CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (9 January 2019)

Mick McKay called the meeting to order at 7:10 p.m. Secretary and Treasurer gave brief reports. Mick asked the members who brought guests to introduce them: Dan and Melinda Stearns and Brucie Serene, guests of Jim Serene, and Irwin Feller a guest of Jim Ultman. In addition, Bob Carline was proposed by Frank Deutsch for membership, which was unanimously approved. Mick introduced Al Turgeon who spoke on the recent TV series: "Vietnam: What Ken Burns Got Right and What He Got Wrong." This presentation was based on initial personal impressions by Al, who had served as a US Army helicopter pilot in Vietnam, receiving a Distinguished Flying Cross award, followed by four decades of internalization while he pursued his professional academic career. On retirement he decided to review the Vietnam War era through scholarship on the what, why and when of that segment of his life. The presentation was his personal response to the TV series.

This summary reflects a partial listing of very general topics [underlined] identified by Al that he felt could/would create an incomplete impression of the complex topic based in the film alone. Length of involvement where critical decisions ran from the eras of Roosevelt through Ford and can be characterized by alternating emphases by their administrations followed by partial execution of their plans. The backdrop was centuries of resistance by the Vietnamese people to outside control. The decades-long US plans were disrupted by two Presidential deaths and one resignation. This resulted in little consistency in intent or tactic. In overview, the US involvement started as a minor part of the larger strategy of "The Domino Theory" for containing communism and morphed into something much more intense and micro-focused. Diplomatic and military tactics swung from loose US government supervision to strictly imposed diplomatic and military tactics that might have succeeded in the short term but often stifled the initiative and lowered the dignity of the very people they meant to help. Wavering political support within individual US administrations that had a pattern of a President inheriting a "mess", beginning with broadly defined goals, realizing the limits and deciding to reduce or eliminate commitment, but delaying action until after the next critical US election.

Congress never accepted its unique Constitutional role to declare war, and thus no one ever analyzed the feasibility and end objectives of government policy. Slow recognition and adaptation to the brilliance of N Vietnamese military leaders such as General Giap who succeeded beyond expectations with forces that did not have latest tactics and equipment but did have intense integration into the history and culture of Vietnam. Little acknowledgement of the severe constraints that the US government placed on its military tactics. One example was the inability of the dominant Air Force to attack supply chains in neighboring countries and seas, allowing free flow of enemy materiel and people in and out of the limited geographic area then recognized as South Vietnam. Another was that command structures were fragmented, making integrated plans impossible across military commands, much less with the diplomatic support needed for long-term success. A third was the initial failure to set up a political structure appropriate to internal Vietnamese history and culture. The conclusion in the film that the war was not winnable after the Tet attacks, despite the fact that it was a major defeat of the VC and NVA forces participating in the attacks. Thus, a US military success was turned into a political defeat by the inability to distinguish between political and military objectives. In summary, the details are too nuanced to be summarized in a few words, and the reader is invited to consult the attached summary prepared by Al Turgeon, followed by the sources in his bibliography. An extended and open discussion followed, covering both details of the presentation and reflections by the speaker of his experiences when viewed in perspective.

The meeting adjourned at 8:10 pm. Attendance: 28 members and 4 guests.

The next program on 13 February will have Scott Kretchmar speaking on: "A Philosophical Tribute to Muscle".

Vietnam: What Ken Burns got right and what he got wrong.

Despite the expenditure of thirty million dollars and ten years of effort, the Vietnam Documentary by Ken Burns and associates had numerous errors and omissions and showed an antiwar bias throughout the ten-part series. The narrator—Peter Coyote—stated at the outset that the war occurred under five presidents of both political parties; actually, there were seven presidents who played a significant role in the two Indochina Wars. President Roosevelt did not want the French to occupy Vietnam after the defeat of the Japanese in World War II; however, he died before the war was concluded. President Truman was convinced by the Europeanists in the State Department, over the objections of the Asianists and the OSS, to allow the French to recolonize Vietnam in order to obtain their support in resisting communist expansion in Europe after the war. This eventually led to the First Indochina War, President Eisenhower continued and expanded support of the Republic of Vietnam under Ngo Dinh Diem in order to prevent a communist takeover of not only Indochina, but other Southeast Asian countries, consistent with his "Domino Theory." This, in turn, led to the Second Indochina War, called the American War by the Vietnam War by the Americans.

Initially, the Vietnam War was a guerrilla war—from 1957 till 1962—fought by remnants of the Vietminh who remained in South Vietnam following the First Indochina War. It expanded in intensity to a mixed war consisting of both guerrilla skirmishes and conventional operations between 1963 and 1969, after which it switched again to a strictly conventional war until its conclusion in 1975 with the defeat of the South Vietnamese forces.

Errors and omissions in the documentary:

- 1. Neglected to show how the performance of American civilian advisors in the Eisenhower administration were so heavy handed in their dealings with the South Vietnamese that they stifled the initiative and stomped on the dignity of the very people they were attempting to help. It also failed to point out that American military advisors worked to change the ARVN from its regional defense mission to repelling an NVA invasion when, in fact, what was also needed then was regional defense against Vietminh guerrillas. These strategic mistakes—a top-down approach to rural development and changing the ARVN's mission away from regional defense—set the stage for problems of increasing severity under subsequent U.S. administrations.
- 2. Failed to point out that, despite public pronouncements to the contrary, Kennedy privately concluded that the Vietnam War was a hopeless pursuit and ordered that 1,000 troops be withdrawn by the end of the year, and planned to withdraw all troops following the 1964 elections.
- 3. Failed to show the pivotal role of Dwight Eisenhower in convincing President Johnson that his first duty was to contain communism in Southeast Asia, and that he needed to shift from *retaliatory strikes* to a *campaign of pressure* against North Vietnamese targets—leading to Operation Rolling Thunder.
- 4. Failed to explain the constraints under which Westmoreland had to operate, including: he was not permitted to: invade North Vietnam, enter Laos, despite plans to cut the Ho Chi Minh Trail by a ground incursion, and attack bases in Cambodia. Furthermore, his command was limited to the U.S. Army and Marine forces in South Vietnam, and did not include Air Force or Navy resources, nor command of the South Vietnamese armed forces (RVNAF). As he couldn't rely on RVNAF to fight VC main-force units, he requested they handle pacification, but with few resources and no training. With a primary focus on attrition, Westmoreland resorted to tactics for maximizing enemy losses, resulting in so much collateral damage that turned the rural peasantry against the U.S. and GVN. And, when confronted with the unwillingness of the GVN and RVNAF to remove and replace incompetent and/or corrupt leaders, he proceeded to prosecute the war independently.
- 5. Failed to explain how the air war was conducted. For most of the operation, airstrikes were strictly forbidden within 30 miles of Hanoi and within 10 miles of the port of Haiphong; furthermore, a 30-mile buffer zone extended along the length of the Chinese frontier. Thus, the most important targets were off limits, and many of those that were bombed were of little or no strategic value. LBJ then concluded that the bombing was ineffective in convincing the North Vietnamese to stop their aggression against South Vietnam. Losses included 922 aircraft and 1,076 crewmen killed/captured/missing.
- 6. According to the Burns' documentary, "Westmoreland's assumption—that the attacks on the cities and towns was a side show—was wrong. <u>Khe Sanh was the side show</u>; the attacks on cities and towns throughout

Vietnam would be the main event." This was simply wrong, as both were main events: one was a key offensive that was intended to yield a major victory, similar to that realized at Điện Biên Phủ in 1954, while the other was expected to precipitate a general uprising; it was hoped that both would result in the defeat of the GVN and its U.S. ally.

- 7. Most importantly, it concluded that the war was not winnable after the Tet attacks, despite the fact that it was a major defeat of the VC and NVA forces participating in the attacks; thus, a U.S. military success was turned into a political defeat by the press.
- 8. The coverage of General Creighton Abrams, Westmoreland's successor at MACV Commander, was limited to: Comments about GEN Abrams in the Burns' documentary: "he drinks a lot," he presided over "Vietnamization," and his statement near the end of his tenure that "I need to get this army home to save it." Thus, it failed to note that Abrams dramatically changed tactics to emphasize pacification over attrition, eventually winning the guerrilla by 1970.
- 9. In illustrating the execution of Vietcong Captain Nguyen Van Lem by General Nguyen Ngoc Loan, it failed to add that Lem had just assassinated seven South Vietnamese police officers, as well as their families—34 bound and shot bodies in total. AP photographer Eddie Adams later apologized to Loan for the damage it did to his reputation.
- 10. It quoted Liz Trotta's statement that "A lady in Wyoming said what the jury has done to 2LT Calley is a disgrace to this nation. The enemy is the enemy. From Ohio, a doctor said let us not condemn Calley when it is the character of the war which is at fault for such slaughters as Mỹ Lai." But it failed to point out that what Calley and associates did was in violation of the "rules of engagement" and all should have been prosecuted and punished.
- 11. It quoted Army deserter Jack Todd: "Having just learned about the death in Vietnam of a boyhood friend from his mother, he lamented: "Long after we knew how wrong the war was, guys like Ron were still dying. Why?" But it didn't elaborate on why a war that was right initially, based on the commitment by a succession of U.S. presidents had turned wrong. Was it the battlefield horrors? These occur in all wars. Was it the atrocities? These are inevitable to some extent, but they occurred relatively infrequently. Was it because of the length of the war and the number of casualties that occurred? These are legitimate concerns but don't necessarily make the war wrong. Or was it because of inept leadership? The one example used was a statement of Marine Corporal John Musgrave, who stated: "War is a real estate business; we're supposed to take real estate away from the enemy and then deny the enemy access to that real estate." Actually, many of the wars the U.S. and other nations have fought were not about real estate; they were about attritting the enemy personnel and materiel until they could no longer continue fighting. This issue should have been addressed by someone more knowledgeable in military strategy and tactics than a corporal.

Bibliography

A Better War by Lewis Sorley Dereliction of Duty by H.R. McMaster Vietnam at War: The History 1946-1975 by Phillip B. Davidson Ho Chi Minh by William Duiker In Retrospect, The Tragedy and Lessons of Vietnam by Robert McNamara On Strategy, A Critical Analysis of the Vietnam War by Harry Summers Victory at Any Cost, The Genius of Vietnam's Gen. Vo Nguyen Giap, by Cecil Currey Why Vietnam? by Archimedes Patti

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (13 February 2019)

Mick McKay called the meeting to order at 7:00 p.m. Secretary and Treasurer were not asked to provide reports. Mick asked the members who brought guests to introduce them: Bob Hendrickson introduced his wife, Linda; Jim Ultman introduced his wife Deena; Al Turgeon introduced his guest Bob Sills (a potential member); and Roger Williams introduced his guest Dick Jones who was subsequently approved as a new member. Mick introduced a topic for later consideration to deal with procedures for cancelling meetings in cases of inclement and dangerous weather. More detail needed before discussion.

Mick introduced our speaker, Scott Kretchmar, Professor Emeritus of Exercise and Sport Science, Penn State. Scott introduced his wife Janet and then spoke on "A Philosophical Tribute to Muscle". The talk was from the heart, serving as a philosophical tribute to muscle and the diverse, important, sometimes surprising, and often overlooked ways it affects our lives. This multi-tiered presentation addressed the topic from Scott's personal and professional research interests that include the metaphysics and ethics of games, play, and sport, the role of games and play in human evolution, and theory of mind and the intellectual requirements of sporting activity. His unique blend of comments combined physiology and health promotion, on the one hand, with philosophy and ideas about quality of life, on the other. It included data on health risk factors related to sedentary living as well as human risk factors encountered when we age and cannot "stand tall," move, dance, and play.

From that highest-level overview, the presentation went to more every-day matters such as how our public schools deal with muscle in the context of physical education and many of the arts: how school curricula and policies treat brawn in contrast to brain. He then continued to examine social biases that would tell us how human smarts and physical strength are related, and concluded with comments about why, today perhaps more than ever before in human history, we need to be intentional about moving, getting exercise, and paying tribute to our muscles.

