Colonel James E. Sabow, USMC

Analysis of Jon Nordby's Report of Death Investigation

Prepared For

Chairman Duncan Hunter And The Senate and House Armed Services Committees

Prepared By

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My report will not revisit the history of this case. I have covered that on numerous occasions in the past and I have provided historical narratives of Colonel Sabow's death and its surrounding events.

Likewise, I do not think it is appropriate to instruct the committee on *scientific methodology, terminology, criminalistics and ballistics,* as was done in Dr. Jon Nordby's report. The Senate and House Committee members are quite capable of evaluating the logical conclusions of an investigation without being sidetracked by arcane minutiae.

The scope of the investigation into Colonel Sabow's death, as directed by law in HR 1588 is quite clear: An independent, objective and scientific analysis into the death of Marine Corps Colonel James E. Sabow, is to be conducted by experts outside the Department of Defense. Experts who have been identified by the Sabow family and who had previously been consulted by the Sabow family, were to be interviewed. The investigation was to have begun within sixty days of the report's being signed into law, and it was to have been completed and presented by the Secretary of Defense to the members of the Senate and House Armed Services Committee, no later than six months after the bill was signed into law. The bill was signed on November 23, 2003 by President George W. Bush.

Chairman Duncan Hunter held a meeting in his congressional office on March 12, 2004, in order to discover why the investigation had not yet begun. I was at that meeting in which Principle Deputy Secretary of Defense, Honorable Charles Abell was also in attendance. The meeting resulted in four directives:

- *1.* Iowa State University was to conduct the investigation and they were to be under contract by the end of that week.
- 2. Because the assessment of the evidence in his possession pointed to homicide, Chairman Hunter expected clear proof that the death was not a homicide, but rather the result of suicide, if indeed it was. (This is normally expected in an unattended violent death, when accidental death has been eliminated)
- 3. Dr. Sabow was to be included as a member of the investigative team, to see that all issues surrounding Colonel Sabow's death were addressed. He was also to aid the team in arranging interviews, accessing family members and other relevant witnesses, and to be at the general disposal of the investigative team, as they saw fit.

4. Dr. Sabow was to provide a roster of those people who had reviewed the evidence or a portion thereof, to Secretary Charles Abell. All of those people were to have been contacted and their opinions regarding the manner of Colonel Sabow's death were to have been evaluated, and included in the final report of the Department of Defense.

Not one of Chairman Hunter's directives were followed. Instead of, and without notification, the following took place:

- 1. Iowa State University was excluded. In their place, one Dr. Jon Nordby, PhD, (not a medical forensic specialist) was contracted to conduct the investigation, after being recommended to the Department of Defense by the FBI.
- 2. Jon Nordby's report clearly assumed that Colonel Sabow's death was a suicide, and his whole report is an attempt to prove suicide, in spite of overwhelming evidence to the contrary.
- 3. Dr. Sabow was completely excluded from the investigation. Crucial to the investigation, were the autopsy results. Dr. Sabow is a Board Certified Neurologist who has outlined many concerns about the conclusions and methods of the autopsy. He was excluded from any participation that may have elucidated several errors. Dr. Sabow has a total of 35 years of neurological training and experience. Yet, he was excluded from participating in any discussion of the skull x-rays, which were critical to the investigation, as well as the neural control of breathing. These issues are critical to the autopsy interpretation.
- 4. Dr. Sabow provided a roster as was requested and gave it to Deputy Secretary Abell. However, no legitimate effort was ever made by anyone involved in the investigation to contact these people.

(In my opinion, special attention should be given to this failing, for it epitomizes how Dr. Nordby and the Department of Defense disregarded specific directives. It affords insight about their intentions regarding the investigation.)

HR 1588, orders the DOD to investigate the death with special attention to the medical and forensic factors and to consult outside experts. Section 568 of the House Bill, states: "The committee believes that previous investigations did not address a range of issues that could clarify whether murder, not suicide, caused Colonel Sabow's death. The committee has compiled a list of significant issues and questions that must be addressed as part of this new investigation, as well as witnesses that must be interviewed. The committee expects the Secretary of Defense, prior to beginning the new investigation, to consult with the committee to ensure that the new investigation fully and comprehensively addresses these matters. "

(The issues enumerated above were explicitly discussed and understood by the representative of the Secretary of Defense, his Deputy, Charles Abell.)

On p.9 of Dr. Nordby's report he indicates: "...I was to complete this work by September 30, 2004. I requested and was granted an extension..."

- a) Nordby never mentions when he was initially contacted by the DOD and whether he knew that Iowa State University was initially chosen to conduct the investigation
- b) On September 29, 2004, **only one day prior to the original scheduled completion date**, Nordby sent **form letters** to Jack Feldman, Ph.D., Dr. Kent Remley, MD, Dr. David Rubinstein, MD, Dr. Martin Fackler, MD, Mr. Antonio Verducci and "to Six Faculty members concurring with Dr. Kent Remley, MD.

c) On p. 59, Nordby states: "I attempted to contact, in writing, the scientific experts listed by Dr. Sabow...without the benefit of Dr. Sabow, I attempted to track down some of these individuals and locate their new addresses..." and then he adds: "However, I believe that any information these experts may have is based upon incomplete and partial data provided to them...therefore, the inability to contact each expert **has no significant bearing** on the conclusions reached in this investigation." And he adds: "I do not conclude that their information has great merit based upon the non-forensic background of these clinicians and researchers."

Only one conclusion can be drawn from this type of conduct and the above statements of Jon Nordby: From the outset, and irrespective of Chairman Hunter's directives, the DOD intended to conduct the investigation on their own terms. Their conclusions were clearly based on *predetermined results*. Because, HR 1588 demanded some response from the Department of Defense, it was necessary for them to contract the services of someone who would do their bidding. So, the DOD completely ignored Chairman Hunter's orders for the following reasons: Iowa State University refused to abdicate their intellectual honesty and freedom, while Jon Nordby agreed to abandon any ethical, intellectual and moral standard that he may have possessed sometime in the past.

Using these new ground rules, Dr. Jon Nordby produced a report that is beyond the pale of scientific scrutiny, common sense and honesty, and it lacks even the slightest inkling of professionalism. Any professional who would present this report to any committee should be held accountable, as well as the Department of Defense.

One other point should be made: Jon Nordby apparently completed his report and presented it to the Department of Defense on November 8, 2004. However, the DOD took almost two months to release it to the Senate and House Armed Services Committees. I realize that the delay could be explained with many excuses, but in my judgment, the most plausible explanation is that the report presented by Jon Nordby was reworked by "experts" who cleverly and convincingly employed, and in a very convincing fashion, many examples of *fallacies of logic*, in an attempt to convince the reader of the report's validity. Those who constructed the final product *were* experts: in all likelihood they *were* "psy-ops" specialists. Their ability to a construct a proposition, manipulate supporting premises, inferences and implications, and reach a conclusion, is truly masterful.

On the other hand, if the readers applies a modicum of common sense and discernment, they will conclude that the report clearly lacks any honesty, *logic or deductive reasoning*.

In reviewing the Investigative Report of Jon Nordby, one is immediately aware of how much of his report is devoted to pedantic and philosophical monologues that have nothing at all to do with the germane evidence. They are cleverly arranged through the report in an attempt to divert attention from illogical statements, false premises and bizarre conclusions. The report focuses on irrelevant discussions of techniques, terminology and tediously irrelevant experiments. Clearly, this is meant to confuse the "message" by showing "how brilliant is the messenger."

