it could not accomplish this.[191] The sad fact is the FAA is a huge machine that moves very slowly. It reacts only to events that drive it. It is apparent that the FAA does not move to

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[189] *Wichita Beacon*, February 26, 1971

[190] Ibid., 21 October 21, 1970

[191] To get a better understanding of the complications involved with changing the FAR to adequately meet the needs of the FAA see the John H. Reed to John H. Shaffer correspondence, *NTSB Aircraft Accident Report*, NTSB-AAR-71-4, December 24, 1970, Appendix J.

make changes until an event occurs to impel changes to be made. Most of the time, when these types of events occur, the FAA then overacts, as it appeared to do in this situation.

Golden Eagle was destroyed by the results of the NTSB hearing. The FAA stripped Golden Eagle of its Part 135 certificate. In fact, it was Charles Peters who handed Ron Skipper the notification of this, seconds before he was to testify in the NTSB hearings in Wichita. It did not take long after Golden Eagle lost its certification for Golden Eagle to declare bankruptcy. Golden Eagle attempted to appeal the original suspension, but two weeks after the NTSB hearing in Wichita, the NTSB denied the appeal. Skipper stated, "We knew our cause was lost before the appeal hearing had even begun."[192] Skipper had argued that during the NTSB hearings held in Wichita, the FAA had been permitted to use the hearings as a stage to gather information to use against Golden Eagle in the appeal hearing concerning the revocation of its Part 135 certificate.[193]

The three original members of Golden Eagle lost everything. On January 18, 1971, the FAA handed these members of the now defunct Golden Eagle one last stake to the heart. It was on this date that a letter arrived from the FAA's Fort Worth Air Carrier District Office. The letter informed the men that without further notice, they were to surrender their personal pilot licenses. The Assistant Regional Counsel, a Mr. Tyler of the FAA, informed the members of the defunct Golden Eagle that the intent of administrator of the FAA was to "prevent, by any and every means, any officer of Golden Eagle from ever recovering the revoked 135 certificate, or obtaining any other certificate of

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[192] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 27.

[193] *The Sunflower*, October 27, 1970. Also see *Wichita Eagle*, October 25, 1970.

operation. Beside that, the administrator wanted their personal licenses."[194] The FAA wanted their pilot licenses at any cost. The reason was unknown, but it was apparent that their licenses had to go. Tyler vowed that he had the administrator's authority to negotiate and enter into an agreement with them.[195]

After much discussion, Skipper stated that "we were stone broke, and there was no purpose to be served by a prolonged battle."[196] Therefore, the three members of Golden Eagle consented, but with one stipulation: by allowing their licenses to be taken, this action would not be admittance to any of the FAA's charges. It was apparent this was nothing but a public ploy for the FAA. The proof of this was in the fact that the FAA only wanted to take the men's licenses for a set amount of time. It would not be a permanent suspension. Danielson and Kennedy lost their license for a period of ninety days, while Skipper lost his for 120 days.[197] Another display of the FAA's hypocrisy was in the fact that after it took their licenses, the FAA gave the three men temporary private licenses for single and multi engine aircraft and an instrument rating for their use during their suspension. The FAA had destroyed the company these men had built; now it took away the ability of these men to earn a living. With this action, the FAA had struck its final blow into the heart of those who had at one time been Golden Eagle.

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[194] Ronald Skipper, "Golden Eagle: Memoirs of Ronald Skipper", 30

[195] Ibid.

[196] Ibid.

[197] Ibid.

And what of Wichita State? The school went through a turbulent time after the hearings. The insurance problem had been handled[198] but there were lawsuits to be dealt with. It took until 1978 to settle all the lawsuits that were brought against the state of Kansas In the end, the state paid out $1.56 million to eight of the survivors and on behalf of twenty-four passengers who were killed. It was not only monetary loss the university and the state had to suffer through.

Soon after the crash, the remainder of the football team voted to finish out the season in honor of its teammates who had died in Colorado. The team went on to lose all of its remaining games but displayed great heart in finishing out the season. Unfortunately for the football program, the rest of the university did not display such heart, for the school soon forgot the sacrifices those young men had made when they had died on the mountain in Colorado.

Within twenty years of the crash, the University was placed in a position of whether to cancel the football program or drop to a lower division. In the end, the school felt it was better to cancel the program than not be on the same competitive level as its rival schools, Kansas, and Kansas State. The program was shut down in 1987. The president stated financial reasons, but the fact remained that if the program were to have survived, it would have needed to drop to a division 2A; many in the university could not comprehend this, so in the end, no football was concluded to be better than division 2A football. The school, for a plethora of reasons, gave up on its dreams of a championship football team.

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[198] To get a better understanding of the problem Wichita State had with Aetna Life and the payment of insurance claims, see *Wichita Eagle*, November 19, 1970.

