
VIEWS LETTER

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AWD's Views, News & Items of Interest

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Dynamics of Flight

By AWD

"Aviation in itself is not inherently dangerous. But to an even greater degree than the sea, it is terrible unforgiving of any carelessness incapacity or neglect." This story identifies one of the reasons why aviation accidents sometimes occur. The Wright Brothers made the first powered flight and introduced the heavens to their version of aerodynamics, and suddenly, the skies became eternally infected with the dynamics of human nature.

This story begins and ends on the 2nd of July 1969. Aviation was a relatively new form of transportation—less than 70 years since its humble beginning, yet just a few days after this incident happened Apollo 11 was launched, and a few days later the first lunar landing in history was made.

This story is about two pilots, a WWII veteran fighter pilot, Captain Bill, and the second pilot is Randy, my friend who became a very successful Airline Captain and served with TWA starting in the beginning of the Jet age and into their purchase by American Airlines. This story takes place when Randy was a fledgling flight instructor in his mid-twenties trying everything possible to break into a career as an airline pilot.

Captain Bill was a pilot/salesman. He was best suited to being a pilot, however, and for whatever reason, he was trying to make a living

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Happy Easter!

THE STORY OF EDITH BURNS...

Edith Burns was a wonderful Christian who lived in San Antonio, Texas. She was the patient of a doctor by the name of Will Phillips. Dr. Phillips was a gentle doctor who saw patients as people. His favorite patient was Edith Burns.

One morning, he went to his office with a heavy heart, and it was because of Edith Burns. When he walked into that waiting room, there sat Edith with her big black Bible in her lap earnestly talking to a young mother sitting beside her.

Edith Burns had a habit of introducing herself in this way, "Hello, my name is Edith Burns. Do you believe in Easter?" Then she would explain the meaning of Easter, and many times people would be saved.

Dr. Phillips walked into that office and there he saw the head nurse, Beverly. Beverly had first met Edith when she was taking her blood pressure. Edith began by saying, "My name is Edith Burns. Do you believe in Easter?"

Beverly said, "Why, yes I do."

Edith said, "Well, what do you believe about Easter?"

Beverly said, "Well, it's all about egg hunts, going to church, and dressing up." Edith kept pressing her about the real meaning of Easter, and finally led her to a saving knowledge of Jesus Christ.

Dr. Phillips said, "Beverly, don't call Edith

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One great advantage of liberty is that it makes available to the liberated the ability and the opportunity to do good—in spite of all opposition, hardship and pain.

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selling airplanes and flying them professionally at the same time. Although it is very rare a few have been successful doing both. I've only met one that I know of and he was above average. It is a difficult combination to accomplish with any amount of real success in either endeavor.

Captain Bill was known around the Oklahoma City flying community as one that had been through the fire of WWII, and he was probably thought of as bulletproof by most of the young, inexperienced aviators that were always hanging around—trying to gain more experience and flying time. When the younger pilots saw Captain Bill they might have mistaken him for a god of sorts, someone who could do no wrong, especially in the cockpit.

Imperfection is a common trait among all mortals, however, it is difficult for many of us to admit especially if we are aviators always aware of our outward image. Most acts of carelessness and neglect are almost always sins of self preoccupation which is one of the most common sins that occur in the cockpit.

On this particular day, Captain Bill's mission was to demonstrate the Jet Commander 1121 to a perspective buyer. He was determined to show and confirm the range of the aircraft by flying it non-stop from Oklahoma City, OK to Pella, Iowa—an attainable feat but the conditions must be almost perfect. The weakest aspect of the Jet Commander 1121 is that they are terribly inefficient and consume fuel by the barrel. Therefore, the range is limited by the amount of fuel the aircraft is able to carry.

Typical July days in the Midwest begin with cool mornings that graduate into warm mid-mornings and hot afternoons. By mid-afternoon, there are always cumulonimbus clouds developing somewhere in one direction or another. These clouds can grow into gigantic monsters containing thousands of cubic miles of violence with heavy

rain, large hail, icing conditions, strong vertical wind shears, severe turbulence, bolts of blinding lightning, claps of thunder, and oftentimes, tornadoes. (That may sound over exaggerated, but it's true.) Many times these storms form in lines along fronts that can stretch hundreds of miles across the country. Usually by sunrise, they dissipate into a few layers of what is commonly called scud (that's pilot jargon for fluffy little white clouds scattered a couple thousand feet above the surface). Sometimes, those lines of storms remain strong and mature throughout the night surviving to grow even stronger the following morning.