In addition, Nordby is a master at one of the best known of the logical fallacies, "*argumentum ad hominum*":

An *ad hominum fallacy* consists of saying that someone's argument is wrong *purely* because of something about the person rather than about the argument itself. The purpose of the characterization is to discredit the person offering the argument and to invite others to discount his arguments.

Ad hominum is fallacious when applied to deductive reasoning. Evidence may be doubted or rejected due to its lack of credibility, but to doubt or reject a deduction based on the source is the *ad hominum fallacy*.

It is apparent that Dr. Nordby's intent is to obfuscate, confuse and discredit. Rather than focusing on the abundant evidence available in this case and reach clear, logical and concise conclusions with the application of rigorous deductive reasoning, Dr. Nordby employs the classic *"smoke and mirrors."*

The premises and statements quoted by Dr. Nordby in this case, violate the most fundamental laws of physics, logic and basic forensic science. He attempts to camouflage his erroneous statements by attacking my investigative efforts and me, personally. At other times, he attempts to convince the reader of a particularly outrageous theory, hoping that his self-acclaimed "superior" knowledge and credentials will not be questioned.

Any objective assessment of Dr. Jon Nordby's report can only lead to one conclusion: COVER-UP.

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Honorable Duncan Hunter Chairman House Armed Services Committee 2268 Rayburn House Office Bldg. Washington, DC 20515 *And all* Members of the Senate and House Armed Services Committees

RE: DEFENSE AUTHORIZATION BILL FOR FISCAL YEAR 2004, SECTION 568 Investigation into the death of Colonel James E. Sabow, USMC

Dear Mr. Chairman:

Recently I received the Investigative Report from the Department of Defense which was mandated by Congress and completed by Jon Nordby, doing business as Final Analysis Forensics. I can assure you that I studied this report with the utmost objectivity and I made every effort to apply only hard scientific scrutiny in its evaluation. In a completely unbiased manner, I applied over forty years of my scientific background, training and experience to the assessment of Dr. Nordby's report of Colonel Sabow's death. Finally, I arrived at an honest and completely unprejudiced opinion of the report's conclusions, as well as its integrity.

I am reluctant to be so explicit in the description of Dr. Nordby's report. However its character, methodology and conclusions leave me no alternative. The report, referenced as: **Shotgun Death of Col. James E. Sabow** is not only without the slightest bit of scientific merit, it also represents a unscrupulous attempt to discredit me personally and professionally. He impugns my character in an effort to convince the reader that anything I have proposed should not only be categorically dismissed because it is without scientific validity but also because my opinions represent the conclusions of a delusional fanatic. The report's nature is inflammatory; its science is absurd; its motive is **cover-up**!

Dr. Nordby ignores the most basic laws of physics, is ignorant of human physiology, does not understand the terminology of body positions, conducts experiments apparently meant to confuse or to act as a subterfuge for his mis-statements. He appears to do this at least in part by intent and in part by ignorance. As a result, his report is replete with false characterizations and invalid conclusions. It is incomprehensible to me, that anybody with average intelligence, let alone one who portrays himself as a "forensic scientist", could produce this report under the auspices that its conclusions are the result of the scientific evaluation of the evidence made available to him. This evidence was gathered and provided by the NCIS, the Orange County (CA) Medical Examiner's Office as well as by me.

The totality of evidence that he "reviewed" was gathered at the crime scene, was on and in the victim's body, came from statements made by many individuals to the NIS, from air traffic control records, from the **date/time group** of a memo from El Toro HDQS to the Commandant of the Marine Corps, in photos, skull x-rays, blood volume estimates at the crime scene by a Navy physician, in hand written notes by Colonel Wayne Rich (which was a "script" of the March 9, 1991 meeting in which I was a participant) and in the well known indomitable character of Colonel Sabow. He neglected to personally visit the crime scene and to study the location of the victim's body in relation to the victim's house, patio and to Colonel Underwood's house. He elected not to interview Cheryl Baldwin, the NCIS crime scene control officer, nor Burt Nakasone, the NCIS forensic officer at the scene. He never attempted to interview Joe Underwood, the victim's next door neighbor, who after viewing the body from a distance of over forty feet, immediately called General Adams and reported that Col. Sabow was dead and that he had shot himself in the mouth. Furthermore, Dr. Nordby decided that it was not relevant to discuss the opinions of those experts whom I had named, even though Chairman Duncan Hunter specifically ordered Secretary Charles Abell to do this.

Dr. Nordby had my records which contained copies of the suspect memo from the Base Commander General Adams to Marine HDQS, whose topic was about Colonel Sabow's death. The transmission of this memo was by infallible AUTODIN hardware and SARALITE software which automatically affixed the Date / Time Group. It indicated that the memo was initiated **eight hours before Colonel Sabow's death occurred** even though it was not sent until the following day and after he was killed. Furthermore, that memo came from General Adam's Headquarter's office late at night, 11:45 PM, on January 21, 1991, the conclusion of a three day holiday weekend, Martin Luther King 's anniversary, when there was no regular staff present. Obviously, this should have been carefully evaluated but it is not even mentioned in Dr. Nordby's report.

Throughout the report Dr. Nordby mischaracterizes me and my intentions. In reference to my investigation into the manner of Colonel Sabow's death, he states the following on p.61: "His (Dr. Sabow's) project remains scientifically suspect from the outset-his stated objective is "to prove that his brother was murdered" rather than "to investigate the status of his brother's death." On p. 62 he states that he was angry at my "unjustifiably arrogant, unbecoming, unprofessional, single-minded, and methodologically abhorrent fanaticism." Yet, he ignores the evidence that for fourteen years, I have begged the FBI, Congress, the Marine Corps, the Departments of the Navy and Justice, and my own US senators and representatives, simply to conduct an honest, open and objective investigation into my brother's death. He ignores the fact that I had contacted the Commandant of the Marine Corp's personal attorney through Anthony Verducci (Retired Colonel MC JAG) in 1999 and made an offer to drop the pending FTCA suit against them and all others, if they would simply conduct a new and open investigation into Colonel Sabow's death. They refused and stated that they "would take their chances in court".

As Dr. Nordby quite frequently demonstrates in his report, he contradicts his own statements. For instance on p. 6 & 7, he references a NIS report written by Cheryl Baldwin on 05 February 1991: "...Dr. Sabow wanted assurances that this investigation would be conducted thoroughly, to determine whether or not foul play could have been a part in his brother's death." However, on other occasions in his

report, Dr. Nordby states that my intentions are not focused on an objective analysis of Col. Sabow's death but rather to prove that he was murdered. Dr. Nordby is also aware that in 1994, I asked the FBI in Rapid City, South Dakota to review the evidence and offer me their conclusions. He knew that I had a personal meeting with Senate Majority Leader, Tom Daschle in 1996 and asked him to arrange a meeting with Attorney General Reno and Director of the FBI, Louis Freeh in order for them to review the case personally and have them assign their own criminal investigators to the case. On my behalf, Dr. Anthony Battista asked Commandant of the Marine Corps General Jim Jones to thoroughly investigate Colonel Sabow's death.

My actions over these entire fourteen years clearly demonstrate that my objective, always was and always will be, to obtain an objective and honest investigation. Dr. Nordby's accusations are without merit.

