CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (12 September 2018)

President Mick McKay called the meeting to order at 6:50 pm. Bob Hendrickson introduced his guests: Dennis Heitzman, retired director of Counseling and Psychological Services at Penn State, and Jeff Leo, who worked for American Financial Services. Bob Igo introduced his guest, Larry Ragan, who worked for Penn State World Campus. Mick called our attention to the Club's promotional brochure prepared by Webmaster John Vincenti and introduced our new officers: Dick Held as Vice President and Roy Hammerstedt, who will share secretarial duties this year with Art Goldschmidt. Mick will resume the practice of calling on a few members to introduce themselves at each meeting. He and his wife returned in retirement to Penn State, where they first met, and enjoy social dancing and attending lectures and sports events. Lee Stout has long been interested in history and genealogy. Mick then introduced Dean Snow, who spoke on "David Ingram's Long Walk."

Dean Snow discussed David Ingram's long walk in 1568. Historians agree that he was marooned on the Gulf Coast of Mexico in October of that year, and that he and two companions, all illiterate sailors, were rescued by a French ship on the coast of Maine or New Brunswick about a year later. Ingram was interrogated by Francis Walsingham, Queen Elizabeth's secretary and spy master, in 1582 and an account of it was soon published. His interviewers, all gentlemen who placed little credence in Ingram's story, which often combined observations of Africa and Central America with those of eastern America. Since then most historians have dismissed Ingram as a compulsive liar. Dean Snow's careful research of evidence in the original documents, compared with other travel accounts from the 16th century, reveal that Ingram could have walked the 3000 miles in the time available, and that his descriptions of things he saw along the way were not fantasies, however greatly they failed to comport with what educated Elizabethan authorities thought they knew about North America.

One of the striking features of Dean's interesting talk was his attempt to account for David Ingram's reference to strange beasts that he had observed with modern photographs of the unusual animals and plants that correspond to what Ingram had described. Clearly, what the "educated Elizabethan authorities" thought they knew did not measure up to what David Ingram and his two companions saw. Historians have often doubted that three men could have safely walked three thousand miles from the Gulf of Mexico to the Maine coast, but Dean Snow showed how their choice of routes and their engagement in itinerant trading to support themselves and avert any hostility from the native Americans. Dean's talk led to some penetrating questions: how did the three men survive unarmed? How did they choose their route north from Tallahassee, avoiding high mountains and swampy coastlands? What did they wear on their feet? What constitutes a trail and what caused the detailed network of trails (which Dean depicted during his lecture) to vanish after the 16th century? What did the three men trade other than shell beads (which served as currency)? How did they escape from dangerous animals? What kind of tobacco did they find and why did smoking become popular? What provided the prodigious amount of daily caloric intake for the three men during their long walk?

The meeting adjourned at 7:55 p.m. Attendance was 24 members and 3 guests.

The next meeting will take place on 10 October, featuring Ed Klevans, speaking on "Electricity in Society."

Respectfully submitted, Art Goldschmidt, secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (10 October 2018)

President Mick McKay called the meeting to order at 6:50 p.m. Dick Held introduced his guest, Gary San Julian, a wildlife management expect. Mick urged us to take copies of the brochure to promote our club. He invited Gordon DeJong and Jim Serene to talk briefly about their interests. Art announced that the next IATC convention will take place in Durham, NC, on 20-23 June 2019.

Mick introduced Ed Klevans, who spoke on "Electricity and Society." Ed earned his BS in electrical engineering at Penn State, did his graduate work in nuclear engineering at Michigan, and returned to teach NE and to conduct research on controlled fusion. His presentation focused on how we produce electricity and then how it gets from the power plant to people's homes and business firms, the electrical grid. Ed presented critical data related to electricity production such as cost, then transitioned to one of the main causes of climate change. We are transitioning from coal to natural gas, which produces less carbon dioxide (CO2). About 20 percent of our production comes from nuclear energy. Hydroelectric power generation is strong in the Northwest. Wind power is increasing but isn't always dependable and hence must be backed up, most often by fossil fuels. Geothermal power is geographically limited. Ed showed a schematic picture of the electrical power grid: the generating station to transformers to power line to transformers to step down voltage to the consumer. The US electrical grid is the world's largest machine, producing \$400 billion worth of electricity annually, and valued at almost a trillion dollars. The US has Eastern, Western, and Texas interconnection systems. Its present grid dates from the 1960s. Regulated monopolies, originating from the 1935 Public Utility Holding Act, provided power at modest cost to consumers and a reasonable and reliable return to investors. The system is now less regulated, due to 1980 and 1992 legislation that made electricity cheaper and facilitated long-distance power transmission, but discouraged modernization. Some power companies sold their plants, making electricity a free market commodity, hence the Enron debacle.