He noted that, in only one or two generations, all of us have moved from an environment where physical work, with emphasis on muscle, dominated our lives to one where for many the heyday of muscle is over. Scott closed with a vision of a future where we are rapidly being separated from the past and its influences. That fracture leads to increased mortality that can be linked in part to inadequate physical activity. One antidote to those new risks can be through support of increased planned exercise, promotion of health, and its related linkages to mental well-being. The final visual summed up his philosophical tribute to muscle as follows. It is possible to say too much, while it is difficult to say too little on a topic that will be of growing importance to our children and grandchildren. He ended with the claim that muscle is important, ". . . for how we think and talk, for how we preserve our dignity, for how we hold onto our freedom, and because we want to continue to enjoy the dance of life . . .":

The breadth of the presentation was astonishing, making it most difficult to capture its various elements in their true perspective in a short review. The interested reader can find many of the elements encompassed in this publication by Scott. "Homo Forte: A Philosophical Tribute to Muscle" *Sport Ethics and Philosophy* · September 2018 DOI: 10.1080/17511321.2018.1493529.

An extended and open discussion followed, covering both details of the presentation and reflections by the speaker to supplement the presentation.

The meeting adjourned at 8:00 pm. Attendance: 23 members and 5 guests.

The next program on 13 March will have Louise and Art Goldschmidt speaking on "What is a mosque?"

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (13 March 2019)

Mick McKay called the meeting to order at 7:00 p.m. Secretary and Treasurer were not asked to provide reports. Kathy Sillman filled in as Treasurer for this meeting. Mick asked the members who brought guests to introduce them: Mick McKay introduced his wife Joyce, Gordon DeJong introduced his wife Caroline, Marylee Taylor introduced her guest Emilie Allan, Louise Goldschmidt introduced her guests Alita Letwin and Tom and Kari Reyburn, Al Turgeon introduced his guest Bob Sills (a potential member); and Jim Serene introduced his wife Brucie and two potential members Dan and Melinda Stearns. Bob Sills and the Stearns were unanimously approved for membership and were welcomed into our Club. Gary Miller was asked to give a brief overview of his activities, which he did this by summarizing his 50-year career in Penn State Public Broadcasting and Educational outreach programs. Mick introduced our speaker Louise Goldschmidt who enlightened us on the topic "What is an American Mosque?" by means of a bit of history and a series of general questions with answers. How many Muslims are there in the U.S.? How many mosques? Where are they located? Why are they so different from each other? What does a building need to have in order to be a mosque?

As of 2017 there were 3.45 million Muslims in the U.S., or 1.1% of the total population. There were also 5.3 million Jews, who comprise 2.9% of the U.S. population. In some European countries, the percentage is much higher. In some European countries, the percentage is much higher. For instance, in France 8.8% of the population are Muslims; in Sweden, 8.1%. A 2011 survey of mosques in the U.S. revealed that at that time there were 2,106 mosques, of which 76% had been built since 1980. Most mosques are in cities, but now many are being built in rural and suburban areas.

What is the history and precedent? The first mosque was the Prophet Muhammad's home in Medina. Although no pictures of it exist, we have several written descriptions. It consisted of a rectangular, walled space with an inner courtyard which was surrounded by sheltered areas on three sides and a larger sheltered area on the fourth side, which was used for worship. After the Prophet died in 632 A.D. Arab tribesmen from the Peninsula engaged in a period of rapid conquest, in which most major cities from Spain on the west to Iran on the east became incorporated into a vast Muslim empire. During this period some of these Arabs based themselves in desert forts which were similar in layout to the Prophet's home. One in Iraq (the Great Mosque of Samarra) survives. It was built next to a previously existing ziggurat, a cone-shaped tower with an outside ramp, which may in fact have been a precursor to later minarets. Soon the Muslim conquerors began to build mosques in their conquered cities. The mosque of Ibn Tulun (9th century) in Cairo is an example. It had a similar layout, but several new features were added: 1) a large fountain in the courtyard, used for ablutions before praver; 2) a mihrab, a niche indicating the direction of Mecca; 3) a minbar, a pulpit for the person who was preaching the sermon; and 4) a minaret, a tower used by the muezzin to call the faithful to prayer. Egyptian and Turkish mosques developed in different ways. Egypt, being a hot, dry country, and Cairo, having (at first) a lot of space, developed mosques that continued the large central courtyard plan (like Ibn Tulun). After a while, however, land became scarce, and Egyptian mosques were built more vertically. Turkey, on the other hand, is a cooler, wetter country, where large courtyards need to be covered. The Turkish mosque developed out of the mausoleum, which was basically a dome over a cube, with a porch and one or two minarets added. The classic Turkish mosques of the 18th century ended up with huge domes and as many as six minarets. They were very tall and thin and were called "pencil minarets".

What form(s) and styles do we have in the USA? Most American mosques follow the Turkish model. This is no accident, as beginning in about 1900 there was a great influx into America of refugees from countries---Egypt, Syria, Lebanon, Albania, etc.---from the Ottoman Empire, which was rapidly declining. These immigrants were often young, unmarried men from the poorest parts of the empire, hoping to make money and escape the Turkish draft. They settled in places like Biddeford, ME (textile mills), Ross, ND (homesteading on the frontier), Cedar Rapids, IA, and Dearborn, MI (car manufacturing), using simple existing buildings as mosques. Their ingenuity in transforming American buildings to new uses was amazing. As communities prospered, however, Muslims began to build mosques designed by professional architects. They are truly outstanding works of architecture, and other mosques stand out as radically modern. Why are there so many different kinds of mosques in America? Mosques vary in architecture according to who built them, (Factory workers, Diplomats, Wealthy businessmen?) What part of the Middle East did they come from? (Egypt? Albania? Lebanon?) They naturally tried to replicate the mosques they knew from home. What kind of Muslims were they? (Progressive? Traditional? Racially inclusive? Narrowly ethnic?) How much money did they have to spend on their mosque? What part of the U.S. did they settle in? It made a big difference whether they were in Florida or North Dakota in terms of climate, available building materials, and what other buildings were there already.