In addition Dr. Nordby compounds his lack of professionalism by portraying me as a "fanatic" among other similar epithets, and that I am in need of psychiatric care. Throughout his report, he criticizes my efforts of fourteen years, as unsound, unprofessional and without scientific merit. On p.55, in reference to questions that I had of Dr. Vincent DiMaio, after the DOD IG Report was published in 1996, Dr. Nordby states that "Dr. DiMaio, a knowledgeable professional (was) too busy to baby-sit fanatics …" Finally, in the second to last page of his report on p.63, Dr. Nordby makes one final insult to me by quoting Voltaire: "**Prejudice is the reason of fools.**"

EVIDENCE

Skull Fracture and Localized Swelling:

Dr. Nordby states that there is *no depressed skull fracture*.

p.8 Nordby: A so-called "depressed skull fracture" is a fracture caused by a blow from outside the skull, such as being hit by a hammer...a displaced skull fracture is a fracture in which the margins of two sides of a fracture line separate and overlap...to say that one bony surface appears beneath another is not usually what common usage means when we say that someone suffers a "depressed skull fracture." The use of "displaced" skull fracture is used more descriptively, simply to capture the relationship among the bones fractured in some catastrophic event.

P.12 Head x-rays show extensive skull injury..."eggshell" skull fractures...such fractures become easily displaced with movement...the head is still held together by soft tissue...thus the bones move beneath the skin with one fracture margin moving beneath the adjacent margin...**No "depressed fractures" are evident.**

FACTS: A 12 gauge, No. 7 1/2 Dove and Quail shotgun load creates 1771 ft/lb of energy at the muzzle. According to the laws of physics, this energy or "force" must be dissipated in some manner. The most obvious way is the propulsion of the bullet, or in the case of a shotgun, the birdshot. However, when

there is an intraoral shotgun wound **without an exit wound**, the entire energy created by the explosive gases had to be devoted to tissue destruction, skull fractures, propulsion of the body and blow back through the entrance wound. Hence, there were extensive non-depressed linear fractures (eggshell fractures) as would be expected, and since the direction of these explosive gases was from within the skull, the tendency for fragment displacement would obviously be outward.

However, there is **one prominent depressed skull fragment** (a large skull fragment directed **inward** into the brain) and that single fragment is behind the right ear. Furthermore, immediately over that depressed fragment is a very large swelling, that is clearly identified on both crime scene and autopsy photos, as well as having been noted by several witnesses, before the body was ever touched or moved, except by Sally Sabow who gently cradled her husband's head when she discovered him prostrate in the backyard. This was the only area of swelling. Furthermore, a large blood clot was identified under the scalp and over the bone within that swollen area. All other areas of bleeding were subarachnoid and subgaleal.

Let me explain: The rapidly expanding gases generate a fairly uniform force on the entire inner surface of the skull. When the skull separated into numerous irregular fragments (eggshell in appearance), the skull still retained some semblance of a spherical nature. This is because of a very tense membrane called the *galeal aponeurosis*, commonly termed the galea, which held the "puzzle like" skull fragments within its confines. The bleeding caused by the tissue destruction and skull fracturing occurred under the skull which is the subaracnoid blood and just over the skull but still contained under the galea. This is known as subgaleal bleeding. These two types of bleeding are exactly what would have been expected by this intraoral explosion without an exit wound and which are clearly identified and described by the pathologist.

On the other hand, there was a large lump, the size of half a grapefruit, that was localized behind the right ear with extension inferiorly towards the neck. When the scalp was incised and pulled away from this lump during the autopsy, a huge localized blood clot was present immediately *under* the scalp but over the galea. By definition, this is termed a **contusion**. Furthermore, this contusion was *over* the depressed skull fracture. The combination of the swelling, the contusion and the depressed skull fracture are the hallmarks of an **external blunt force trauma** to the skull. There is even further proof that this area of the skull received an external blow, because the skull x-rays clearly show that there were no bone splinters or shotgun pellets in the blood clot over the depressed fragment.

p.13, 14 **Nordby:** Dr. Sabow and his "non-forensic colleagues" misuse the term, depressed skull fracture.

FACTS: These non-forensic colleagues included three professors of neurosurgery, several of whom are world famous, and five neuro-radiologists. Not one of them described the skull x-ray as anything but a depressed skull fracture and **typical of a fracture from external blunt force trauma.** Furthermore, the terminology "displaced" skull fracture is not one that is used by physicians involved in the care of head injured patients. Dr. Nordby's insistence on calling the depressed skull fracture a "displaced" fracture is nothing more than a transparent attempt to create confusion. He is simply trying to set the stage for his subsequent lies which are as follows:

Nordby: p,13 The "swelling" behind the ear and on the neck at the skull's base that Dr. Sabow notes, results from the head having moved after the linear fractures...the skull bones have displaced...the source of this damage comes entirely from the shotgun injuries...absolutely no indication or evidence that the swelling came from a blow to the back of Colonel Sabow's head from outside the skull. Nordby continues: "Indeed if such a blow had occurred sufficient to render the decedent unconscious and unable

to defend himself, the soft tissue damage would appear quite different than it does." "At autopsy, the damaged scalp and neck tissues would show contusions...what Dr. Sabow interprets as contusions is surface blood, lividity or artifact introduced by the neck block..." and " no evidence exists to support the view that the decedent suffered a "depressed" skull fracture in the proper medical sense of that term. Following these assertions, Nordby continues on in a disjointed explanation of the difference between a depressed skull fracture and a displaced skull fracture, none of which makes any sense whatsoever.

Nordby: p.14, 15, 16, 17, 18,19, "12 gauge Winchester "Dove and Quail" bird shot is not to be considered an extremely powerful load…" He purposefully fails to acknowledge that any 12 gauge shotgun wound, in contact or near contact, is extraordinarily powerful and mutilating. He spends these six pages in a disjointed fashion talking about the head block, lividity, discoloration behind the right ear etc. Then he makes a statement that all of this clearly means that "There was no external blow to the victim's head". He says that the swelling is partially from the displaced bones. However, he doesn't explain why he arrives at this conclusion. The x-rays don't show any bones protruding into the swollen area. On the contrary, the skull fragment under the swollen area is depressed inward. Then he says, that the swelling is from the damaged soft tissues, as well as from bone fragments and gunshot, as a result of the intraoral shotgun blast. Yet again, the skull x-rays show just the opposite: there were **no pellets and there were no bone fragments in the swelling.**

On p. 12, Nordby constructs a graph that is typically used in summarizing the "ballistics" of a crime scene. However, noticeably absent under the heading-**TRAJECTORY-** is the path of the blast from right to left. He includes $\mathbf{A} \rightarrow \mathbf{P}$ (anterior to posterior) and upward $\mathbf{F} \rightarrow \mathbf{B}$ (front to back). Apparently, Nordby doesn't know that anterior refers to front and posterior refers to back. This error is obviously committed purposefully, for he is attempting to conceal the fact that in his graph, he makes no reference to the path's third dimension which is from $\mathbf{R} \rightarrow \mathbf{L}$ or from $\mathbf{L} \rightarrow \mathbf{R}$. "Ballistics 101" which is included in every text on crime scene investigation, teaches that, in a self inflicted wound by a right handed individual, or when the weapon is fired into the body from the right side, the path of a projectile, is from **Right to Left**. Therefore, if the decedent had shot himself, the path would have been $\mathbf{R} \rightarrow \mathbf{L}$. So when Nordby states that the swelling behind the right ear was due to the trauma of the shot, he contradicts this fundamental of ballistics, as well as common sense. This fact was noticed by a bystander at the crime scene, who stated: "Colonel Sabow must have been left-handed." Nordby had access to that statement, for it is included in the interviews conducted by the NIS. (**Colonel Sabow was strongly right-handed**.)

