RENO LED THE WAY IN AIRCRAFT ACCIDENT INVESTIGATIONS
(30th Anniversary of GALAXY 203 CRASH in Reno on January 21, 1985)

NOTE: USA TODAY 10.28.14 HEADLINE — ‘PLANE CRASH DIDN’T KILL THEM—FIRE DID’ (An investigation of small plane crashes). In the following essay you will note that 60% of the Galaxy victims died from the fire, not the crash.

By Roger S. Ritzlin, MD, and Anton P. Sohn, MD

In 1985 fatalities from commercial aircraft accidents surpassed all previous years, and Reno led the way with the first crash of the year on January 21. Of interest is the fact that in the ten years preceding 1985, thirty commercial aircrafts crashed, resulting in 2,500 deaths and only two investigators reported autopsy findings and injury patterns.

In all of Nevada’s tragic accidents, the seventy deaths in the Galaxy crash is second to the eighty-five deaths from Las Vegas’ 1980 MGM Grand Hotel fire and eighty-five deaths in the Paradise Airline crash March 1, 1964, on Genoa Peak near Carson City. (Eric Moody and Phil Earl from Nevada in the West provided information on the Genoa crash.) Smoke inhalation and fire played a major part in the Las Vegas tragedy and it also was a major cause (60% of the deaths) in the Galaxy crash. The following historical account will show the importance of studying all aircraft accident deaths to determine the cause of death. We also plotted and published where individuals were located at the crash site as related to cause of death, however this information is not included in this essay.

A Lockheed L-188 turboprop aircraft, shortly after take off at 1:04 a.m. from Reno-Cannon Airport, crashed two miles south of the airport. On board were six crew and sixty-five passengers, some had attended the Superbowl at Stanford University and stopped in Reno to get other passengers before returning to Minnesota. Immediately after takeoff the pilot radioed that he was experiencing an unusual vibration. He was instructed to return to the airport.

The plane banked right, lost altitude, and crashed in a field east of South Virginia Street. It skidded across a field, impacted a drainage ditch, broke apart, caught fire, and smashed through an RV sales lot. Debris from the plane ended in Virginia Street. The sound, smoke, and the light from the fire were witnessed by A.P. Sohn and R.S. Ritzlin in their homes in south Reno; both were several miles from the accident site. Within five minutes after the accident fire and rescue personnel arrived at the scene.

There were three survivors — two later died in the hospital and one survived with nonlethal injuries. The 17-year-old survivor, George Lamson, Jr., was sitting next to his father where the plane broke apart. They were ejected from the plane belted to their
seats. The father died on the eighth day of his hospitalization, and George Jr. "walked away from the crash." Today he lives anomalously in Reno, a testimony to Renoites who showed him kindness.

Ritzlin: “Little did I know that the noise we heard would result in sixty-eight autopsies waiting for us. The late David Melarkey, an autopsy assistant, showed up with his autopsy gear to assist us without our contacting him. I believe he was a weekend ‘on call’ tech at the time. We were impressed with his initiative and support which helped considerably.”

During the next three days forensic pathologists R.S. Ritzlin, J.H. Gauthier, and A.P. Sohn did autopsies on the sixty-eight victims who died at the scene. Dr. V.A. Salvadorini and Washoe County Coroner Vernon McCarty assisted with organizing the temporary morgue.

Autopsies were necessary for several reasons: 1) to settle the estate when several members of a family with different heirs die in the same crash; 2) to deny life insurance when the policy contains a clause that excludes payment to beneficiaries when the victim is intoxicated regardless of whether or not alcohol contributed to the death; 3) to pay for pain and suffering prior to death which is permitted by Nevada law when negligence or wrongful death is proven; 4) to make positive identification of victims; and 5) to gain knowledge to improve airline safety.