If only the school could have looked at the model of Marshall University. Marshall had lost every football player on their team. The university allowed the team to drop to a lower division, only to become a national powerhouse, and in 2001, they went back up to division 1A football again. They were able to sacrifice their pride and have earned back their place in football history, while Wichita State's football program now stands in ashes, nothing but a memory.[199]

So in conclusion, thirty years have passed, The original members of Golden Eagle Aviation have gone on with their separate lives, Wichita State University still thrives, though without a football program, and the FAA has grown to be an even larger bureaucracy and appears able to accomplish even less than it could in 1970.

What lessons were learned from this tragedy? One has to be that with the understanding of the legal realities concerning the crash, that the death of over thirty people was not the only tragedy to befall this event. The events that surrounded the 1970 NTSB hearing into the crash demonstrated another type of tragedy. From the hearing, a scapegoat had been delivered and utterly destroyed. The FAA had displayed itself the righteous hero of the public's well being, and Wichita State had walked away not knowing exactly what had happened; however it was apparent that it had not only lost the lives of members of its football team and staff, but it had also lost forever a part of its innocence.

[199] For an interesting comparison between the paths that Wichita State and Marshall took their football programs after their tragedies see *Wichita Eagle*, October 1, 2000.

"AS TIME GOES BY, MEMORIES WILL FADE, BUT WE WILL NEVER FORGET…."

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Appendix

Appendix A

History of the Federal Aviation Administration

The Air Commerce Act of May 20, 1926, was the cornerstone of the Federal government's regulation of civil aviation. This landmark legislation was passed at the urging of the aviation industry, whose leaders believed the airplane could not reach its full commercial potential without federal action to improve and maintain safety standards. The Act charged the Secretary of Commerce with fostering air commerce, issuing and enforcing air traffic rules, licensing pilots, certificating aircraft, establishing airways, and operating and maintaining aids to air navigation. A new Aeronautics Branch of the Department of Commerce assumed primary responsibility for aviation oversight. In fulfilling its civil aviation responsibilities, the Department of Commerce initially concentrated on such functions as safety rulemaking and the certification of pilots and aircraft. It took over the building and operation of the nation's system of lighted airways, a task that had been begun by the Post Office Department. The Department of Commerce improved aeronautical radio communications, and introduced radio beacons as an effective aid to air navigation.

In 1934, the Aeronautics Branch was renamed the Bureau of Air Commerce to reflect its enhanced status within the Department. As commercial flying increased, the Bureau encouraged a group of airlines to establish the first three centers for providing air traffic control (ATC) along the airways. In 1936, the Bureau itself took over the centers and began to expand the ATC system. The pioneer air traffic controllers used maps, blackboards, and mental calculations to ensure the safe separation of aircraft traveling along designated routes between cities.

In 1938, the Civil Aeronautics Act transferred the Federal civil aviation responsibilities from the Commerce Department to a new independent agency, the Civil Aeronautics Authority. The legislation also expanded the government's role by giving the Authority the power to regulate airline fares and to determine the routes that air carriers would serve. In 1940, President Franklin Roosevelt split the Authority into two agencies, the Civil Aeronautics Administration (CAA) and the Civil Aeronautics Board (CAB). CAA was responsible for ATC, airman and aircraft certification, safety enforcement, and airway development. CAB was entrusted with safety rulemaking, accident investigation, and economic regulation of the airlines. Both organizations were part of the Department of Commerce. Unlike CAA, however, CAB functioned independently of the Secretary.

On the eve of America's entry into World War II, CAA began to extend its ATC responsibilities to takeoff and landing operations at airports. This expanded role eventually became permanent after the war. The application of radar to ATC helped controllers in their drive to keep abreast of the postwar boom in commercial air transportation. In 1946, meanwhile, Congress gave CAA the added task of administering the Federal-aid airport program, the first peacetime program of financial assistance aimed exclusively at promoting development of the nation's civil airports.

The introduction of jet airliners, along with a series of midair collisions, spurred passage of the Federal Aviation Act of 1958. This legislation transferred CAA's functions to a new independent body, the Federal Aviation Agency, which had broader authority to combat aviation hazards. The act took safety rulemaking from CAB and entrusted it to the new FAA. It also gave FAA sole responsibility for developing and maintaining a common civil-military system of air navigation and air traffic control, a

responsibility CAA had shared with others. In 1966, Congress authorized the creation of a cabinet department that would combine major Federal transportation responsibilities. This new Department of Transportation (DOT) began full operations on April l, 1967. On that day, FAA became one of several modal organizations within DOT and received a new name, Federal Aviation Administration.