Nordby also ignores the admonition present, in virtually every forensic textbook, that: a contusion frequently is not appreciated until the skin is incised at the time of the post mortem examination. An external blow to the skull with a blunt object is more likely to cause localized swelling without a laceration, rather than producing a laceration. Jon Nordby knows this as well as anybody, and yet he says the opposite: *"The decedent could not have been rendered unconscious or suffer a depressed skull fracture without a lacerated scalp."*

CONCLUSION:

- 1. A large depressed skull fracture was present in the right temporal-occipital bone.
- 2. A large blood clot was present under the scalp but over the skull and galea.

- **3.** This blood clot was lying immediately over the depressed skull fragment that was behind the right ear.
- 4. X-rays clearly indicate that no pellets or bone fragments were present in the blood clot.
- 5. If the swelling had been the result of the shotgun blast, the blood clot would have been:
 - a. behind the left ear
 - b. the bone fragments would have been blown out, not sucked in
 - c. the x-rays would reveal pellets and bone in the clot

Position Of Victim At Scene Of Crime:

Nordby: p. 52, He criticizes a statement that I had made : "If the victim had shot himself in the mouth and in the alleged sitting position, he would have been driven backwards." He disagrees with this fundamental physical law and states: "This opinion is contrary to the laws of physics-and is perhaps based upon viewing inaccurate TV and movies - when someone is shot, they follow their center of mass and fall in the direction they lean - unless they are hit by a mass larger than their own such as a car or truck. Then they follow that mass."

P. 22, 23 Nordby stages a photograph with a model which depicts a subject sitting in a standard lawn chair, similar to that alleged to have been used by the decedent. He illustrates how the victim had to have been seated while holding the gun in his mouth, given the restrictions imposed by the dimensions of the shotgun, the height of the seat from the ground, and size of the decedent.

FACTS: The crime scene photos depict the victim lying on his right side, his legs extended, arms flexed at the elbows and his hands curled a few inches in front of his mouth. First of all, the victim could not have been leaning forward with his "mass" situated in a manner that would allow him to fall forward, and this is clearly seen in Nordby's own photos of the model. Only the model's head is bent forward and even that is minimal. The victim's "mass" or "center of gravity" is clearly evident and is seen to be situated perpendicular to the seat of the chair. In addition, Nordby apparently does not understand one of the most common formulas in physics: F (kinetic energy) = $1/2 \text{ mv}^2$ (alternately $\text{E}= 1/2 \text{ mc}^2$) Force equals 1/2 mass *times* velocity *squared*. The muzzle velocity of a # 7 1/2, 12 gauge "Game" load is over 1220 ft/sec. The hot explosive gases consist of both mass and velocity. All these variables combine to create a force, equivalent to 1771 ft/lb of Kinetic Energy (Σ). In further emphasizing the amount of force to which the decedent was exposed, Nordby, on p. 14 says: "The decedent also suffered fractures of the mandible and maxilla (the lower and upper jaw bones, respectively) as a result of the shotgun's discharge in the mouth...it "kicks back" following basic physics: *any action has an equal and opposite reaction*. He then ascribes these jaw fractures to this "kick back."

FACTS: Certainly, that particular law of physics should be quite evident in this case, but not in explaining the jaw fractures. With the butt of the shotgun allegedly planted on the ground, just lateral to

the decedent's right foot, and with the barrel held in his mouth with his left hand, the "reaction" of the shotgun would be against the ground on which the butt of the shotgun was in contact. The jaw and skull fractures were the result of the explosive gases. Four to five gallons of these gases are produced at the time of the weapon's discharge and they exit from the muzzle end of the barrel. However, the cavity of the skull is only about 1 1/2 quarts in volume. The applicable physics in this situation is elementary. The force generated by these explosive gases accounted for the fractures and if the decedent was in the sitting position as has been alleged by Nordby, the remaining force would have propelled the body backwards, head over heels in the direction that the gun was aimed.

On p.4, Nordby refers to Calvin Goddard, as the "father of modern ballistics" but he fails to cite any valid scientific principles of modern ballistics regarding this investigation. On the other hand, Nordby makes no mention of Calvin's more famous relative, Dr. Robert H. Goddard, after whom the NASA Space Flight Center is named and who is "the father of space flight and rocketry." It was Robert Goddard who applied the most basic law of physics to rocketry; *for every action there is a reaction*. He developed a rocket, whose ignited fuel, produced rapidly explosive expanding gases. He created a tube-like structure that directed the expanding gases. This enabled the rocket to rise from its pad and attain flight. Even Nordby knows that relatively small jet engines propel the massive Boeing 747 from a standstill, down a runway and then into the air. And he must know that the rapidly explanding gases that explode within the skull of a victim and especially a victim who has no exit wound, would be subject to the same principles.

Nordby: p.14, 15, 16, 17, 18,19, "12 gauge Winchester "Dove and Quail" bird shot is not to be considered an extremely powerful load…" He purposefully fails to acknowledge that any 12 gauge shotgun wound, in contact or near contact, is extraordinarily powerful and mutilating. He spends these six pages in a disjointed fashion talking about the head block, lividity, discoloration behind the right ear etc. Then he makes a statement that all of this clearly means that "There was no external blow to the victim's head". He says that the swelling is partially from the displaced bones. However, he doesn't explain why he arrives at this conclusion. The x-rays don't show any bones protruding into the swollen area. On the contrary, the skull fragment under the swollen area is depressed inward. Then he says, that the swelling is from the damaged soft tissues, as well as from bone fragments and gunshot, as a result of the intraoral shotgun blast. Yet again, the skull x-rays show just the opposite: there were **no pellets and there were no bone fragments in the swelling.**

Conclusion:

The decedent could not possibly have been sitting in the lawn chair when the shot was fired.

The decedent could not have assumed the position of being stretched out on his right side in which he was found, if he had been sitting in the chair when the gun was fired.

The decedent would have been blown backward after the shotgun blast, if he had been sitting in the chair as depicted by Nordby's model and in the chair, as was alleged to have been the scenario of the shooting. Nordby tries to minimize the destructive and mutilating power of the 12gauge shotgun blast whose muzzle was in contact or near contact with the decedent's soft palate. He fails to point out that this would place the muzzle of the 12 gauge shotgun within a 1/2 inch of the anterior aspect of the brain stem. Thus, the shotgun would have blasted the brainstem with its full load of pellets and exploding gases before it destroyed anything else.

Nordby fails to point out that this blast creates 4 to 5 gallons of hot explosive gases, cavitation and tissue laceration and pulpification that produce much more devastation than the pellets.

He fails to point out that this blast caused destruction of the upper spinal cord. He is misleading by emphasizing that the pathologist recognized a portion of medulla in the Foramen Magnum (low brainstem in the hole at the base of the skull) as if that fact could in any way account for breathing. He ignores the description by the NIS of this tissue (destruction of the upper spinal cord) as if the presence of macerated tissue could justify his contentions.

ASPIRATED BLOOD

On p. 45 **Nordby** attempts to discount my "concerns about 'so called aspirated blood' in the decedent's lungs." He does this with an irrelevant discourse of the "smooth steel and relatively thin barrel of a shotgun" as if this has any relevance whatsoever in explaining how blood got into the lungs, since this was described by the pathologist in the autopsy report. Nordby continues his obfuscation by talking about the difficulty of conducting experiments involving variables of temperature, gas volumes, combustion and complex equipment, i.e. a "piezoelectric gauge". He adds that he "could conduct these experiments if requested in a supplemental report". However, in the very next paragraph, he concludes that this experiment would be meaningless!

In spite of this extraneous monologue, he concludes in the final paragraph: "Suffice it to say that sufficient pressure is generated by the Ithaca shotgun blast to aerate fluids including human lung tissues. It is also sufficient to damage *such delicate tissues* and generate broken blood vessels and hemorrhage."