Whether or not Captain Bill knew about the line of storms that crossed their intended route of flight is uncertain. He may have failed to get an in-route weather briefing or may have chosen to ignore part of it. Any of these possibilities would be hard for him to admit at the time. The truth of it may never be known, but Randy avows that Captain Bill never discussed the possibility of a line of storms with him.

The sun was still well below the eastern horizon as Captain Bill pushed the power levers forward creating enormous noise in all directions except inside the cockpit. Accelerating down the runway and lifting off into the cool calm morning air was as always, exhilarating. As the landing gear retracted, a light illuminating the landing gear handle attracted the attention of both pilots. It was an indication that the landing gear was still intransient—not fully retracted or fully extended. They recycled the landing gear, but the light remained illuminated. The nuisance of the warning light was ignored as the assumption was made that the light was an indication malfunction.

Air Traffic Control (ATC) cleared them to Flight Level 370 (37,000 ft above sea level). Around Tulsa they began notice cumulonimbus clouds more than a hundred miles ahead flickering occasionally in the darkness. As they progressed

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The quiet words of the wise are more to be heeded
than the shouts of a ruler of fools. *Ecclesiastes 9:17*

closer, they could see flashes of lightning jumping from one cloud to another and to the ground. ATC informed them that the tops were over forty thousand feet. In his own mind, Captain Bill knew that the aircraft was capable of operating at a much higher altitude than its certified ceiling of thirty seven thousand, and that they could probably top the approaching line of storms.

This line of reasoning was outside of the known envelope. Before an aircraft is certified to operate at higher altitudes, the manufacturer has to prove to the FAA, and others, how the airplane will perform. Tests that relate to pressurization, low and high speed buffet boundaries, and the ability to descend in a given period of time should an emergency arise, are all part of the certification process. All such factors directly relate to the safety of the aircraft and its occupants.

They requested and were assigned FL 410 (41,000' above sea level). As the tops of the clouds became higher, they requested and were assigned FL 430 (43,000' above sea level). Bill was now operating the aircraft outside of the envelope. There was nothing written to define how it would fly, no graphs, and no data of how it would perform at this altitude.

Randy had made the assumption that Captain Bill knew exactly what he was doing and that this was standard operating procedure, normal stuff. This was a bad assumption. "Newbies" seldom know what to think and being in a jet for the first few times is often so overwhelming that they are more passenger-like than crewmember. Flying in a modern jet aircraft can lull the most experienced aviator into carelessness and neglect which can end in death.

Both pilots became more concerned as they watched this solid line of storms grow. They were

now consumed with searching for an opening where they could pass through safely. ATC advised them that this very storm had dropped three feet of water on the streets of Kansas City a few hours before. (*This had to be an exaggeration.*) Captain Bill indicated in his written report that as they approached the storm, the clouds were getting higher and eventually they were flying in the tops of the clouds with no outside visual reference.

Obviously, a change in course a few minutes earlier would have made their future problem nonexistent. They could have gone around the line of storms to the south, and then if necessary, they could have landed somewhere and bought more fuel. Now, they were too heavy to be this high and too close to turn away.

They were operating off the chart and into the unknown, a place where only test pilots dare to fly. A test pilot flying outside the known envelope at this weight and this altitude is seldom concerned about his safety, because engineers have made a scientific and educated prediction about what will happen to an aircraft at a given weight and at a given altitude. More importantly, the test pilots are not into taking unnecessary risks. Test pilots test out the engineers' theories, but they do it in perfect meteorological conditions. Captain Bill and Randy were way outside the envelope and were rapidly approaching the most horrible, meteorological condition known to aviators—a solid line of thunderstorms over forty-five thousand feet tall. The very thought of where they were about to be, and the feeble flying condition of the aircraft (too heavy & too high) makes me shiver just writing about it.

Panic began to creep into the cockpit. Both

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Faith is not some weak and pitiful emotion,
but is strong and vigorous confidence
built on the fact that God is holy love.

~Oswald Chambers

FLIGHT, *continued from page 3.*

pilots were closely monitoring every sweep on the radar. They constantly changed the range of the radar from the forty mile range to the ten, to the twenty mile range, etc, etc. They were trying to find a place where it looked and felt safe to fly. The air was extremely thin and the airplane seemed mushy and slow to respond. It seemed as if they were barely flying. The high speed buffet boundary was precariously near as was the low speed buffet boundary. The meaning of “coffin corner” was becoming very realistic and understandable to them both.

Captain Bill and Randy were about to find themselves in a place where they were out of solutions, ideas and almost completely out of control of the airplane. It was not a comfortable place to be.