At the same time, CAB's accident investigation function was transferred to the new National Transportation Safety Board. By the mid-1970s, FAA had achieved a semi-automated air traffic control system based on a marriage of radar and computer technology. By automating certain routine tasks, the system allowed controllers to concentrate more efficiently on the vital task of providing separation. Data appearing directly on the controllers' scopes provided the identity, altitude, and groundspeed of aircraft carrying radar beacons. Despite its effectiveness, this system required enhancement to keep pace with the increased air traffic of the late 1970s. The increase was due in part to the competitive environment created by the Airline Deregulation Act of 1978. This law phased out CAB's economic regulation of the airlines, and CAB ceased to exist at the end of 1984.

FAA's organizational structure has continued to evolve since its creation. The agency's first administrator favored a management system under which officials in Washington exercised direct control over programs in the field. In 1961, however, his successor began a decentralization process that transferred much authority to regional organizations. [200]

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[200] Federal Aviation Administration, "A Brief History of the Federal Aviation Administration and it's Predecessor Agencies." www.faa.gov/apa/history /briefhistory.htm. (16 August 2001)

Appendix B

NTSB History

The National Transportation Safety Board is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in the other modes of transportation such as railroad, highway, marine and pipeline accidents, and issuing safety recommendations aimed at preventing future accidents. The rules of the Board are located in Chapter VIII, Title 49 of the Code of Federal Regulations. The NTSB is responsible for maintaining the government's database on civil aviation accidents and also conducts special studies of transportation safety issues of national significance. The NTSB provides investigators to serve as U.S. Accredited Representatives as specified in international treaties for aviation accidents overseas involving U.S.-registered aircraft, or involving aircraft or major components of U.S. manufacture. The NTSB also serves as the "court of appeals" for any airman, mechanic or mariner whenever the Federal Aviation Administration or the U.S. Coast Guard Commandant takes certificate action, or when the FAA assesses civil penalties.

The NTSB opened its doors on April 1, 1967. Although independent, it relied on the U.S. Department of Transportation (DOT) for funding and administrative support. In 1975, under the Independent Safety Board Act, all organizational ties to DOT were severed. The NTSB is not part of DOT, or affiliated with any of its modal agencies. Since its inception in 1967, the NTSB has investigated more than 110,000 aviation accidents and thousands of surface transportation accidents. In so doing, it has become one of the world's premier accident investigation agencies. On call 24 hours a day, 365 days a year, NTSB investigators fly to every corner of the world to investigate significant accidents.

The NTSB has issued more than 11,600 recommendations in all transportation modes to more than 2,200 recipients. Since 1990, the NTSB has highlighted some issues on a Most Wanted list of safety improvements. Although it has no regulatory or enforcement powers, its reputation for impartiality and thoroughness has enabled the NTSB to achieve such success in shaping transportation safety improvements that more than 80 percent of its recommendations have been adopted by those in a position to effect change. Many safety features currently incorporated into airplanes, automobiles, trains, pipelines and marine vessels had their genesis in NTSB recommendations. At an annual cost of less than twenty-three cents a citizen, the NTSB is one of the best bargains in the government.[201]

[201] National Transportation Safety Board. "NTSB History." www.ntsb.gov/abt_ntsb/history.htm. (16 August 2001)

Appendix C

Basic Fact Concerning The Flight Of An Aircraft

There are four basic forces that act upon a flying body. These forces act the same regardless what they're acting upon, a 50,000 pound aircraft or a four pound bird. These forces are lift, mass, thrust, and drag. Lift holds the body up, as opposed to its mass (gravity), which pulls down upon it. Thrust (muscles or engines) pushes or pulls the body forward, and drag holds it back. When a body is not accelerating or decelerating, in other words stable, the opposing forces balance themselves, or vice versa. A change in any one of the forces changes them all, and the body will accelerate, decelerate, climb or descend, as the forces work to again balance themselves.

When there is enough lift created, birds and airplanes fly upon their outstretched wings, The wings create this lift because their camber (thickness) requires that air moving across the top of them has further to go and therefore moves faster than the air moving under them. Boyle's law states that a gas's pressure is inversely proportional to its speed. The upper curvature is called camber. When one understands this basic law of physics, it becomes obvious that the faster the wing passes through the air, the more lift it will produce. Birds flap their wings to create the necessary lift. Airplanes push their wings through the air to gain lift. Different airplane types need more or less lift for flight, depending upon their weight, wing shape, altitude, and bank angle.

In takeoff configuration most airplanes use flaps to lengthen the difference in distance across the top and bottom of their wings, allowing them to produce sufficient lift at a lower speed. After takeoff, with sufficient speed gained and increasing, the landing gear and flaps are retracted to reduce drag, allowing more forward acceleration. For

landing, flaps are once again used to create more lift and drag, allowing lower landing speed.