Pathologists made the final determination of cause of death of those killed at the scene after reviewing autopsy and toxicology results. Three categories emerged. The first category, blunt trauma, included twenty-seven (40%) individuals who died immediately with lethal injuries and no evidence of smoke or carbon monoxide (CO) inhalation. The next group of eight (12%) individuals died from a flash fire, exemplified by rapid incineration and no lethal traumatic injuries or inhalation of smoke. The final category included thirty-three (48%) people who lacked lethal injuries, but who had marked elevation of blood CO, soot in the lungs, and toxic products from smoke inhalation. This finding indicated individuals who were not killed on impact.

Ritzlin: “An attorney told me that our categories of death were extremely helpful in determining the pain and suffering payout. He mentioned that the estate of someone who died instantly of traumatic head injuries would receive less than the estate of someone who suffered from smoke inhalation. This attorney said that our categories of death were a reason that cases were settled without long court battles and pathologist’s testimony.”

Sohn: “Autopsy identification was necessary for one man because a dental examination at autopsy revealed no evidence of previous dental work, however, autopsy body X-rays revealed an old injury sustained when he played football at the University of Minnesota. I was also notified to be prepared to testify in a 1987 trial in Minnesota and was later told that the case had been settled based on the autopsy findings.”

An FAA investigation revealed that cause of vibration after takeoff was due to an unsecured cargo door. Furthermore, the pilot made the crucial mistake of reducing power to return to the airport when he should have maintained or increased power.

Galaxy Airline Flight 203 Investigation by Bruce Laxalt, Attorney at Law

By Monique Laxalt

The liability insurer of Galaxy Airlines flight 203 was notified almost immediately after the 1:04 am January 21st crash. It promptly utilized its resources to assist in the subsequent investigation and eventual settlement of claims. Per protocol, investigators and attorneys were involved from the outset.

Primary legal responsibility was given to Reno attorney Bruce Laxalt (1951-2010) who, at only 33, organized and directed investigators and attorneys on the early morning of the 21st. Priority one was to insure that the three surviving passengers were receiving the best available medical care.

The next priority was to secure and preserve the crash site, which encompassed over a square mile with debris strewn across U.S. Highway 395. Once bodies of the deceased were removed and their locations catalogued, investigators began the search of what remained
of the aircraft. An effort was made to locate every part and piece of the Lockheed Electra. Mr. Laxalt contacted the Anthropology Department at the University of Nevada, whose department head agreed to provide students to mark out grids, which were then searched for aircraft debris as well as personal effects of the passengers. There were many “finds” which had been previously missed prior to the implementation of the grid approach.

Mr. Laxalt, a former chief homicide prosecutor with the Washoe County District Attorney’s office, coordinated with pathologists Doctors Anton Sohn, Roger Ritzlin, and Jay Gauthier to insure that autopsies performed on the deceased included a determination whether the deaths were due solely to blunt force trauma, post-crash fire/smoke inhalation or a combination of both. These findings were important for damages assessment in the evaluation and settlement of the prospective wrongful death claims.

One aspect of the investigation that Mr. Laxalt handled with great sensitivity was ascertaining the true identity of each individual passenger on board flight 203. The group had been at a Super Bowl party hosted by Caesar’s Palace in South Lake Tahoe where Dallas Cowboy running back Tony Dorsett was the lead celebrity at the request of Caesar’s. The flight manifest did not contain all of the correct names and relationships. To sort this out a meeting took place in the suite at Caesar’s Palace with the host where the Super Bowl party had taken place. Verification and confirmation of the true names of the deceased passengers took several days.

Out-of-court settlements were eventually reached in all of the wrongful death claims.

Information provided by Jerry Mowbray, Esq.

BOOK REVIEW

The Remedy: Robert Koch, Arthur Conan Doyle, And The Quest To Cure Tuberculosis

By Thomas Goetz (2014)

In The Remedy, Thomas Goetz provides us with a well-written and easily readable narrative on the history of medical progress in mid to late nineteenth-century Europe as the leading minds sought to understand cause, cure, and transmission of infectious disease. Great debates raged in the medical and scientific community for years and even decades. Competing theories abounded and Goetz skillfully elaborates on the substance of the issues and the personalities involved with sufficient detail to inform, but not so much as to bore the reader with minutiae. Today, the idea of “germs” as the cause of many diseases is regarded as common sense and obvious; but, that was anything but the case at that time. General acceptance of the “germ” theory was slow in coming even as professional and well-documented research offered ever more proof.