However, he doesn't explain that fresh red blood was present in the larynx, bronchi and bronchioles and that these structures are closest to the shotgun blast. He continues: "Infusion of gas from the discharge of the weapon would have sufficiently aerated the liquid blood as well as provided blood. This "aerated" blood he is referring to was "hemorrhagic frothy fluid" which was described in the autopsy, as being present in the alveoli. However, he cannot explain why the blood that was present in the bronchi and larynx, (which are anatomical structures more proximate to the shotgun blast) lacked the frothy pink appearance and simply was bright red blood.

Nordby is intent on furthering his theories on how blood arrived in the lung. On p. 53 Nordby states: "Tissue exists such that breathing for one or two breaths was possible." Apparently he is referring to the following: "Only a small a small portion of medulla and spinal cord is noted in the foramen magnum." The following is worth mentioning by way of illustrating Nordby's selective use of the evidence, although it doesn't have any relevant physiologic significance. The NIS report of an autopsy photo identifies "destruction of the upper portion of the spinal cord." In other words, there may have been

some tissue within the confines of the foramen magnum, but it was macerated by the shotgun blast. The medulla is the upward extension of the spinal cord and it begins at the level of the *foramen magnum*. **FACTS:**

If as Nordby postulates, the blast was "sufficient to damage *such delicate tissues* and generate broken blood vessels and hemorrhage" in the alveoli, then how can he explain that those tissues, such as the larynx, trachea, epiglottis and esophagus, which would have been directly below the blast, were found to be entirely intact, according to the autopsy report? Furthermore, how could Nordby postulate that any of the extremely *delicate* remaining brain tissue at the skull base, could have retained any function at all? How can he explain that there was no blood in the esophagus or the stomach, if the force of the blast was

responsible for "driving the blood into the lung?" After all, the esophagus which connects the pharynx to the stomach, was immediately *below* the shotgun blast. Furthermore, the entry to the trachea and lungs are protected by the epiglottis and larynx. The esophagus has no such barrier at its entrance.

The most transparent of Nordby's ommissions in the aspirated blood issue, is his failure to explain how the pressure of the shotgun blast, drove the blood almost exclusively into the right lung, leaving the left lung almost devoid of extraneous blood.

Autopsy:

RESPIRATORY SYSTEM:

Left lung weighs 440 grams. Right lung weighs 970 grams. There is a large amount of aspirated blood into the right lung parenchyma. The lumen of the trachea and bronchi have large amount of aspirated blood, more marked on the right than on the left side.

The normal adult male lung weighs between 400 and 450 grams. The average would be 425 grams. This means that the decedent's right lung had an excess 545 grams by weight. The autopsy concludes that this extra weight was blood. The specific gravity of blood is 1.058. This figure is used to convert the weight of blood to the volume of blood by simple division: 545 gr. \div 1.058 = 515 ml. of blood in the right lung. This is greater than 1/2 liter. This is a considerable amount of blood.

Then consider the left lung weight: 440 grams. There would be an excess weight of about 25 grams which would be $25 \div 1.058 = 24$ ml. of blood. This is a scanty amount, considerably less than a shot glass.

Finally, in dealing with Nordby's contention that tissue was present that could account for a few breaths, it is quite easy to examine the factuality of this assertion. Anyone can access the Internet or a textbook on spinal cord injury, neurophysiology or neuropathology and investigate "spinal shock" or the brainstem equivalent, "diaschesis." What follows is a brief summary of one of the most basic facts of neurophysiology: When the spinal cord is severed, all vegetative, reflexive and skeletal muscular functions are immediately lost. This is called "spinal shock." The medulla is simply the upward extension of the spinal cord but it also contains special centers for breathing, blood pressure regulation and heart function. What results by severing the spinal cord, applies also to the medulla, except that with the medulla, death is <u>instantaneous</u>, due to the immediate loss of vital functions.

The shotgun blast destroyed the brainstem. It was <u>severed</u>. It was separated from the spinal cord. All functions below the level of destruction were immediately lost! Every nerve to every muscle fiber that could expand the lungs were immediately paralyzed! Not a gasp could occur. Heart function, breathing and blood pressure control were immediately lost.

This is beyond "opinion." There are certain issues that are beyond discussion. These are called "basic principles" or "facts."

Several descriptions of relevant brainstem anatomy and neurologic conditions are cited below. These are available in any basic text that deals with these issues. They also are available on the internet.

Spinal Shock

Immediately following spinal cord injury there is a period where you have no movement, no sensation, and no reflexes below the level of the lesion. It can last for hours to weeks and then may get better.

Respiratory Impairment

The amount of respiratory impairment following spinal cord injury depends on the level of the lesion. Nerves coming from C3-5 supply the diaphragm, the major muscle involved in breathing. If the injury is above C3 you cannot breathe on your own and will need a mechanical respirator. C-spine and T-spine nerves supply other muscles that help you to breathe. Any cervical or thoracic injury will, therefore, decrease your ability to breathe and can lead to lung infections.

Spinal Shock

Loss of all reflex activity below level of injury

Flaccid paralysis of extremities below the lesion. Lack of bowel and bladder function was formerly a major cause of death until development of new management techniques

Medulla Oblongata

The medulla oblongata is an enlarged continuation of the spinal cord extending up into the "pons" (a large bulge under the brain stem). On each side of the medulla oblongata is an oval swelling, called the "olive", from which a large bundle of nerve fibers arises and passes up into the cerebellum. Because of its location, all ascending and descending nerve fibers connecting the brain to the spinal cord must pass through it.

Medulla Oblongata

The Medulla Oblongata - approx. 3 cm long - is the most inferior portion of the BrainStem and is continuous Inferiorly with the Spinal Cord. Superfically the Spinal Cord blends into the Medulla but internally there are several differences. Discrete Nuclei (clusters of Gray Matter, composed mostly of cell bodies, surrounded by White Matter) with specific functions are found within the Medulla Oblongata but not within the Spinal Cord. In addition, the Spinal Tracts that pass through the Medulla do not have the same organization as the tracts of the Spinal Cord. On the Anterior surface two prominent enlargements, called Pyramids because they are broader near the Pons and taper towards the Spinal Cord, extend the length of the Medulla. The Pyramids consists of Descending Nerve Tracts involved in the Conscious control of Skeletal Muscles. Various Medullary Nuclei also function as centers for several Reflexes (regulation of Heart Rate, Blood Vessel Diameter, Breathing, Swallowing, Vomiting, Coughing, and Sneezing).

CONCLUSIONS:

It was <u>impossible</u> for the decedent to have taken one breath, even one gasp, <u>following</u> the shotgun blast.

The presence of over a 1/2 liter of blood in the right lung, while the left lung contained almost none, clearly destroys Nordby's farfetched hypothesis, that the pressure from the shotgun blast forced the blood into the lungs.

The "large " amount of blood in the trachea and bronchi and 1/2 liter in the right lung, with only 24 ml. in the left lung, could only have occurred if the decedent was lying on his right side when the blood was introduced from above.

Since the only bloody wound of the body in continuity with these tissues and structures was in the pharynx (throat) and since the body had to have immediately fallen to the ground following the shot and since the head was tipped down to the side touching the ground, the blood from the throat wound would have had to have flowed up hill. Since fluid does not passively flow up hill, there must be an alternate explanation.

The blood had to have been sucked up hill. This could have occurred in only one possible way - *breathing*.

However, death was immediate following the shotgun blast which severed the victim's body from his brain and not even a gasp could have occurred, notwithstanding filling the right lung with 1/2 liter of blood.