Angle of Attack

A wing seldom flies with its bottom surface parallel to the apparent wind. The difference between them is called "angle of attack." Hold your hand outside a car at sixty miles per hour, and you can demonstrate "angle of attack" to yourself. There is less backward force (drag) on your appendage when the hand is flattened with the thumb forward. As one rotates the thumb up, lift is created; rotate it down and the lift becomes a downward vector. Hold your flattened hand into the wind, and the backward force (drag) becomes great. When angle of attack becomes too great, the air will no longer flow smoothly over your extended hand or a wing. When the smooth airflow breaks and turbulence begins, your hand or a wing is stalled—no longer creating lift, only drag.

Stalls

A wing and its accompanying airplane stall when the wind no longer flows smoothly across the upper surface. The stall condition may be caused by too slow speed or too steep bank angle. The entire wing does not stall along its length at the same time. When the airflow becomes turbulent over a portion of the wing, there is usually a mild buffet as the flow breaks away. The way to compensate for a stall is to either decrease bank angle, increase speed, or lower flaps.

Turns

One cannot turn an airplane with its rudder. Instead, the wings are banked (tilted) and lift pulls the airplane around. The steeper the bank, the faster and tighter the turn and the less lift available to counteract gravity. With the relatively shallow banks made by airliners, upward lift is hardly affected. In a steep turn, more than 45 degrees, stall speeds

become significantly higher, as half the lift produced turns the airplane and half holds it up.

Fuel Mixtures

It is unfortunate that limitations in materials prevent an internal combustion engine from being operated with the chemically correct mixture of fuel and air called stoichiometric. The main reason for this is that in a constant stoichiometric condition, the internal temperature would be too great. So, provisions are made to change the mixture on large piston engines. At maximum power, for takeoff, the pilot uses a rich mixture of fuel, with the carburetor providing more fuel to cylinders than will be burned, thereby using excess fuel for cooling. The mixture remains rich until the airplane reaches cruising altitude, at which time the mixture is leaned. The pilot or co-pilot accomplishes the adjustment of "lean" or "rich" fuel during flight. During cruise, the carburetor passes more air and less fuel. All the fuel burns, leaving the excess air for cooling.

IFR, VFR – IMC, VMC

Basically, when the weather is bad, instrument meteorological conditions, IMC, prevail, and a pilot must file an instrument flight plan and fly instrument flight rules, IFR. Under IFR a pilot can fly through any conditions, no matter how bad, as long as his airplane is properly equipped and he is properly certified. In good weather, visual meteorological conditions, VMC, prevail. Usually no flight plan is required under VMC. One adheres to the old rule, see and be seen, and may wander at will. I have flown from the Atlantic to the Pacific under VMC and never talked to a soul on the radio.[202]

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[202] This information was provided by Ronald Skipper, a pilot with over twenty years aviation experience

Appendix D

AVIATION SERVICES AGREEMENT

THIS AGREEMENT, made this July 21 day of 1970, 1970, between Golden Eagle Aviation, Inc., a corporation, hereinafter referred to as "Contractor", and Wichita State University, hereinafter referred to as "Customer";

WITNESSETH:

WHEREAS, Customer has leased (or, prior to the commencement of the services provided for herein, will have leased), from a third party, the following described aircraft:

ONE DOUGLAS DC-6B

hereinafter referred to as "the Aircraft"; and

WHEREAS, Customer desires to have Contractor provide, with respect to the Aircraft, the services specified below, upon the terms and conditions hereinafter set forth, and Contractor is willing so to do;

NOW, THEREFORE, Customer and Contractor do hereby agree as follows:

1. SERVICES: Contractor shall provide the following services for the Aircraft during the period of time commencing on September 11, 1970, and ending on November 14, 1970:

(a) A fully qualified flight crew to fly the Aircraft to and from such points within the Continental United States as Customer may direct (or, if an itinerary is attached hereto,

to fly the Aircraft in accordance with said itinerary), said flight crew to consist of: Captain

First Officer

Flight Engineer

Two Cabin Attendants

(b) The following specified in-flight catering services See attached schedule and itinerary titled "1970 - Football Travel Plans".

(c) All fuel, oil and other fluids necessary for the operation of the Aircraft pursuant to their Agreement.

(d) Routine maintenance on the Aircraft.

2. COMPENSATION: As consideration for Contractor's providing the above specified services, Customer shall pay to Contractor a total sum of $ 24,388.60 .

3. PAYMENT: Customer shall pay to Contractor the sum of $12,194.30 upon signing this Aviation Service Agreement, this sum to constitute an advance against the total of $24,388.30.

In addition, the Customer shall pay to the Contractor on October 5, 1970, 1970 the sum of $12,194.30, this sum in addition to the advance to constitute payment in full of the Aviation Service Agreement.