And there is a final question: What does a building need to have in order to be a mosque? Robert Hillenbrand, a well-known Islamic art historian, wrote that all a Muslim really needs in order to pray is a wall correctly oriented towards Mecca, but even a wall and a roof are not really necessary. No minimum size is required for a mosque. No liturgical accessories are necessary. No crosses or stars-of-David. No paintings or sculptures. No altars, communion rails, or stained-glass windows. No piano or organ. No chairs or pews. No lectern. No furniture at all, except for a minbar (in a large mosque) and a few chairs for people who are no longer able to kneel. A mat or carpet is nice for comfort but is not required. All you need is yourself. Obviously---*a mosque is any place where an individual Muslim---or a group---prays*.

A wide ranging 20-minute discussion followed that indicated the resonance the topic had with our group.

The meeting was adjourned by President McKay at 0805 PM. Attendance was 28 members and 10 guests.

The April 10 meeting will feature Carl Sillman and the topic "Gentleman Genius: CN Meyers and his English Setters."

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (10 April 2019)

President Mick McKay called the meeting to order at 7:00 p.m. Secretary and Treasurer made no reports. Mick introduced guest Kathy Sillman and thanked her for serving as Treasurer at the last meeting. Art Goldschmidt spoke on the forthcoming International Association of Torch Clubs meeting in Durham, NC. Mick introduced Carl Sillman, who provided a wide-ranging introduction to the life, work, and impact of a unique business and civic leader, Clinton Noah Myers, with the title "Gentleman Genius: C.N. Myers and His English Setters"

Born on a farm in Carroll Co., MD, in 1876, Clinton Noah Myers moved to Hanover, PA, at age 16 and held a series of jobs. His father also moved to Hanover and entered the insurance and banking businesses. He introduced his son to Harper D. Sheppard, and the two younger men became fast friends. They formed the Sheppard and Myers Co., a business partnership and friendship that lasted for 52 years until Sheppard's death in 1951. In 1899, they founded the Hanover Shoe Company. They were innovators in that they did not sell their shoes through department stores, but directly to the public through their own shoe store chain. The first Hanover Shoe Store opened in York, PA, in 1900. As their business grew, Sheppard and Myers became co-leading citizens and philanthropists. They funded the construction of Hanover General Hospital in 1926 and created a municipal water supply for Hanover by building the Sheppard Myers Dam and planting thousands of trees on the watershed. They donated the land for an athletic field for the local high school and funded its construction. So close was the friendship between the two men that they built identical mansions a few blocks from each other.

Myers was a lover of nature. Even as he succeeded in business, he never forgot his agricultural roots. An avid sportsman, he hunted with pointers and setters. He collected specimens of trees from all over the world and created his own arboretum, which contained about 600 trees and which still exists today. A lover of horses, he drove trotters at local fairs. Together with Harper Sheppard, he founded the world-famous Hanover Shoe Farms, which today remains the top producer of champion Standard Bred trotters. On his farm just outside the town, Myers raised and exhibited prize-winning corn, wheat, and other crops. He was particularly famous for his Barred Plymouth Rock chickens, which he exhibited all over the country. He created his own line of Plymouth Rocks, which he called "Lady Beautiful." Myers was so successful with this line that he swept all the major Barred Plymouth Rock awards at the Madison Square Garden poultry shows for eight years. Unabe to find any challengers, he gave up showing poultry and took up the breeding and showing of English Setters.

Beginning in April 1934, Myers acquired and took to showing English Setters. He purchased some dogs with connections to the highly revered sire Rummey Stagboro, who sired 33 AKC show champions. As a breeder of "bench show" English Setters he built on the breed's roots, which were linked to Setters bred in Wales by Thomas Steadman (Mallwyd Kennels). Breeders often refer to the successful English Setters bred since then as being of the "Winning Mallwyd Strain," of which Rummey Stagboro was the first great sire. By judiciously breeding to these "Mallwyd" dogs and English Setters from other kennels in America, Canada, and the United Kingdom, Myers tried to develop his own line of dogs, as he had done with his Barred Plymouth Rocks. His kennel pre-fix, "Blue Bar," referred to his Plymouth Rocks. Myers succeeded with his breeding program. In the era of the large kennel, Blue Bar was the largest operation of them all. At its height, Blue Bar housed up to 400 English Setters. During his twenty-year breeding career, Myers bred and/or owned 125 AKC Champion English Setters. Many were big winners in the show ring. He bred or owned eight parent club specialty winners during a 17-year span from 1939 to 1956. By any measure, Blue Bar's Myers was the most successful breeder of English Setters of his time. Blue Bar continued on a reduced scale after Myers' death in 1954 and closed for good in 1957. Blue Bar English Setters were shaped the breed as we know it today. Dogs bought at Blue Bar's final dispersal sale in 1957 became productive sires and dams that made their new breeder/owners instant successes. It is a rare English Setter whose pedigree does not contain at least one English Setter from Blue Bar.

A limited question period ended the excellent presentation. Carl has 22 years' experience with English Setters and currently serves as the ESAA Historian [English Setter Association of America; <u>https://www.esaa.com/</u>].

The meeting adjourned at 8:07 PM. Attendance: 26 members and 1 guest.

The next meeting will feature Lee Grenci, Penn State Senior Lecturer in Meteorology [Retired], entitled "Throwing Nuclear Snowballs, Sweeping Fog off Airport Runways, and Changing Our Climate". This will be a visual, scientifically palatable presentation, focusing on how human activities can change the weather, with a transition to how human activities have changed [and will continue to change] the Earth's climate.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (08 May 2019)

President Mick McKay called the meeting to order at 7:05 p.m. No Secretary report was given. Treasurer gave an overview of the annual cash flow patterns, reported no expected overall change and made an estimate of a balance at the end of June of \$2400.