The high speed buffet boundary is a speed where sound waves affect airflow. This means that a pilot flying an aircraft designed for subsonic flight, faster than the high speed buffet boundary allows, will experience some loss of flight control. A pilot flying any airplane slower than the low-speed buffet boundary will experience some loss of flight control. The higher the altitude the aircraft is flown, the higher the *indicated* low speed buffet boundary. Whereas, the high speed buffet boundary becomes a lower indicated speed with the increase of altitude. As an aircraft is flown at higher and higher altitudes the high and low speed buffet boundaries become closer and closer to each other. This is referred to in pilot jargon as “coffin corner.”

Bill and Randy were working very hard trying to stay out of harms way. Due to the aircraft they were flying and the enormity of the weather that they were confronted with, they both sensed

imminent danger and became more and more concerned. It was too late for a course change. In his written report, Captain Bill mentioned trying to make a slight turn just as things began to rapidly deteriorate.

Bill stated in his report, “Before the aircraft turned, it started to porpoise. The airspeed dropped to about 160 knots, then rose rapidly to about 270 knots, then started down again. I disengaged the autopilot and pushed the wheel forward. A quick glance showed the airspeed was dropping below 160 knots. The porpoising had been smooth up to this point, but then it became rough. I heard a series of puffs, or small explosions that accompanies a compressor stall. The annunciator panel lit up on the left side.”

When the aircraft slowed to 160 knots it was possible and probable that it slowed because the altitude hold function of the autopilot was trying to maintain altitude in a strong downdraft. In order to maintain altitude, the autopilot caused the aircraft to pitch nose-up which caused the speed to drop off. As they sped eastward, they moved from strong downdrafts to strong updrafts. The altitude hold function was doing its best to maintain altitude causing the aircraft to pitch nose-down into the strong updrafts. The indicated air speed (IAS) gained more than a hundred knots rapidly to 270 knots IAS. This was partly due to the updraft and partly due to gravity helping to increase the speed as the aircraft was now pointed down. When Captain Bill disconnected the autopilot he caused things to go from bad to worse. When he tried to correct the nose down pitch attitude of the aircraft he pulled too hard and deflected the normal air flow to the engines which caused a dual engine flameout.

With both engines flamed out—each of the

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The questions that truly matter in life are remarkably few, and they are all answered by these words—
“Come to Me.” Our Lord’s words are not, “Do this, or don’t do that,” but—“Come to me.” ~*Oswald Chambers*

FLIGHT, *continued from page 4.*

pilots donned their respective oxygen masks which now complicated communication between the two of them. The Captain, who was trying to fly the aircraft, mistook an instrument for something that it was not. He was attempting to fly the aircraft using a turn coordinator—all the while thinking that the instrument was an attitude gyro. He was ignoring his primary instruments that would have been operating normally using power from the battery, but this required movement of a switch. For some reason, Captain Bill failed to close this switch. Evidently, he was preoccupied with the turn indicator. Vertigo and total upset were likely to have been a major factor in this calamity. Randy expressed that he tapped the Captain on the shoulder and pointed to the flight directors. The Captain chose to ignore him and continued to try to fly via the turn coordinator. Randy recounts going through a series of turning maneuvers that took them from nose up vertically to nose down vertically several times, speed changing from extremely fast to extremely slow. During one of these violent maneuvers they heard a loud crashing sound. They later learned that this noise occurred when the right hand landing gear broke free from the up latch and came crashing out of the wheel well. The suspected cause was extreme positive 'g' forces along with a faulty up latch. At one time, their descent rate and speed became so high that both pilots were pulling back vigorously on the yoke trying to slow the aircraft. They were going from heavy positive g-forces to zero g-forces to negative g-forces and back again, all in extreme meteorological conditions.

“It was by the grace of God that we survived,” Randy explained. “God had other plans for me on this earth or my life would have ended that morning.”

The first visual reference was recognized when

a section line appeared in one of the upper eyebrow windows. They were at about 25,000 feet when they broke out and they were up-side-down. All of their gyrations, high speeds to very slow speeds, up to down movements, right side up to upside down cost them 18000 feet of altitude. Captain Bill split out of inverted from 25,000' MLS (mean sea level). Again both pilots pulled on the controls to level off at 19,000' MSL. Their speed at the bottom of this maneuver must have been extremely fast because they relit both engines while descending from 19,000' to 18,000' MSL. Their circumstances required them to make tight turning maneuvers in order to stay out of the clouds.

ATC advised them that the nearest airport was Jefferson City, MO. They circled around storms that extended to the ground and seemed to be all around them. Randy noticed a landing strip that was directly below them. ATC identified it as Columbia Regional, and they advised them that there were no maintenance facilities on the field. At this point, they didn't care if there was a maintenance facility on the field or not. They were ready to feel some terra firma under their feet.