Therefore

The victim's lungs <u>had</u> to have filled with blood <u>before</u> he was shot. This implies that the victim was breathing and that he had suffered a wound that was the source of the aspirated blood.

There is <u>no other possibility</u> no matter how one stretches the imagination!

Bloodstains, Blood Patterns and Blood Volume

The evaluation of blood at a crime scene should be an integral part of every crime scene reconstruction. The volume of blood, the pattern of blood, the location of blood, all may help in determining whether the death was a murder or suicide. <u>Bloodstain Pattern</u> <u>Analysis, 2nd ed. Tom Bevel, Ross M. Gardiner, CRC Press, 2002</u>

Nordby: P. 29, through 43: "... I hypothesized that **the bloodstains found on the body and at the scene would be dependant on the power of the shell fired into the victim's mouth**. Of course this is *obviously* correct if the shot shell has sufficient power to produce an exit wound, essentially blowing the victim's head apart at the scene."

"In this event, then, we should expect to see the result's of arterial spurting, etc. covering any clothing worn by the victim as well as any deposition of brain matter, skull, and tissue debris. Obviously we do not see such bloodstains in Col. Sabow's death. There is no exit wound. Therefore, testing is required...to determine what the victim's position was when the shotgun was discharged."

Facts: Literature on crime scene investigation is replete with texts on <u>blood evidence</u>. There are literally dozens available. Furthermore, Jon Nordby credits himself as being an *expert* on blood evidence and cites his training and qualifications in this regard.

Jon Nordby then must know very well that the bloodstains found on the body and at the crime scene have little bearing on the power of the shell fired into the victim's mouth and whether there was an exit wound or not. The bloodstain is dependant on the arteries and veins that the gunshot lacerated which, in turn, is related to the part of the body that was violated. Finally, the pattern depends on the position of the body when the shot was fired and its relation to other body parts and objects and surfaces in the vicinity. (He follows his totally false proposition with the word *obviously* which is a frequently used modifier when a false statement is made, for it carries the ring of authority.)

Certainly everyone has experienced or seen how a small scalp laceration can spurt blood staining everything in the vicinity, how a nosebleed can cover the front of ones shirt, and in pictures, how a stab wound without an exit wound, can cover all the walls of an entire room.

After making this ludicrous statement, *a priori*, Nordby states: "Therefore, testing is required to help determine from the injuries sustained...just what the victim's position was when the shotgun was discharged. If we can replicate the staining, then we have come a long way in understanding the way in which Col. Sabow died."(another fallacy-that is stating that A is true if B is true without offering causation or inference).

Therefore, Nordby proceeds to tediously describe an experiment that he conducted. However, it was based on totally erroneous statements and propositions that he concocted in order to simulate how the decedent had allegedly sustained the shotgun blast, how the blood pattern resulted from that blast, how the victim would have fallen after the blast and how the blood entered the lungs (does not mention the blood was only in the right lung). Then, from the results of this "experiment", Nordby arrived at conclusions that were intended to prove that every expert who had reviewed the evidence and concluded that the manner of death was a homicide rather than a suicide, to be uninformed in forensic science and their conclusions grossly in error.

Not only did Nordby proceed with his experiments based on erroneous propositions, he conducted an experiment that in no way simulates what "may have happened." Consider the following: a plywood skull box filled with plastic bags containing red colored fluid, gel to simulate muscle tissues, a PVC pipe placed within a bathrobe to represent the trachea and lungs.

There is no mention of the arteries and veins at the base of the brain which represents the most highly vascularized area of the entire body. No mention is made of the brain tissue and especially the brainstem which was within one inch of the discharged weapon. On p.30, Nordby adds a curious disclaimer: "The box is designed ONLY TO model the direction of energy into the box [a human skull] and NOT TO model the fractures or damage done to the skull bone or to the skull itself" and "The objective was to investigate *only positional and force issues related to blood stains...*" He adds on p. 35: "the PVC tube is designed to capture the gases pushing materials down into the trachea/esophagus and into the lungs, but does not involve the stomach. "(Autopsy showed **no blood in stomach**)

FACT: No matter what the disclaimer says, the blast in the "skull box" would clearly depict the plywood being blown out the back of the box. He states that the experiment is to show the **direction of energy**. So how can it do this without showing the direction of energy in relation the skull, if this is a "skull box and the shot was into the box?"

Nordby appears not to understand basic anatomy. He states that the PVC experiment is to show the gases pushing materials into the **trachea/esophagus** and into the lungs but not into the stomach. The esophagus does not connect to the lungs. It is the conduit into the stomach. Furthermore, the entrance to the trachea is protected by the larynx and epiglottis. If anything, the pressure would have projected blood into the stomach more readily than past the epiglottis and larynx, down the trachea and subsequently into the lungs. Even more erroneous, if the pressure had succeeded in breaching this boundary, it would have driven blood into *both lungs* in a roughly equivalent volume. However, the results of the autopsy state otherwise: **no blood in the stomach but aspirated blood, almost all of which was in the right lung.**

P. 38, Nordby discusses the sound of a shotgun blast. "The weapon's discharge with a low pressure round such as any shotgun load...into a human mouth...makes the sound mute at best."

FACTS: Every forensic expert knows that a shotgun blast is anything but low pressure. Four to five gallons of hot explosive gases are produced in a load that was fired at the crime scene, a 12 gauge, # 7 1/2 Dove and Quail load. Furthermore, every forensic expert knows that when there is no exit wound, tissue mutilation is much more extensive than when there is an exit wound, such as is seen more prevalently with a "high powered rifle." This is because without an exit wound, all the kinetic energy is confined within the skull and is dissipated with tissue destruction. However, when there is an exit wound, a significant amount of the kinetic energy produced by the blast of the firearm is used in the flight of the projectile beyond the confines of the skull. What's more, Nordby talks about the *tremendous* pressure of the blast in order to explain the "eggshell fractures" of the skull, but then attempts to *minimize* this pressure when he attempts to explain the small volume of blood present at the crime scene. P. 14. Nordby: "The rapidly expanding gases produced by the explosion damaged the soft tissues as well as **providing the pressure fracturing the skull** as noted at autopsy."

P. 39. Nordby: "When a shotgun is held against a target which would completely seal the barrel ends, the explosion bursts the steel tube barrels."

FACT: If a shotgun barrel is placed against a solid surface i.e. concrete, oak slab, sealing the barrel end, and then, somehow stabilizing the weapon to prevent kickback, destruction of the barrels would probably occur. However, this investigation does not suggest that this was the situation. The wound, as proven at autopsy, was a contact or near contact wound to the soft palate. This would be equivalent to pressing the muzzle up against, or within an inch or so, of a thin slice of soft tissue and discharging the weapon. One can be assured that "there would not be destruction of the last three inches of the weapon's left barrel." Furthermore, the gag reflex is mediated by nerve endings within and around the soft palate and not in "hard tissues."

On p. 39, **Nordby** reminds us that "the **cartoons** depicting gun barrels pealed back like "banana peels" is **"in the real world".** It is particularly distressing to me to listen to an expert who would even consider such an analogy in a case like this. Furthermore, on p. 52, Nordby states that, when I indicated that the "victim would have been pushed backward out of his chair" if he was positioned, as the NIS alleged, is "contrary to the laws of physics" and "is perhaps based upon viewing **inaccurate TV and movies**."