4. CONTRACTOR'S PERSONNEL: Contractor's personnel engaged in the performance of this Agreement shall for all purposes remain employees

of Contractor. All members of the flight crew shall be licensed and fully qualified in every respect to operate the Aircraft.

5. DELAYS OR CANCELLATIONS: Contractor shall not be responsible for delays or cancellations occasioned by labor disputes, weather, acts of God, mechanical failure or any other factors beyond the control of Contractor.

6. INSURANCE: Customer, at its expense, shall provide for passenger liability insurance with limits satisfactory and in accordance with the FAA and CAB regulations and shall furnish proof thereof to Contractor.

7. ENTIRE AGREEMENT: This Agreement, and any schedules or exhibits attached hereto, constitutes the entire agreement between Customer and Contractor and shall not be modified or amended except by writing signed by both parties.

8. COUNTERPARTS: This Contract may be executed in numerous counterparts, each such counterpart having the same effect as the original contract.

9. CHOICE OF LAW: This Contract shall be construed in all respects pursuant to the Laws of the State of Oklahoma.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

GOLDEN EAGLE AVIATION, INC.

By _____
Vice President

ATTEST:

_____
Secretary

WICHITA STATE UNIVERSITY

By _____

Appendix E

Martin 404 Performance Information

1. General Information

Airport

Stapleton Field, Denver, Colo.
Elevation: 5,300 feet.
Takeoff Runway: No. 35; 11,500 feet long.
Atmosphere: FAT 71° F.; wind 030 @ 6 knots; dew point 30° F.

Crash Site

Elevation:	11,000 feet m.s.l.
Ambient Temp.:	50° F.
Standard Temp.:	20° F.
Density Alt.:	12,900 feet m.s.l.

Airplane

Gross weight at takeoff at Denver:	48,165 lbs.
Gross weight at impact:	47,565 lbs.
Wing flap position at impact:	12.5°(Takeoff & SE En route)
Lateral attitude at impact:	31 - degree left bank
Power conditions at impact:	2,400 r.p.m., 165 bmep (1,400 BHP)

2. Maximum Permissible Takeoff & Landing Weights for Field Elevation of 5,300 ft.

	WET	DRY
Max. Takeoff Wt.:	42,975 lbs.	39,500 lbs.
Max. Landing Wt.:	42,500 lbs.	37,975 lbs.

3. Estimated Single-Engine (SE) Takeoff Climb Performance in feet per minute (f.p.m.) at 48,165 lbs., 5,300 ft. altitude, V_2 speed, 12.5° flap, International Standard Atmosphere (ISA)

Gear Down:	5 f.p.m.	- 135 f.p.m.
Gear Up :	+ 255 f.p.m.	+ 140 f.p.m.

4. Estimated En Route Climb Performance at 47,565 lbs., 11,000 ft. altitude, Scheduled Wing Flap & Airspeed, ISA, Straight & Turning Flight

	Flap Position	Calibrated Airspeed (CAS) mph/kts	0°	15°	30°	45°	60°
All-Engine:		163/141	+ 890	+ 860	+ 760	+ 515	- 240
Single-Engine:	12.5°	142/124	- 40	-	-	-	-

5. Estimated All-Engine En Route Climb Gradient at 47,565 lbs., 11,000 ft. Altitude, 141 kts. CAS, Flaps Up.

Free Air Temperature (FAT)	Rate of Climb	Gradient
20° F. (ISA):	+ 890 f.p.m.	0.0525 (i.e., 5.25%)
50° F. (ISA + 30):	+ 798 f.p.m.	0.0457 (i.e., 4.57%)