Fluctuating natural gas prices have bankrupted some distributors. Nuclear energy produces electricity 92 percent of the time, followed by geothermal at 76 percent, whereas wind only achieves 37 percent and is backed up by fossil fuels. Nuclear energy wouldn't build up CO2 in the atmosphere. Federal and state subsidies lower the cost of wind power. Hydroelectric power costs little. Nuclear power could compete, but its plants are costly and take 6-7 years to build. Both coal and natural gas add CO2 to the atmosphere. Because Trump's administration and our local congressmen deny their effect on climate, hurricanes are becoming become more destructive. Energy return on investment is high for nuclear, low for solar generated energy, which is costly. Germany has abandoned nuclear power. California pushes wind generation and will be relying on battery backup, which is costly and environmentally unsound. Energy sources must exceed the economic threshold. Trump pushes biomass production, which is not economical for power generation. Wind with a backup can supply electricity but the highest economic return is from coal, gas, wind, and nuclear. Ed ranked CO2 emitters: transportation leads but electricity is a close second. Nuclear energy has no greenhouse gas emissions. What is our limit for warming? Even 2 degrees C is too much. Environmentalists don't promote nuclear energy; almost all grants go to renewable energy. Nuclear has been safer than fossil fuels, except at Chernobyl; Three Mile Island caused no deaths or injuries. Can nuclear fusion generate power? Noting a new MIT project, nuclear fusion will have many advantages if it can be done economically. Nuclear waste disposal problem is political, not technical; only the Scandinavians have succeeded. Ed showed a diagram of how nuclear fusion produces energy. High temperatures needed for ignition and generation. Engineers have reached 40% efficiency in containing the hot ionized gas (plasma). France's fusion plant is being built, costing \$20 billion dollars and with many construction delays. It will probably take years to build and maintain electrical generation by nuclear fusion.

Questions: Barriers to building nuclear power plants? Construction of some generation plants halted, due to production costs? Public failure to see economic advantages of nuclear power generation? Why are the Ukrainians building a solar power plant? Could deuterium replace tritium for nuclear fusion? Other countries' future plans to generate power? Will adopting LED lightbulbs for illumination reduce power consumption? West Penn Power (First Energy) dropping power generation? Penn State's Nuclear Engineering program? Why does US import nuclear isotopes entirely from foreign countries? Why promote retail consumption of solar power? How do global warming and population growth increase retail demand for electricity? What is "clean coal?" Can

one reduce coal's CO2 emissions? Why use corn for biomass? Germany's experience with renewable energy will be next May's Torch Paper? Coal power generation as a health hazard?

The meeting adjourned at 8 p.m. Attendance: 23 members and one guest.

Next meeting will be on 14 November.

Respectfully submitted, Art Goldschmidt, secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (14 November 2018)

Mick McKay called the meeting to order at 6:10 p.m. Secretary and Treasurer gave brief reports. Mick asked the members who had brought guests to introduce them. These included Craig Weidemann, a Penn State vice president; Bob Carline, a retired fisheries manager; Martha Anderson, a dance instructor; Larry Ragan, who in turn introduced his guests, John and Jan Dillon (retired journalism professor and retired director of outreach and analytics, respectively); and Mike Bezilla (author and administrator). Larry Ragan (who formerly worked at the Penn State World Campus) and Mike Bezilla were proposed for membership; both were approved unanimously. Roger also invited everyone to an event at Forefathers Book Shop on Sunday, the 18th, involving himself and two other members. After dinner the meeting resumed at 7:15. Mick passed out a summary of Roy's paper and introduced John Vincenti, who has updated and improved our Club website, which includes an audioform welcome, featuring President Mick, photos of the club officers, our brochure, the application form, and an IATC link, copies of past minutes, and a list of past presidents. Website Checker gives it a 93% rating. It is on Facebook, Google, and Bing. Most visitors to our website are not Club members.