Mick turned the meeting over to Jim Serene who introduced is wife, Brucie, and then our invited speaker; Lee Grenci. Lee enjoyed a career in meteorology, recently retiring as a Penn State Senior Lecturer in Meteorology after involvement in research and both in-house teaching and active participation in WPSU Weather World. The talk was entitled "Throwing Nuclear Snowballs, Sweeping Fog off Airport Runways, and Changing Our Climate" via a visual, scientifically palatable presentation, focusing on an introduction to the basis for common meteorological observations and how human activities can and have changed the weather. Accomplished!!

A critical element is the use of the National Weather Service definitions to distinguish between projections for weather [up to 7-10 days] and climate [out to a season ahead] but not to hundreds and thousands of years in the future. <u>Weather</u> projections have become very precise when focused on specific geographical areas through harvesting of immense amounts of locally relevant data and analysis with sophisticated "big data" approaches. In general, more data equals better projections. <u>Climate</u> projections are nowhere near as precise, especially over wide geographic areas, as they are subject to perturbations from all over the globe. An example was provided to its limits through experiences with PSU colleagues trying to guide groups climbing Mt Everest. While May and October statistically are the "best" months there is no way to predict the best few days in each for the final assault.

The next topic dealt with common patterns observed in the sky and their ultimate understanding through simple factors such as temperature, humidity and the presence of microparticles serving as nucleation points. Any change in one or more can explain observations such as a large "hole" in the extensive cloud cover over the Chernobyl nuclear site [meltdown heat], the presence of dark streaks or "distrails" in continuous cloud cover caused by airplane exhausts, or white streaks behind a plane on a clear day ["contrails" or condensation trails from engines adding hot exhaust plus microparticles into cold environment]. Additional examples included ship trails on calm seas and use of nucleation methods to clear fog from airports. Physical demonstrations showed the interdependence of temperature, moisture and points of nucleation to trigger the conversion of liquid water to its solid phase. An important lesson for all is that the freezing point of water at 32F is a constant at only one set of conditions and will differ greatly when not in the lab-like situation.

The presentation closed with an introduction to the central themes of climate change and the meteorological phenomenon of global warming. The potential of such change has been discussed for over two centuries [Foster, 1824; Tyndall, 1859; Arrhenius, 1896] and its real-term impact on planning was introduced by the US Air Force after WWII. From first principles it is due to a disturbance between heat entering and leaving the total global environment, related in turn to changes in rates of emission and absorption plus convection. The causative agent is total carbon dioxide $[CO_2]$ in the atmosphere. Using archeological and paleontological records as a guide it appears that while the total CO_2 had fluctuations over the past 400,000 years it never exceeded 300 ppm. But beginning in 1950, when direct measurement was increased, a striking rise to almost 400 ppm currently was noted with no indication of a change. Thus, disturbance in heat exchange leads to increases in global temperature that in turn leads to patterns of ice melting, changes in storm patterns, and related impact on operations of society as established over the centuries. A central question that emerges is how do you alert the people of the world to the potential for life threating changes when they are not technical specialists, may not appreciate the time scale of the causative events, and might suffer economic damage from adjustments from the status quo.

One model might be the worldwide response to the "ozone hole" recognized in the early 1970s. Its cause was due to halocarbon refrigerants, solvents, propellants, etc. released into the stratosphere where they catalyzed the breakdown of ozone (O_3) into oxygen (O_2) . Loss of protective O_3 allowed an excess of radiation to impinge on the earth which in turn was linked to the existing worry of nuclear radiation. In addition, the same companies making the original halocarbons could easily switch to any replacement. Thus, worldwide agreement on the

transition was reached and implemented. A problem recognized in the 1970s is likely to be gone in two plus generations. Little progress is being made on the global warming action due to a host of factors. Details beyond this report and are in the current news daily. Vested interests of all sorts have successfully delayed unified actions as were taken for the ozone threat. To your recorder, this resembles the actions of teenagers where any exception can be used in an attempt to eliminate any rule. May adulthood come soon! A limited question period ended the excellent presentation.

The meeting adjourned at 8:10 PM. Attendance: 24 members and 3 guests.

The next meeting on June 12 will feature Steve Smith with a presentation entitled "The Columbian Connection: What Columbus started".

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (12 June 2019)

President Mick McKay called the meeting to order at 7:00 p.m. The minutes and treasurer's reports were accepted. Since the president got only positive feedback on the talk by our invited speaker for the May meeting, the Club may henceforth consider inviting outside speakers if needed in the future. As for guests: Scott Kretchmar presented Robert Foster, Bob Igo presented Floyd Todd, and Larry Ragan re-introduced John Dillon, who had attended a previous meeting, and nominated him for membership. Approved unanimously. The slate of officers presented in May [Richard Held - President; Ming Tien - Vice President; Leon Stout - Treasurer; Mike Bezilla - Recording Secretary; and Art Goldschmidt - Corresponding Secretary] was unanimously accepted for 2019-20. Mick McKay was thanked for his service as President. Ed Buss's dedication to the Club since 1985, as a frequent speaker, elected officer, and unstoppable recruiter of new members, was acknowledged with thanks. Mick turned the meeting over to Steve Smith for his talk entitled "1493: How Europe's Discovery of the Americas Revolutionized Trade, Ecology and Life on Earth," based partly on the book by Charles C. Mann (2011).

The overall theme is that the effects of Columbus' voyages go far beyond simple exploration. Isolated ecological systems, separated through recorded time, were suddenly mixed in a process called the Columbian Exchange. Over the next few centuries a single new world was formed from the collision of two old worlds (or three, if you count Africa separately). This creation had many economic, political, and health effects because the ships that sailed back and forth across the Atlantic carried not only human beings, but plants and animals that led to unintended consequences, some good, some not. The book covers four main topics that can be summarized as follows.