Luckily, the landing gear's diagonal brace had gone over top-dead-center which locked the gear down, but in a partially retracted position. As they touched down, a fog bank rolled in and they had to stumble around in the fog to find the parking area. Isn't God's grace wonderful? Randy believes that Providence provided that short span of good weather over this little airport just for them.

A turn coordinator is an antiquated instrument designed to provide a timed turn and can be used along with an airspeed indicator and altimeter to maintain level flight. It was one of the first and most reliable gyro instruments ever placed in early aircraft. Using the instrument for any other

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Faith is the supreme effort of your life—throwing yourself with abandon and total confidence upon God.

~Oswald Chambers

purposes without a good understanding of how it works could cause confusion in the mind of the pilot. This kind of confusion often ends in vertigo which often means a total loss of control. Usually the loss of control is exhibited by a fiery crash—the very sudden stop at the bottom of what is commonly known as a graveyard spiral.

The airplane endured with a wrinkled surface on the upper side of both wings. The wing spars were x-rayed and found to be intact. The airplane was repaired and flown again. There is no strange or unusual phenomenon that caused this event. It was pure and simple human error. Captain Bill opted to venture into the unknown without concurrence from Randy. He chose to take them into a situation that was questionable at best. Randy assures that he is not willing to go to a place similar to this again, nor will he allow anyone to take him there.

It shouldn't take a shrink, a psychologist, or a minister to understand what happened almost 40 years ago. Captain Bill and Randy were blessed by the grace of God on that horrifying morning. Most events of this nature end in death.

Randy is still a very active, veteran aviator with over 27,000 accident free hours of experience. He still views that day as the scariest of his career, but says that it has made him a much more cautious pilot.

The grace of God is the very best gift that has ever been offered to mankind, without it, all of us would be lost.

This is a true story. Randy has since flown a complete carrier as an Airline Pilot and was forced to retire a couple years ago due to the very discriminatory "Age 60 Rule". He is presently the Chief Pilot of a corporate flight operation in Oklahoma City. He has been a Sunday school teacher for young adults for more than 20 years. It may be that God had this position in mind for Randy when he kept Captain Bill and Randy safe on that July morning back in 1969.

into the office quite yet. I believe there is another delivery taking place in the waiting room.

After being called back in the doctor's office, Edith sat down and when she took a look at the doctor she said, "Dr. Will, why are you so sad? Are you reading your Bible? Are you praying?"

Dr. Phillips said gently, "Edith, I'm the doctor and you're the patient." With a heavy heart he said, "Your lab report came back and it says you have cancer, and Edith, you're not going to live very long.

Edith said, "Why Will Phillips, shame on you. Why are you so sad? Do you think God makes mistakes? You have just told me I'm going to see my precious Lord Jesus, my husband, and my friends. You have just told me that I am going to celebrate Easter forever, and here you are having difficulty giving me my ticket!"

Dr. Phillips thought to himself, "What a magnificent woman this Edith Burns is!"

Edith continued coming to Dr. Phillips. Christmas came and the office was closed through January 3rd. On the day the office opened, Edith did not show up. Later that afternoon, Edith called Dr. Phillips and said she would have to be moving her story to the hospital and said, "Will, I'm very near home, so would you make sure that they put women in here next to me in my room who need to know about Easter."

Well, they did just that and women began to come in and share that room with Edith. Many women were saved. Everybody on that floor from staff to patients were so excited about Edith that they started calling her Edith Easter; that is everyone except Phyllis Cross, the head nurse.

Phyllis made it plain that she wanted nothing to do with Edith because she was a "religious

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"This is what is written: The Christ will suffer and rise from the dead on the third day, and repentance and forgiveness of sins will be preached in his name to all nations, beginning at Jerusalem." ~Jesus Christ Luke 24:46 NIV

nut". She had been a nurse in an army hospital. She had seen it all and heard it all. She was the original G.I. Jane. She had been married three times, she was hard, cold, and did everything by the book.

One morning the two nurses who were to attend to Edith were sick. Edith had the flu and Phyllis Cross had to go in and give her a shot. When she walked in, Edith had a big smile on her face and said, "Phyllis, God loves you and I love you, and I have been praying for you."

Phyllis Cross said, "Well, you can quit praying for me, it won't work. I'm not interested." Edith said, "Well, I will pray and I have asked God not to let me go home until you come into the family."

Phyllis Cross said, "Then you will never die because that will never happen," and curtly walked out of the room.

Every day Phyllis Cross would walk into the room and Edith would say, "God loves you Phyllis and I love you, and I'm praying for you."