6. Estimated Power-Off Stalling Speed at 47,565 lbs., and Various Bank Angles; CAS mph/kts.

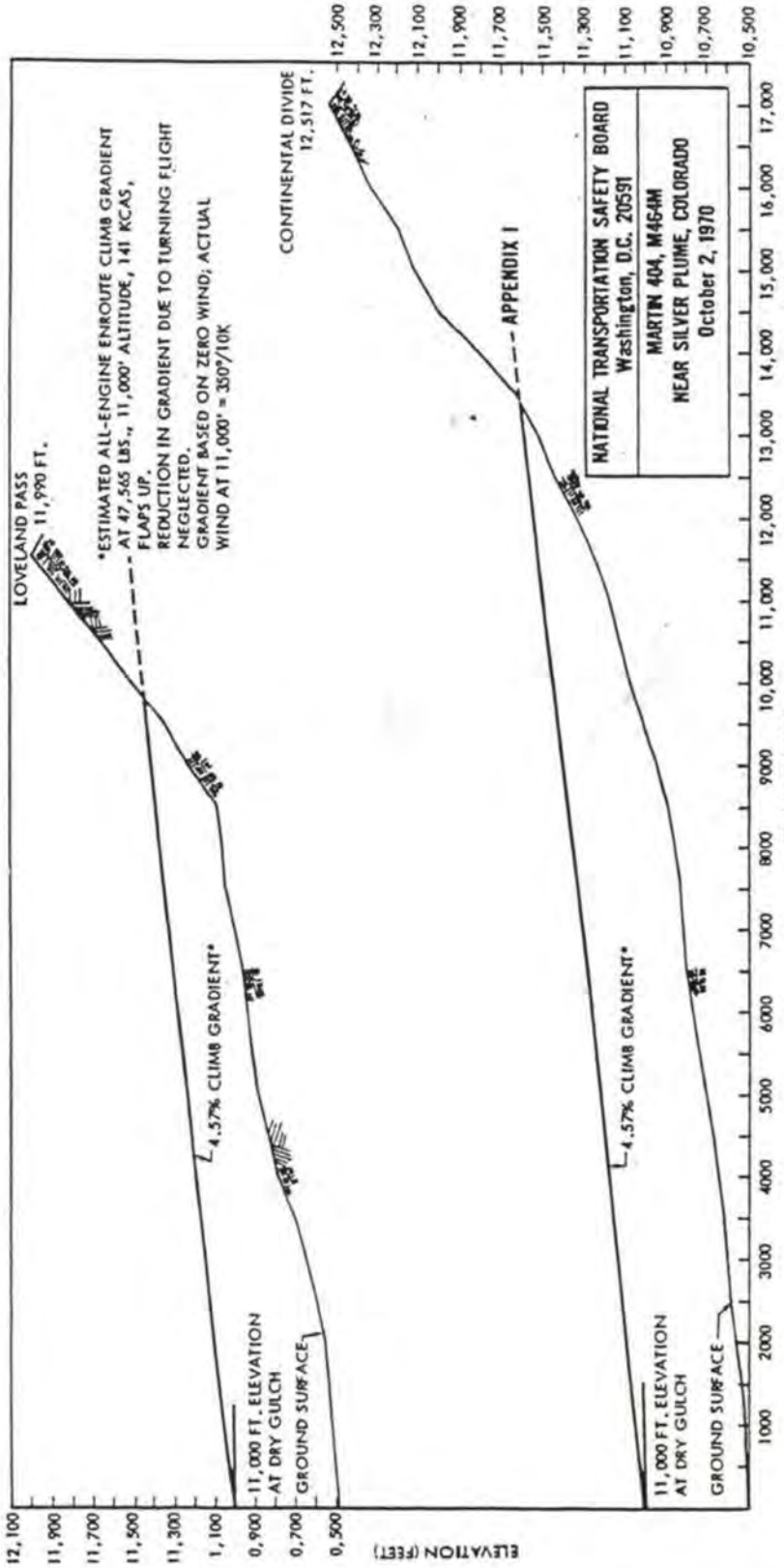
Bank Angle	0°	15°	30°	45°	60°
Flaps 0°:	115/100	117/102	124/107	137/119	163/141
Flaps 12.5°:	104/91	106/92	112/98	124/108	148/128