The Atlantic Exchange. A century after the voyages (in 1610) John Rolfe persuaded a shipmaster to bring tobacco seeds from Venezuela and Trinidad to Jamestown, where conditions for its cultivation were optimal. In six years, the crops were shipped to London, where it became a craze in London's seven thousand tobacco houses, or smoking rooms. This American tobacco, dispersed through Europe, Asia and Africa, became an instant hit around the globe, creating a huge demand for this cash crop. Expansion to satisfy that demand needed a work force, thereby introducing several complications that had long-term consequences. Malaria had been unknowingly introduced to the Americas, where it immediately killed those (native Americans and most Europeans, included indentured servants) who lacked immunity. Until around 1700, about 90% of the people who crossed the Atlantic were African captives taken from areas where they had been immune to malaria. They became the main workforce in the US South and Brazil, which thus became slave societies in ways that non-malarial regions did not, a choice that continues to affect our society today.

The Pacific Exchange is less known, but this era of globalization began with vast shipments of silver from Spanish America to China to purchase silk, porcelain, spices and slaves, and in exchange brought such American products as tobacco, sweet potatoes and corn to China. No human group in the Old World was quicker to adopt American food plants than the Chinese, for famine was widespread in the 1580s and 90s. The new food crops were well-suited for growth and soon ended the threat of famine in China, as 80% of farmers in some areas abandoned traditional rice and wheat to raise the imported crops. Unchecked extension to areas ill-suited for agriculture occurred, often with disastrous ecological results. But they have been so important to the country that China has become the world's biggest sweet potato grower, producing over ³/₄ of the global harvest, and the second biggest corn producer.

The Agricultural Revolution is an extension of these exchanges and focuses on the imported species of potatoes (from the Andes), tomatoes (also originally from the Andes, not Mexico), rubber (from Brazil to South and Southeast Asia) and corn. Wherever these crops went, there were cultural impacts: think Italy without tomatoes, or Chinese food without peanuts and hot peppers. Today, the potato is the world's fifth most important crop, after sugarcane, wheat, corn and rice. Many scholars believe that the potato fueled the rise of the West because its introduction into Europe and its consequent widespread consumption largely put an end to famine in northern Europe. When combined with ultra-efficient Andean potato-cultivation techniques, including the world's first intensive fertilizer, guano, the effects are astonishing. It can be argued that the potato (and corn to a lesser extent)

helped Europe evade Malthus' pessimistic predictions. Population rose and living standards improved. As often happens, there were unintended consequences. The potato's success in Europe was driven by the export of a very restricted gene pool, unlike the broad range of potato varieties in the Andes. In addition, it appears that the shipments of guano carried the potato blight fungus, which became a major cause of the Irish potato famine, leading to the death or emigration of many of the Irish people. The Slave Trade was intertwined through all of the three aforementioned trends, with its legacy affecting the political and moral landscape of all areas that had benefited from the decisions made by European settlers several centuries ago.

The meeting adjourned at 8:10 PM. Attendance: 24 members and 7 guests.

No meetings will be held in July and August. The next meeting will take place on September 11.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (September 11, 2019)

Club President Dick Held convened the business meeting at 7 p.m. Treasurer Lee Stout reported that receipts for 2018-19 totaled about \$7,700. Expenditures totaled about \$7,500, primarily for dues sent to the International Association of Torch Clubs, monthly dinners, and printing and website expenditures.

Art Goldschmidt reported that he and his wife, Louise, along with Dick Held, attended the annual International Association of Torch Clubs meeting this past summer, held in Durham, North Carolina. They attended several paper sessions, panel discussions, and the business meeting. The Association is aiming to increase its membership to 5,000 by the Torch centennial year of 2024. The 2020 annual meeting is scheduled to be held in the mountains of western North Carolina. The meeting's autobiographical talk was given by incoming Vice President Ming Tien. Three new members were welcomed by unanimous vote: Floyd Todd, nominated by Bob Igo; Bob Foster, nominated by Scott Kretchmar, Emilie Allen, nominated by Art Goldschmidt. Guests Madge Carline and Dave DeWalle were introduced by Bob Carline.

Frank Deutsch then presented the evening's program, "How to Survive Prostate Cancer," which he based on his own experience as a prostate cancer survivor, having been diagnosed with the disease in 2005.

Frank began with a basic description of the form and function of the prostate—a gland about the size and shape of a crab apple located below the bladder and in front of the rectum whose primary job is to produce part of the fluid that makes up semen. He noted that prostate cancer is the second most common form of cancer in men (after skin cancer). In 2019, an estimated 175,000 men will be diagnosed with prostate cancer. It's also the second most common cause of cancer deaths among men (after lung cancer). An estimated 32,000 men will die from the disease in 2019. It is most often found in older men (average age of diagnosis: 66) and African-American men. The good news, Frank explained, is that prostate cancer usually grows very slowly. In fact, 99 percent of all men will live at least five years after having been diagnosed with the disease. Also contributing to the good news is that most prostate cancers are found while they are still in the prostate "capsule" or nearby areas. Thus, early detection of the disease is critical.

The cause of prostate cancer is as yet undetermined. Typically, men afflicted with the disease experience no definitive symptoms unless the cancer has spread to other parts of the body. The weak or intermittent urine stream associated with the cancer is also symptomatic of non-cancerous conditions. So then how is prostate cancer diagnosed? In most cases by PSA (prostate-specific antigen) blood tests and to a lesser degree, by undergoing a digital rectal exam (DRE) by a physician. PSA's, while not necessarily definitive, are still the best predictors of cancer's presence. A single elevated PSA itself may mean little; the trend line of periodic PSA testing is far more important. A continual upward trend of the PSA over several years is a more likely warning that cancer might be present. Thus, regularly scheduled PSA testing, e.g., as part of annual physical exam, is all-important. Long-term PSA elevation typically leads to a biopsy to determine more definitively cancer's presence. More good news: Most cancers detected through PSA testing and a timely biopsy are curable. There are several options for treatment.

1. Conventional surgery to remove the prostate.

2. Robot-assisted laparoscopic surgery (less bleeding and pain than conventional surgery, but with the same cure rates).

3. Radiation, which may take several forms: external beam, implantation of radioactive seeds, and hormone therapy with radiation—a form most often used if the cancer has spread well beyond the prostate.