Nordby has difficulty in explaining the extremely small volume of blood that was found at the crime scene and documented by the attending surgeon at the scene, Dr. Steven T. Gibbs, LT.MC.USNR, in addition to what was seen on the video tape of the crime scene and the crime scene photos. On p. 58, Nordby attempts to deal with EBL (estimated blood loss) of 50cc. He contends that a fundamental error in the EBL was because the EMT only measured the area of the stains on the soil and clothing and did not take into account the potential depth of these blood stains. Nordby attempts to dismiss the accuracy of the report by continually referring to the report as a product of the EMS (emergency medical service) or EMT (emergency medical technician). He does not acknowledge that the report was prepared by a *Navy Medical Physician* who was called to the crime scene.

Then, Nordby attempts to confuse the issue about the small volume of blood by distracting the reader by irrelevant mathematical formulas concerning an area of a circle and a volume of a cylinder. This is followed by a factually incorrect statement that one can not estimate blood loss without conducting

experiments of the blood stained soil. In spite of pointing out all of these difficulties and errors, Nordby states: "Most of the massive bleeding remained contained within the decedent's thoracic cavity and also within the organs contained therein-including the lungs."

FACTS: The autopsy states very clearly that the only abnormal blood in the thoracic cavity was in the right lung, the trachea and bronchial tubes leading to the lungs, except for an extremely small amount, 24 ml. in the left lung. Apparently, Nordby does not know what other organs reside in the thoracic cavity. The heart, the aorta and its branches are in this cavity, but they are supposed to contain blood. The esophagus is also there but the autopsy states that there was no blood in the esophagus. There was no blood in the pleural cavity. **So where but the in right lung was** *all* **of this massive blood?** There are no other organs in the thoracic cavity!

Nordby describes how he conducted his "blood experiments" and offers his stated results as factual. Even though the experiments are meaningless, if they were meant to simulate the crime scene, the stated results defy common sense, logic and physics. Every textbook on blood evidence in general, and blood spatter and blood pattern analysis in particular, directly contradict literally all of Nordby's premises and conclusions.

A sentence on p. 59, typifies Nordby's use of illogical analysis: "Therefore, any inferences drawn from this 50 cc blood loss estimation are also without any scientific significance." **If the facts do not fit, they are irrelevant.** Or as he states on p. 39, "If it is *possible* that this occurred...it remains a good candidate to explain *how it actually occurred*."

Nordby contends that he majored in philosophy in undergraduate school. This includes the study of *Logic* and *Logical Fallacies*. Yet, his arguments are riddled with these errors.

An intra-oral shotgun wound produces an extremely bloody crime scene. It is known to be one of the most mutilating and destructive injuries to the body. Since the brain has an extremely rich blood supply and the blast causes laceration of the blood vessels of the brain, a large volume of blood is found at the crime scene. The blood will be found on the weapon. The clothes on the front of the body will be drenched. The hand used to hold the weapon in the decedent's mouth will be covered in blood. Spurting blood will exit the mouth and project in variable distances in front of the body.

Therefore

- 1. The EBL, estimated blood loss, 50 cc, is inconsistent with the alleged suicide.
- 2. The minimal blood, only a few drops, on the front of the decedent's bathrobe and undershirt are inconsistent with the alleged suicide.

- **3.** The lack of blood on the shotgun is inconsistent with the alleged suicide. (minimal <u>tissue</u> was found in the barrels-no mention of blood *per se*).
- 4. All blood patterns indicate that the decedent was lying on his right side with his arms flexed at the elbows and his hands and fingers curled in front of his mouth when the gun was fired. The blood projected on his left forearm and palm and on the ground in front of the prostrate body could only have occurred in this position when the gun was fired.

CONCLUSION:

The minimal EBL indicates that the decedent was already dead or very near death, with minimal or no effective circulation, when the gun was discharged.

Fingerprints

p.49 Nordby: "To state that no fingerprints were found may be accurate or misleading. Does this mean no identifiable prints, no smudges and no smears on the weapon?" On p.49, 50, Nordby: "The photo shows at least three gloved hands touching the weapon at the scene after the agent holding the weapon has opened the breach and removed both shotgun shells. With this amount of handling it is not necessarily surprising that identifiable fingerprints were not found."

Evidence: Nordby is wrong. Identifiable fingerprints were found on the weapon and they belonged to Colonel Sabow's son, who cleaned the gun, after using it over one year prior to Colonel Sabow's death. Does Nordby mean that the three gloved hands only smudged or removed Colonel Sabow's prints but magically retained those of his son?

There are certain stipulated facts:

- 1. Colonel Sabow died between 8:30 and 9:00 AM on January 22, 1991
- 2. He showered between 5:30 and 6:00 AM
- 3. He fed the dogs and played with them shortly after his shower
- 4. He made several phone calls that morning
- 5. He had walked to his front yard to retrieve the morning newspaper
- 6. He read at least a portion of the newspaper
- 7. He prepared and consumed two cups of coffee

Therefore:

His hands were not pristine and without salts and oils.

In accordance with the crime scene investigation reports and photographs, the following events would have occurred in sequence, if Colonel Sabow shot himself:

- 1. Unzip the gun case
- 2. Grab the gun and pull it from the case
- 3. Rezipper and replace the case on the closet shelf
- 4. Grab the gun again and walk through the house opening and closing two sets of doors
- 5. Lay the gun on the surface of the workbench in the garage

- 6. Squat down to open the cabinet under the workbench
- 7. With both hands, remove a cardboard box containing several boxes of shotgun shells, as well as considerable other ammunition
- 8. Remove the appropriate carton from that box and extract two shells from the carton
- 9. Then replace the carton in the larger box and stow it back in the cabinet
- 10. Break open the double barrel shotgun and insert two shells
- 11. Close the breech of the gun
- 12. Call the dogs into the garage and close the door, locking them inside
- 13. Walk across the lawn and drag a patio chair from the side of the house to the lawn while gripping the gun in one hand
- 14. Position himself on the chair
- 15. Grab the barrel of the shotgun with his left hand in order to hold the muzzle in his mouth
- 16. Reach down with his right hand and depress the trigger either with his index finger or thumb

To accomplish this without leaving one identifiable print is *most* unlikely. It would be even more unlikely, not to have smudged the fingerprints that were lifted from the gun and which were subsequently identified as those of Col. Sabow's son.

It would be highly unlikely for Colonel Sabow to have handled the gun that morning. If he had, he most likely would have left fingerprints on the gun and also he most likely would have smudged the prints that were found.

Therefore

Even in consideration of only the fingerprint evidence, it is highly unlikely that Colonel Sabow committed suicide by shooting himself in the mouth with the 12 gauge shotgun found at the crime scene. Since David N. Sabow was in Spokane, Washington attending Gonzaga University on the morning of the death of his father, someone else had to have fired the weapon. That person must have used precautions to insure that he left no fingerprints and probably expected that latent prints of Col. Sabow would be identified from a remote handling of the weapon. However, the weapon was thoroughly cleaned by Col. Sabow's son after he last used the shotgun and immediately placed in its scabbard, never to be withdrawn until the morning of Col. Sabow' death. Hence, their were only two latent prints found on the gun and those belonged to Col. Sabow's son, David.

GUNSHOT RESIDUE

Applying the alleged suicide scenario, Colonel Sabow would have used his right hand to fire the shotgun. Beginning on p.24, Nordby states: "The report indicates that *no* GSR was detected on Colonel Sabow's right hand...this is potentially somewhat surprising...without the actual shotgun it is impossible to determine if the lack of GSR on Colonel Sabow's right hand has any significance whatever." Nordby adds, p. 25: "The only relevant testing *must involve the identical weapon, the Ithaca Model 200E serial # 137911* (Nordby's emphasis) used in the Col.'s death."