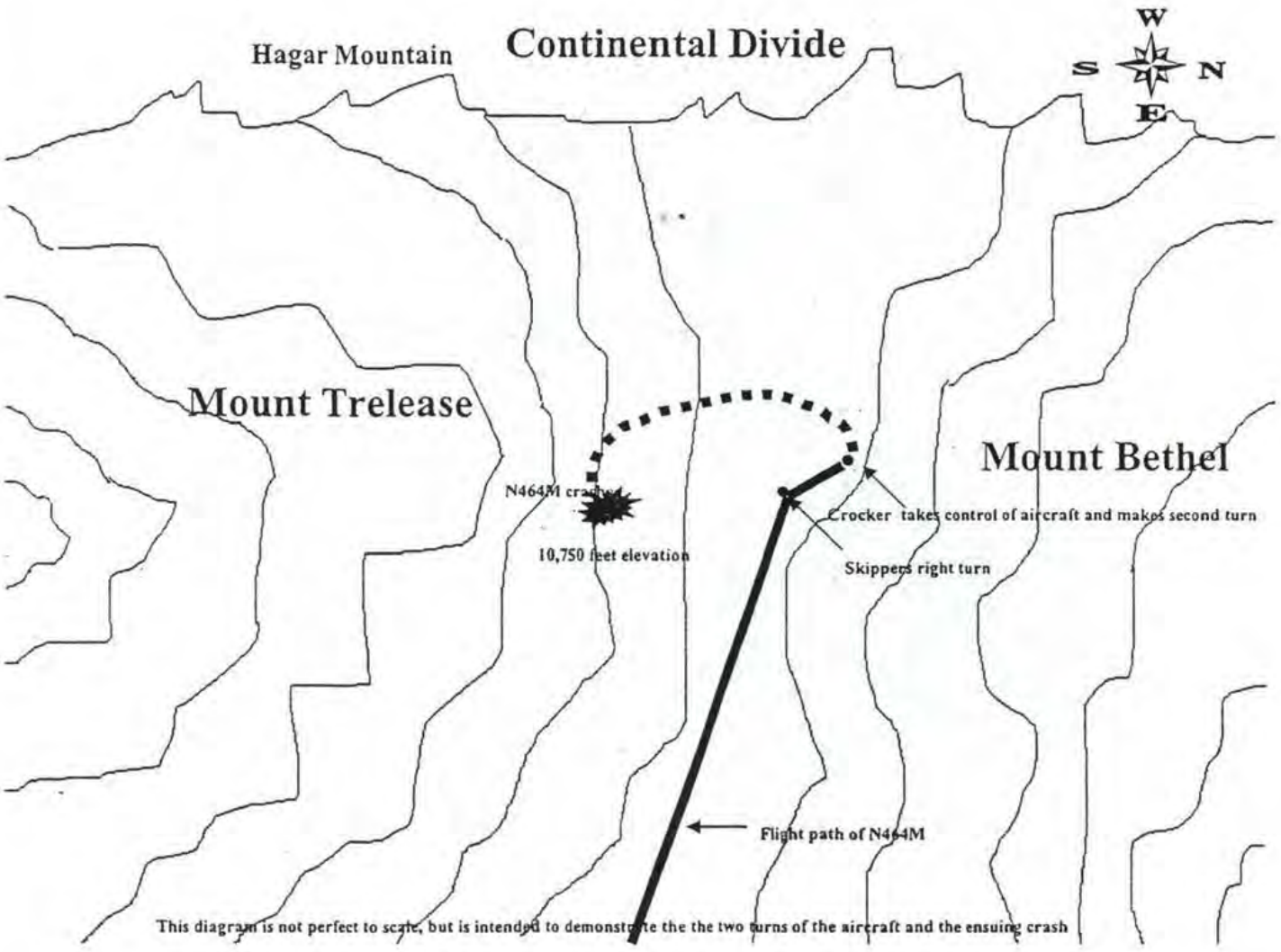
7. Radius of Turn (feet) at Various Bank Angles & Airspeeds (CAS) at 11,000 ft. Altitude & 50° F. Temperature. Flaps 12.5°

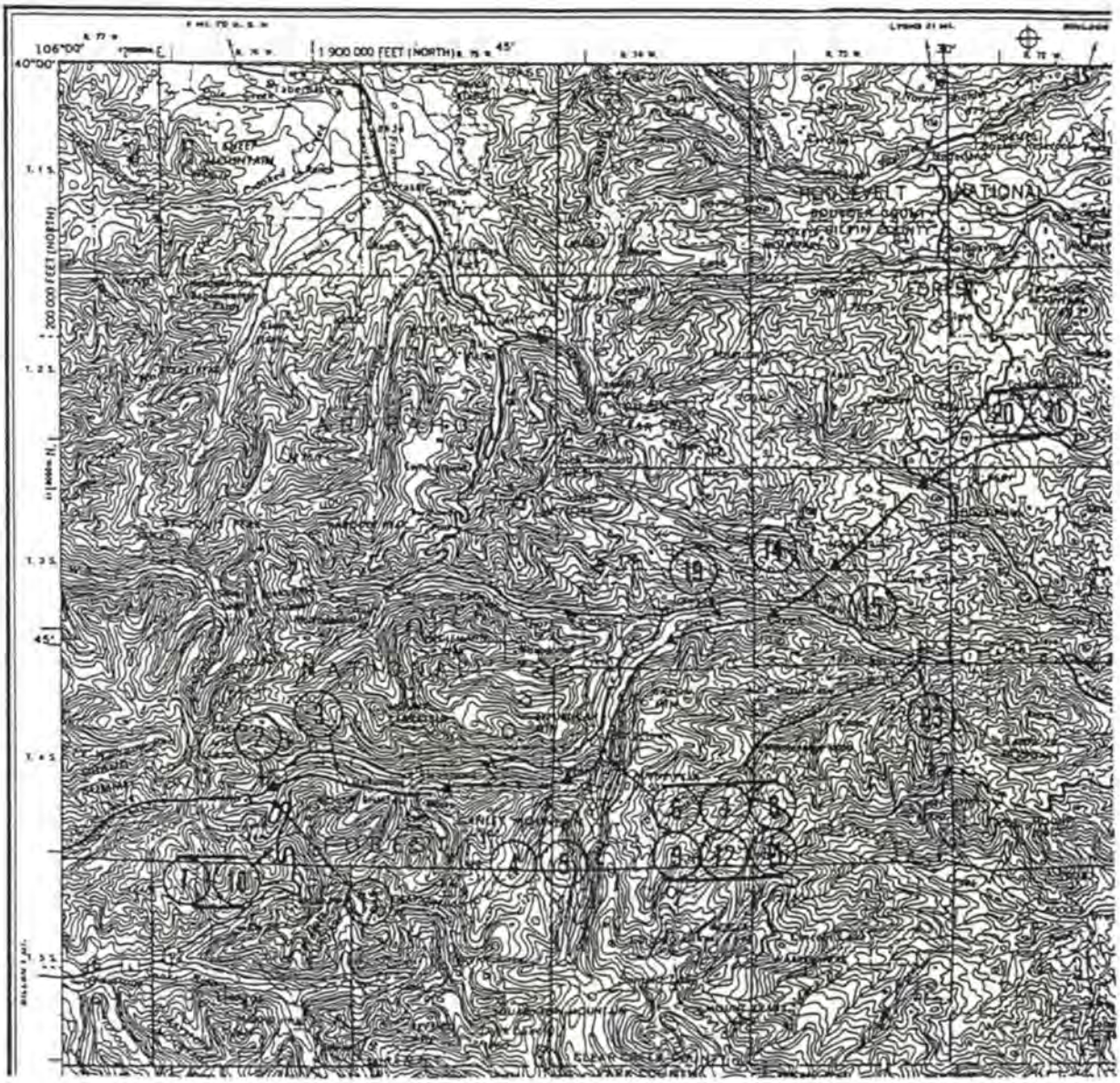
Airspeed M.p.h	Airspeed Kts.	15°	30°	45°	60°
115	100	4,930	2,280	(s)	(s)
127	110	5,930	2,760	1,600	(s)
138	120	7,130	3,310	1,910	(s)
150	130	8,360	3,910	2,240	1,300
161	140	9,600	4,490	2,580	1,490
173	150	11,050	5,140	2,970	1,718
184	160	12,600	5,900	3,400	1,970