He urges members to write articles for the website, Mick introduced Roy Hammerstedt, who spoke on "Crony Capitalism: Here and There, Now and Then." Roy defined "crony capitalism" as an economy in which businesses thrive not as a result of risk, but rather as a return on money amassed through a nexus between a business class and the political class. His presentation centered on personal experiences of its effects, from his childhood in northern Minnesota to current entrepreneurial activities. He related the early role of Duluth as a port, the region's extraction and shipment of minerals, the effect of building the St. Lawrence Seaway that facilitated exports but led to the rise of competing iron industries when a hundred-day strike in 1959 killed Duluth's ore exporting and steel industry. Instead of iron, Duluth exported its young people, including Roy.

Sugar, a protected US industry for three centuries, is an example of crony capitalism: if you want to make money, choose an addictive product, restrict access, and control prices. Sugar promoted colonialism and slavery. A molasses tax sparked the American revolution. One of our new government's early acts was to enact a sugar import tariff. US-subsidized sugar production and consumption led to other manufacturing such as the mason jar, chocolate candy, vending machines, soda, and such sugar substitutes as saccharin, aspartame, and sucralose. Controversy over sugar's health effects, compared with substitutes, goes back longer than a century, the 1958 Delaney Amendment, later repealed, barred scientific discretion from evaluating the health effects of sugar vs substitutes, and was applied to limiting the sale of the latter. This posed an intellectual crisis for Roy, who had been reared to care about the purity of science. Recent farm bills continue to raise the price of sugar, which is used in many manufactured foods. The average American consumes more than 150 lbs of sugar (which is deleterious to health) per year. This is an example of crony capitalism at its worst.

The Interstate highway system is viewed as the cleanest public works project ever, but it enabled Representative Bud Shuster, working with Tip O'Neill, to build the Bud Shuster Bypass to his adopted hometown of Everett. This continued with the 1991 Highway Bill, worth millions to central PA, leading to I-99, called the Bud Shuster Highway. Investigation of conflicts of interest led Shuster not to run again for office. This, too, illustrates the negative effects of crony capitalism.

Roy described his creation of an animal healthcare enterprise to serve the US dairy industry. It is developing ties with the EU, China, and India. The Corrupt Practices Act (1978) is needed, but it discourages entrepreneurs. Crony capitalism can exploit companies if they aren't careful. A larger question is how government should interact with industry. One answer is to abolish all regulations. But what if they are intended to protect consumers in ways that they cannot protect themselves? Historical examples include the impairment or death of babies caused by Thalidomide, acid rainfall, acid drainage from mines, and fracking. But how much regulation is needed? Furthermore, what if there's a national need that can't be met by private enterprise alone. Would any company build a \$1B fighter plane on speculation? Would private enterprise make a new flu vaccine every year without sustaining funds for the necessary research? Roy praised Eisenhower's 1961 warning about the military industrial complex and stated concerns about the future of universities dependent on federal funds.

A limited discussion followed, and the meeting adjourned at 8:10 pm. Attendance: 27 members and 7 guests.

The next program on 12 December will feature Walt Ebaugh, speaking on a timely topic: "We Are Degrading Spring Creek in Taking our Water Supply: What Can We Do?"

Respectfully submitted, Art Goldschmidt, Secretary

December minutes not available.

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 French until their defeat at Dien Bien Phu in 1954; afterwards, he shifted this support to the new government 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 Vietnamese, and 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. Khe Sanh was the side show; 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 materièl 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 prayer; 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; https://www.esaa.com/].

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. Weather 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. Climate 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 [CO₂] in the atmosphere. Using archeological and paleontological records as a guide it appears that while the total CO₂ 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 (O₃) into oxygen (O₂). Loss of protective O₃ 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 ¾ 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.