P. 26, Nordby uses this entire page in a discussion of the importance of testing for GSR. In the first paragraph, he states: "If Colonel Sabow had *none* on his right hand, then someone else fired the weapon. I would not call this irrelevant to the investigation." Then in the last paragraph, Nordby states: "I never-the-less tested the American Arms "Gentry" for GSR deposition on the shooter's right hand, firing the weapon from both directions (pushing and pulling the trigger). [The results of this and other GSR testing from EDX will not be available by the time this report is due November 8, 2004. As stated earlier, supplemental reports will be provided if requested]

FACTS: In a previous case in which he participated as a forensic expert, Nordby clearly points out in **Patrick Swiney v. Alabama**, that if a particular weapon is *not* available, a similar weapon can used in its place and the results will be valid, since similar weapons share common characteristics, as far as deposition of GSR and ballistics are concerned. **On this very basis, Nordby testified to the innocence of convicted murderer, Patrick Swiney in a double homicide case.**

In spite of this testimony and his statements on the *importance* of GSR in his investigation of Col. Sabow's death, as well as the amount of time he supposedly spent on this investigation, Nordby states: "He does not have the results and won't provide them unless he is asked to submit an additional report."

From this alone, how can one not question the credibility of this report and the intent of this investiation?

FACTS: Dr. Jon Nordby was hired as an expert for the defense in an appellate case in the State of Alabama, *Patrick Swiney v. State of Alabama.* He presented his report to Wilson Meyers, attorney for the defendant, on July 3, 2003 and in a sworn affidavit on December 10, 2003. The defendant Swiney was convicted in the shooting death of two people in 1987 and was found guilty. He is currently serving a life sentence without parole. Dr. Nordby was hired to review the evidence and present his conclusions. In his testimony, Dr. Nordby states with **absolute certainty** that Patrick Swiney could not be guilty of these two homicides. He based his conclusions on just two pieces of evidence, *gunshot residue* and *blood spatter*.

Gunshot Residue- Swiney had no GSR on his right hand. The weapon, an AR-7 .22 caliber rifle was the alleged weapon used in the killings. The weapon was not released by the State of Alabama to Nordby. However, Nordby states several times in his two reports: **"it is not necessary to have the actual weapon, but only have a similar one, for they would share the same characteristics as far as ballistics and GSR are concerned."** Nordby conducted an experiment using a substituted AR-7 to see if GSR would be deposited on a shooter's hand. Large quantities of GSR were deposited on the shooter's hand in the experiment Therefore, Nordby concluded, that since there was no GSR on Swiney's hand, he could not have fired that weapon. He states that this, in itself, is **exculpatory**.

Not only does Nordby state that the lack of GSR on Swiney is proof of his innocence, but he also states that "it was **not necessary** to have the identical weapon but only a similar one." This is exactly *opposite* to what he says in his report on Col. Sabow's death. He offers an interesting excuse on p.29: "...the results may be different when *pushing* rather than *pulling the trigger*..."

On p.25, Nordby, states : " The above photograph shows fouling from the weapon's discharge on the inner aspect of the left thumb... note, however, photographic documentation of the right hand is absent..."

Fact: Closeup photos were taken of the residue on the left hand because there was residue present. Since, the left hand was lying immediately in front of the decedent's mouth, while lying on the ground, if he had been shot in that position then there would have to be residue. This residue is termed "muzzle blast effluent" (MBE) as opposed to Gunshot Residue (GSR).

Close-ups were not taken of the right hand because there was nothing to see. However, many photos of the decedent's body were taken both at the crime scene and at the medical examiner's facility and these included multiple views where one can easily visualize Colonel Sabow's right hand. They show no gunshot residue staining.

Patrick Swiney had no blood stains on his clothes. Nordby contends that if the shooter was standing as far distant as four feet from either victim, he would have blood spatter staining his clothes. Therefore, Nordby contends, Swiney *could not have* committed these homicides, based on this evidence. He states that the absence of blood on Swiney's clothes is **exculpatory**.

It should be emphasized that Nordby is making this statement in spite of two very significant details that contrast quite sharply to the Sabow investigation:

-The weapon in the Swiney case was a .22 cal. rifle, while in the Sabow case, the weapon was a 12 gauge shotgun. The difference in the wounding effects at close range, hardly needs to be discussed. Suffice it to say, that a .22 cal. wound is frequently so small, that it can be "missed" if a thorough search is not made. Close, near-contact and contact wounds with a 12 gauge shotgun are among the most mutilating wounds that the body can sustain, and an intra-oral wound is the worst wound that can be inflicted on the human body.

-In the Swiney case, Nordby asserts that even using a .22 cal. weapon, and even if the shooter was standing at a distance of up to four feet away from the victim, he would have had ample projected blood on his clothes. Yet, he dismisses the fact that there was almost no blood on the front of Col. Sabow, who was shot in the mouth with a 12 gauge shotgun.

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Facts in Swiney Case:

Blood spatter *from* the victim, *onto* the shooter who was using a .22 cal. weapon and firing from a distance of 4 ft.

v.

Facts in Colonel Sabow Case:

Blood on the victim after shooting himself in the mouth with a 12 gauge shotgun

Who would be more likely covered with blood? Would it be Patrick Swiney or Colonel Sabow?

Nordby's statements and conclusions simply do not make sense!

Chairman Hunter, my report is quite substantial, however, it is by no means exhaustive. To counter each false statement that inundates Dr. Nordby's report, would require a discussion of almost every sentence. I find it difficult to blame the character of his report simply on ignorance of basic forensics, unawareness of common physical principles and lack of common sense. I believe that it requires very little imagination to realize that Dr. Nordby was not solely responsible for the content of the report. It is my belief, that in the two months that had transpired from the date of the completion of Nordby's report on November 8, to when the report was given to the combined Armed Services Committees, it was *"reworked"* by experts at the Department of Defense. There seems to be a peculiar quality that permeates the report; one that is somewhat foreign to a person involved in scientific pursuits. In contrast, the report reeks of *"disinformation"*, a technique that supercedes even the clever use of *fallacies of logic*. It is my understanding, that no one has perfected this method any better than the experts in psychological operations (Psy-Ops) at the DOD.

The change in the Report's venue from Iowa State University to that of Dr. Jon Nordby, of *Final Analysis Forensics*, has never been explained. The total exclusion of Dr. Sabow from any part of the case is troubling. The decision not to interview the witnesses, as was required by law, except to send a letter to a few of them, and only one day before the final report was to have been due, is outrageous. For the Department of Defense to have kept the report for two months, before its release to the combined Armed Services Committees, raises serious suspicions. After all, one of the most basic tenets of American Jurisprudence, is that *a person cannot be a judge of their own case*.

I would welcome the opportunity to discuss my report with any, or all members of the Senate and House Armed Services Committees. It is my hope that this terrible injustice, in its entirety, receives the attention that it deserves. Colonel James E. Sabow, USMC risked his life for his country 221 times in combat missions over hostile territory in Viet Nam. For the remaining part of his 28 1/2 years in the Corps, he distinguished himself in the demanding VSTOL *(Harrier)*, program and in many other demanding assignments. He deserves the full attention of this Congressional Body. What has occurred to Colonel Sabow and his entire family, is almost unthinkable, especially in this country which is supposedly based on *the rule of law*.

However, there is something even more important than simply discovering the truth about Colonel Sabow's death. For, if I am right and Colonel Sabow *was murdered*, then there is an overwhelming responsibility to investigate *why there has been such a concerted effort to cover-up his murder*. Exposing the entire truth that surrounds Colonel Sabow's death will undoubtedly be painful, but I am convinced that its rewards will have an enduring constructive impact on our country for which Colonel Sabow gave his life.

Respectfully,

John David Sabow, MD