NOTE: (s) designates a stalled condition

Appendix F


LOVELAND PASS
11,990 FT.
*ESTIMATED ALL-ENGINE ENROUTE CLIMB GRADIENT AT 47,565 LBS., 11,000' ALTITUDE, 141 KCAS, FLAPS UP. REDUCTION IN GRADIENT DUE TO TURNING FLIGHT NEGLECTED. GRADIENT BASED ON ZERO WIND; ACTUAL WIND AT 11,000' = 350°/10K
CONTINENTAL DIVIDE
12,517 FT.
4.57% CLIMB GRADIENT*
11,000 FT. ELEVATION AT DRY GULCH
GROUND SURFACE
APPENDIX I
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20591
MARTIN 404, M464M
NEAR SILVER PLUME, COLORADO
October 2, 1970
ELEVATION (FEET)
DISTANCE (FEET)


Hagar Mountain
Continental Divide
W
S
N
E
Mount Trelease
Mount Bethel
N464M crashed
10,750 feet elevation
Crocker takes control of aircraft and makes second turn
Skippers right turn
Flight path of N464M
This diagram is not perfect to scale, but is intended to demonstrate the the two turns of the aircraft and the ensuing crash



LEGEND

(15) WITNESS LOCATION

FLIGHT PATH AS DESCRIBED BY WITNESS

WITNESS GROUP CHART
APPENDIX G
SILVER PLUME, COLORADO
OCTOBER 2, 1970

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

Appendix G

List of Passengers aboard the "Gold" Plane[203]

Players

Marvin G. Brown, Jr. *
Mike P. Bruce
Don Christian *
John Duren *
Martin E. Harrison *
John M. Hoheisel
Randy Joe Jackson
Ronald G. Johnson *
Randall B. Kiesau *
Malory W. Kimmell *
Glenn K. Kostal
Carl R. Krueger *
David W. Lewis
Stephen A. Moore *
Frank K. Morrison
Thomas B. Owen Jr. *
Robert P. Renner
Eugene Robinson *
Thomas T. Shedden *
Richard Stephens
Richard N. Stines *
John R. Taylor *
Jack R. Vetter *

Crew, University Staff and other Passengers

Maxine Coleman *
Ray Coleman *
Danny Crocker *
Judy Dunn *
Carl Fahrbach *
Floyd Farmer *
Etta Mae Grooms *
John Grooms *
Albert Katzenmeyer *
Marion Katzenmeyer *
Raymond King *
Yvonne King *
Judy Lane *
Tom Reeves *
Ronald Skipper
Ben Wilson *
Helen Wilson *

* = Denotes fatalities

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[203] See Wichita State University Football Team Airplane Crash Collection (MS 87-11), Special Collections, Ablah Library, Wichita State University, Wichita, Kansas, box 1, file 2