Frank outlined a number of additional therapies currently in use but which lack long-term data to confirm their effectiveness. These include "freezing" the cancer cells within the prostate, high-intensity focused ultrasound, proton beam radiotherapy, and primary hormone therapy, which focuses on testosterone, the primary "fuel" for prostate cancer growth. No consensus exists among physicians on what type of treatment is best for you. Many factors must be considered, such as your age, overall health, PSA levels, stage of the cancer, and possible side effects of treatment. Goals for the treatment also play a role; for example, to what degree do you want to regain sexual function? Frank indicated that despite myths to the contrary, for most men, the prospects are good for

recovering sexual function. Another course of treatment is essentially no treatment. Since prostate cancer is so slow growing, for men over the age of 75 watchful waiting may be the most appropriate action, because statistically speaking, they are more likely to succumb to other afflictions than to die of prostate cancer. Based on his own experience, talking with other prostate cancer survivors, and extensive reading, Frank offered words of advice to all men facing the prospect of prostate cancer. Get annual PSA and DRE tests, beginning around age 50. If cancer is eventually diagnosed, it's likely to be slow growing, so you have ample time to get opinions regarding treatment from your primary care physician and from two or more specialists. When a course of treatment is decided upon, choose an "artist" to perform that treatment. Selecting the best doctor, based on their experience and reputation, is likely to significantly increase the chances of a successful treatment. "There is overwhelming evidence," Frank emphasized, "that if prostate cancer is discovered and treated by an expert in the early stages of the disease, then the chances of a full recovery are very high!"

Of the dozens of books and articles Frank has read about prostate cancer, he said he discovered "the best" single book just this past August. Published by the Prostate Cancer Foundation, "Prostate Cancer Patient Guide" is available at the Foundation's website, <u>https://www.pcf.org/guide/wellness-guide/</u>. You can download it directly, or click to have the guide sent to you by U.S. Mail at no charge.

Meeting was adjourned at 8 p.m.

Respectfully submitted, Mike Bezilla

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (October 9, 2019)

President Held convened the Club meeting at 6:55 p.m. Ed Buss introduced his guest, John Vandenbergh, a biologist who has written two books and more than a hundred articles and has earned numerous awards. Gordon DeJong introduced Caroline, his wife. Secretary Goldschmidt urged the members to respond on time for meetings.

Dick Held told about the Torch Foundation, whose brochures had been distributed and introduced the speaker, Harry West, who described his background, his choice to become a structural engineer, and his fascination with suspension bridges. They originated from primitives' use of vines as cable bridges, later platforms mounted on the cables themselves, and around 1800 (when wrought iron became available) the creation of suspension chain bridges. The first modern suspension bridge spanned the River Tweed (1820); six years later Thomas Telford built the Menai Straits Bridge, which still exists. The earliest wire suspension bridge was built in Fribourg. The Avon Gorge Bridge took 28 years to build. The first cable bridge in the US was built by Charles Ellet in 1841, spanning the Schuylkill; he later built the first suspension bridge over the Ohio River at Wheeling. John A. Roebling, born and educated in Germany, developed wire cable. He began his career in Pittsburgh, later built aqueducts in northern PA and New York, the Niagara Falls railroad bridge (1865), the Sixth Street bridge in Pittsburgh, Cincinnati's Ohio River Bridge, which was almost a prototype for his Brooklyn Bridge (1883) completed by his son. Illustrations showed how the suspension bridge evolved during the 19th century. The Williamsburg Bridge, heavily trussed, is among the ugliest ever built. Rivals Othmar Ammann and David Steinman made important advances in suspension bridge construction theory. Leon Moisseiff devised the Deflection Theory, instrumental in building the Manhattan Bridge (1904). As spans grew longer, engineers tended to build narrower bridges stressing aesthetics.

Examples include Delaware Memorial Bridge (1926), Ammann's George Washington Bridge (1931) that used enormous cables without stiffening truss or girders, the Golden Gate Bridge (1936), designed by Charles Ellis (but not credited), the Bronx Whitestone Bridge (1939), the Deer Island Bridge (1939) noted for its flexibility, and the slender Tacoma Narrows Bridge (1940) designed by Moisseiff, which had a higher width-to-span ratio than any preceding bridge. It is famous for its collapse. Engineers discuss why some suspension bridges have failed. They may twist due to wind gusts. He showed a table, culminating in the Tacoma Narrows Bridge, caused by designers' failure to consider winds and the bridge's self-excitation, causing much research and debate within the engineering profession. Even the Golden Gate Bridge had design flaws; it almost collapsed in a violent windstorm in 1951. West detailed the efforts to fix the slender bridges built in the 1930s, adding stiffening trusses; e.g. the Deer Island bridge; fairings added to Bronx Whitestone (2005). Adding a second deck strengthened the George Washington Bridge, but it had never suffered from winds. He described the use of deep trusses on the Mackinac Bridge (1957), Verrazano Narrows Bridge (1964), air foil decks for the Severn River Crossing (1966), Denmark's East Bridge (1998), and the conventional American approach for the Akashi Kaikyo Bridge (1998). China has never claimed the longest span, but it has five of the ten longest (all built since 2005). Bridges proposed, but not yet built, include one crossing the Straits of Messina, a bridge between Spain and Morocco, and "Peace Bridge" linking Alaska and Russia. Crazy ideas have included Lindenthal's railroad proposals for spanning the Hudson River, Joseph Strauss's original proposal for the Golden Gate Bridge, and David Steinman's Liberty Bridge. He concluded with Montgomery Schuyler's remark that a bridge is the most durable monument to posterity. He has seen students still designing bridges. Now in retirement, Harry West paints pictures of them. In the ensuing discussion, members asked about building approaches to bridges, why the heavy trusses on the Williamsburg Bridge need to be so heavy, and marathon runners' precautions on the Verrazano Bridge.

The meeting adjourned at 8 p.m. Attendance was 31 (29 members, 2 guests).

The next talk will be given by Gary Petersen on "Soils: Why Are They Important?" on November 13.