Enter Dr. Robert Koch, a German physician trained at Göttingen University who becomes a central figure in the story. Early in his career he takes a position as a local health officer in Wollstein, an agricultural town, where he enjoys a thriving practice but in the evenings he conducts research in his kitchen. He establishes a protocol for his research which he follows meticulously as he begins to identify specific bacteria as the cause for various diseases. Rigid adherence to his well-developed protocol enables him to convincingly defend the conclusions of his work and he rises rapidly to become one of the most prominent scientists in Europe. He is promoted and given significant additional resources by the Kaiser so that he might continue his research on a grander scale and thus enhance the reputation of German science in the eyes of the world. In his new position, Koch decides to attack the problem of tuberculosis. It is a formidable challenge. Tuberculosis (or consumption as it was commonly known at the time) is a dreaded worldwide killer. In England fully one quarter of all deaths are due to tuberculosis. In 1900 it is listed as the number one cause of death in the United States. There was a powerful incentive to find a cure. Whoever did so would provide not only an immeasurable benefit to mankind but to their own fame and fortune.

Meanwhile, the renowned French scientist, Louis Pasteur, becomes aware of Koch’s work and is impressed with his methodology and results but Koch after all is; “gasp”—a German. Pasteur checks Koch’s work by successfully replicating some of his research, which creates animosity and a hostile exchange between the giants for a considerable time. This eventually subsides, but an ongoing can-you-top-this competition between them takes place to identify evermore causes and cures.

In 1882 Koch finally isolated the bacilli that causes tuberculosis and presented his findings to the medical community. Those present were thoroughly convinced by his demonstration. The next obvious step was to determine a cure. Then, in 1890, Koch finally thought he had it. The very idea created worldwide euphoria at the prospect of a cure.
for this killer. Clinical trials began immediately to further quantify results.

Arthur Conan Doyle was a little known English physician trained at the University of Edinburgh in Scotland. He conducts a modest medical practice in Southsea, England, but his true passion is writing (he will later become the renowned author of Sherlock Holmes). He has followed the work of Koch for a decade and at the announcement of a cure he hastens to Berlin to observe demonstrations and to tour the clinic where patients were being treated. While touring the wards of treated patients he is taken aback. Koch’s process appears uncontrolled and chaotic and his documentation does not meet his historically rigid standards. Doyle cannot personally observe any difference between treated and untreated patients. In addition, Koch is secretive about his cure and he is reluctant to give samples to others so that they can conduct independent trials. Doyle is suspicious that the purported cure is not a cure at all. It seems Koch may have been premature in his announcement. Doyle summarizes his observations in a letter to a British periodical. It is a bold decision because he, a relative nobody in the field of medicine, is actually challenging the great Dr. Koch. Others also express the same feelings as Doyle but Koch’s reputation protects him for a time. Eventually additional samples of “the cure” are made available to others so that they can conduct independent trials. As these additional clinical results begin to come in from various sources, they are not favorable to Koch and his reputation suffers. The world will have to wait for the promised cure.

The cure for tuberculosis is not found until World War II when antibiotics were discovered and found to kill the mycobacterium that causes tuberculosis.

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1 Goetz is an award winning science writer and has a masters degree in public health from UC Berkeley and a masters degree in literature from the Univ. of Virginia.

2 Editor’s Note: Every medical student/medical doctor knows Koch’s Postulates for infectious disease.

a) The microorganism must be found in abundance in all individuals suffering from the disease, but not in healthy organisms.
b) The microorganism must be isolated from a diseased individual and grow in pure culture.
c) The cultured microorganism should cause disease when introduced into an experimental host.
d) The microorganism must be isolated from the inoculated, diseased experimental host and identified as being identical to the original specific causative agent.