One day Phyllis Cross said she was literally drawn to Edith's room like a magnet would draw iron. She sat down on the bed and Edith said, "I'm so glad you have come because God told me that today is your special day."

Phyllis Cross said, "Edith, you have asked everybody here the question, "Do you believe in Easter but you have never asked me."

Edith said, "Phyllis, I wanted to many times, but God told me to wait until you asked, and now that you have asked." Edith Burns took her Bible and shared with Phyllis Cross the Easter Story of the death, burial and resurrection of Jesus Christ. Edith said, "Phyllis, do you believe in Easter? Do you believe that Jesus Christ is alive and that He wants to live in your heart?"

Phyllis Cross said, "Oh I want to believe that with all of my heart, and I do want Jesus in my life "Right there, Phyllis Cross prayed and

invited Jesus Christ into her heart. For the first time, Phyllis Cross did not walk out of a hospital room, she was carried out on the wings of angels.

Two days later, Phyllis Cross came in and Edith said, "Do you know what day it is?" Phyllis Cross said, "Why Edith, it's Good Friday."

Edith said, "Oh, no, for you everyday is Easter. Happy Easter Phyllis!"

Two days later, on Easter Sunday, Phyllis Cross came into work, did some of her duties and then went down to the flower shop and got some Easter lilies because she wanted to go up to see Edith and give her some Easter lilies and wish her a Happy Easter.

When she walked into Edith's room, Edith was in bed. That big, black Bible was on her lap. Her hands were in that Bible. There was a sweet smile on her face. When Phyllis Cross went to pick up Edith's hand, she realized Edith was dead. Her left hand was on John 14: "In my Father's house are many mansions. I go to prepare a place for you, I will come again and receive you to Myself, that where I am, there you may be also." Her right hand was on Revelation 21:4, "And God will wipe away every tear from their eyes, there shall be no more death nor sorrow, nor crying; and there shall be no more pain, for the former things have passed away."

Phyllis Cross took one look at that dead body, and then lifted her face toward heaven, and with tears streaming down her cheeks, said, "Happy Easter, Edith - Happy Easter!"

Phyllis Cross left Edith's body, walked out of the room, and over to a table where two student nurses were sitting. She said, "My name is Phyllis Cross. Do you believe in Easter?"

~Unknown

**Thanks for the cards, letters and donations
your support is much appreciated.
VIEWSLETTER
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The Holy Spirit is the one who makes everything that
Jesus did for you real in your life. ~Oswald Chambers

A Vanished Friend

Around the corner I have a friend,
In this great city that has no end,
Yet the days go by and weeks rush on,
And before I know it, a year is gone.

And I never see my old friend's face,
For life is a swift and terrible race,
He knows I like him just as well,
As in the days when I rang his bell,

And he rang mine but we were younger then,
And now we are busy, tired men.
Tired of playing a foolish game,
Tired of trying to make a name.

"Tomorrow" I say! "I will call on Jim
Just to show that I'm thinking of him."
But tomorrow comes and tomorrow goes,
And distance between us grows and grows.

Around the corner, yet miles away,
"Here's a telegram sir," "Jim died today."
And that's what we get and deserve in the end.
Around the corner, a vanished friend.
Unknown

**Christ is the end of the law so
that there may be righteousness
for everyone who believes.**

~St Paul Romans 10:4

BOOK REPORT

Not long ago and not far away, a Nobody named Ordinary lived in the Land of Familiar.

Every day was pretty much the same for Ordinary. In the mornings he got up and went to his Usual Job. After work he ate almost the same dinner he'd eaten the evening before. Then he sat in his recliner and watched the box that mesmerized most Nobodies on most nights.

Sometimes, Best Friend came over to join Ordinary in front of the box. Sometimes, Ordinary went to his Parents; and they watched together.

For the most part, not much happened in Familiar that hadn't happened before. Ordinary thought he was content. He found the routines reliable. He blended in with the crowd. And mostly, he wanted only what he had.

Until the day Ordinary noticed a small, nagging feeling that something big was missing from his life. Or maybe the feeling was that he was missing from something big. He wasn't sure.

The little feeling grew. And even though Nobodies in Familiar didn't generally expect the unexpected, Ordinary began to wish for it.

*Above is an excerpt from a very easy to read, understandable and inspirational book; **THE DREAM GIVER** by Bruce Wilkinson. I encourage everyone that is tired of a mundane lifestyle to get a copy and read it. This book cracks open a door in a dimly lit world into a room filled with light. ~AWD*

Do not let any unwholesome talk come out of your mouths, but only what is helpful for building others up according to their needs, that it may benefit those who listen. *Saint Paul Ephesians 4:29 NIV*