Respectfully submitted, Art Goldschmidt, secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (13 November 2019)

President Dick Held convened the club meeting at 7 p.m. He announced that with 39 people present, our club set a record for attendance. John Vandenberg was admitted as a new member. Two guests were present, both spouses of members: Mary Petersen and Mary Deutsch. Corresponding secretary Art Goldschmidt reported that member Al Turgeon is moving away. Vice President Ming Tien asked the membership to think about program topics and presenters for 2020-21, his year as club president. Suggestions should be sent to him at mxt3@psu.edu. Dick called on recording secretary Mike Bezilla for a brief autobiography. There was no treasurer's report.

Gary Petersen then presented the evening's program on "Soils: Why Are They Important to You, Your Community & The World," drawing on his many years of teaching and research as a soil and land resources scientist. Noting that Pennsylvania alone has 300-400 different types of soil, he focused on the soils of the Centre Region as representative of the state's ridge and valley province. Gary explained the important role that "colluvial" soils play in the region. These are soils that flow off the ridges toward the valleys. The ridges have soils derived from weathered sandstone. The valley soils are derived from weathered limestone. The ridges are flanked with colluvial soils that have moved down slope by gravity and have flowed over the limestone in the valleys. Gary cited a number of examples to show that a knowledge of soils is vital in determining best land-use practices. Valley water tables are typically lowest during August. Soil samples taken then for a housing development may indicate the feasibility of constructing septic systems. But significantly higher water tables that normally characterize the land at other times of the year will compromise the systems' effectiveness.

Such an outcome has implications for good health. Gary noted that Pennsylvania leads the nation in the number of septic systems—and in the number of reported cases of water-borne illness. In the Centre Region as elsewhere, large tracts of farmland have been lost to housing and commercial development. The consequent increase in impermeable surfaces has led to a decrease in water being absorbed into the soil. More run-off impacts floodplain management, soil and water contamination, and many other issues, both political and economic. But merely preserving farmland is not in itself an optimum solution. The simple act of cultivating the soil releases a tremendous amount of carbon dioxide into the atmosphere. On that basis, Gary questioned the wisdom of certain farming practices. For instance, planting millions of acres to corn in order to supply the ethanol industry with its basic raw material seems counterproductive. The same might be said for raising vast quantities of beef cattle, another activity with negative impacts on land use. As an alternative to beef, the human nutritional requirement for protein can be satisfied from a large number of lab-grown meats and even from insects. Soils are a critical component of the ecosystem, yet they are being degraded by numerous forces: contaminants, deforestation, salinization, overgrazing, erosion, unplanned and ill-informed development, and more. Gary cautioned that environmental regulations have been implemented to protect our environment. Unfortunately, he concluded, we are living in a time when environmental protections are being weakened or eliminated.

The meeting adjourned at 7:45 p.m.

The next meeting, on December 11, features John Golbeck on Renewable Energy.

Respectfully submitted, Mike Bezilla, recording secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (December 11, 2019)

President Dick Held convened the meeting at 7 p.m. He announced a change in programs for early next year. The January meeting will feature Lee Stout speaking on "Monumental Messes: Commentary on Our Past." Filling Lee's previously scheduled spot in April will be Gordon De Jong presenting on "Refugees and Asylees in the U.S." Dave Mudgett's program on steel guitars will be rescheduled for 2020-2021. John Golbeck introduced guests Carolyn Wilhelm (John's spouse) and Peter Jurs. Herman Richey was a guest of Art and Louise Goldschmidt. Corresponding secretary Art Goldschmidt noted that next year's annual meeting of the International Association of Torch Clubs will be held June 18-21 in Boone, North Carolina. He stated that financial assistance might be available to members of our club who wish to attend.

John Golbeck then presented the evening's program on "Renewable Energy in Germany: A History of Energiewende," a term meaning "energy transition." Representing a full-scale transformation of German society, Energiewende aims to "de-carbonize" Germany energy by the year 2050. No other nation, John noted, has established such an ambitious goal. Germany is well on its way toward achieving it. Renewable energy sources (photovoltaic, wind, and biomass), accounting for 3.4% of Germany's electricity generation in 1990, grew to 37.8% in 2018. And in March 2019, renewables supplied an astounding 54.5% of Germany's electricity needs, thanks to unseasonably sunny weather and consistently steady winds. The growth in renewables is all the more remarkable considering that most of Germany lies at the same latitude as southern Canada. (In fact, Berlin is farther north than Calgary, Alberta.) Solar irradiance is thus at a very low ebb during the winter months. John attributed the rapid increase in renewables to five factors that played out during the years since 1970: 1) a grassroots movement that began in the early 1970s, 2) the impact of the 1970s energy crisis and the German response, 3) the founding of the Green Party in 1979, 4) the effect of the Chernobyl accident and the growing climate change movement, and 5) the political changes that stemmed from the coalition government formed from the Social Democratic Party and the Green Party.

John discussed each factor in some detail. For example, he noted that the grassroots resistance movement emerged in response to the proposed construction of a nuclear power plant at Whyl in southeast Germany. Both major political parties, the left-of-center Social Democrats and the right-of-center Christian Democrats, had made nuclear power a cornerstone of the country's energy supply. They claimed that safe, clean nuclear technology might one day eliminate energy bills. A coalition formed from Protestant clergy, labor unions, farmers, vintners, and housewives was successful in forcing the power company to back down. Thirty-five years later, the meltdown of the Fukushima nuclear power plant in Japan changed opinion irreversibly, and all nuclear power plants in Germany are expected to be phased out by the year 2022. John concluded by noting that Germany still derives 43% of its total electrical output from coal and nuclear. If Energiewende is to be successful, radical changes will be required, including constructing transmission lines (opposed by some environmental groups) eight times faster than they are currently being built, building new back-up power plants, and installing instruments to control electricity demand. These changes will drive electricity prices higher. Fulfillment of Energiewende thus presents major challenges that currently do not appear to have easy solutions.

The meeting adjourned at 8:05 p.m. Attendance:28 members, 3 guests.

The next meeting will be January 8.

Respectfully submitted, Mike Bezilla, recording secretary