CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (14 January 2015)

President Stephen Smith called the meeting to order at 6:45 pm. Frank Deutsch introduced his wife, Mary, and Gordon DeJong his wife Caroline. Ed Buss wrote to Steve, explaining why he has missed so many meetings, hoping to attend more in the future, and will be able to attend the IATC convention in Lincoln, Nebraska. Steve announced a schedule change: Gary Miller will speak in February, Amit Das in March. Gary has invited Dave Phillips and Laura Miller (WPSU director of marketing) to attend his talk.

Steve introduced Marylee Taylor, who distributed a handout on the General Social Survey, which has charted American beliefs and attitudes since 1972. Funded by the National Science Foundation and conducted by the University of Chicago, its researchers conduct face-to-face interviews, an increasingly uncommon practice, owing to the expense, but more reliable than mail, phone, or email surveys, with a representative cross section of American adults, chosen by cluster sampling. Response rates hover around 70 percent. The GSS pretests questions in an attempt to avoid wording that could prejudice results. Questions assessing racial stereotyping were carefully constructed to minimize "political correctness" influence. Sample sizes for the individual annual and more recent biannual surveys have ranged from 1372 to 4492. Across the 1972-2012 surveys, the total number of 56,860 respondents. A question added in 2010 measured the presence or absence of different races in each respondent's family. A surprisingly large percentage of non-Hispanic whites reported American Indian relatives, perhaps a result of the civil rights movement or an enhanced value for diversity. Only 44 percent of the non-Hispanic white GSS respondents claim not to have any other racial groups in their extended families, whereas 56% believe they do.

Focusing on non-Hispanic white respondents, the speaker noted differences between self-identified Christians and "nones," those claiming no religion (a group that has risen from 7% in the 1970s to 19% in 2010-12). Christians as a group show somewhat less generous attitudes than "nones" toward poor and black Americans. The changing nature of civil life may account for an overall decline in interpersonal trust from 1972 to 2012. Surveys from 1994 on show women to have slightly less trust of "most people" than men do, while blacks and Latinos show dramatically higher levels of distrust than non-Hispanic whites, perhaps because of income inequality, neighborhood segregation, and discrimination. The GSS shows rapidly rising acceptance from 1988 to 2012 of gay marriage. In large part this may result from more people coming out, and the rest of the population discovering that cherished friends and family members are gay. Scores on liberalism show a gap almost three times wider now than in the 1970s between Democrats and Republicans. US parties have changed their stances dramatically in history. Blacks are less negative than whites toward immigration and its perceived effect on economic growth. The GSS should assess attitudes toward Muslims, who are growing in proportion to the population. An earlier survey in greater Detroit showed negative views of Muslims. Most Americans believe that incomes are too unequal. Blacks and Latinos are more hopeful than whites regarding a higher living standard for the next generation. Blacks are less likely to own guns, more apt to have been shot at, and more in favor of gun control.

Questions: do private survey groups gather data as reliable as the GSS? How much do policy makers rely on their findings? Do we have comparable data on other countries' attitudes? Discussion alluded to Australia, Europe, and the Arab countries. One member recalled an American survey revealing that 90 percent of respondents think they are "above average." Academics, but also the popular press and political strategists, use these data. The meeting adjourned at 8:07 p.m. 17 attended, of whom 15 are members. Gary Miller will speak on 11 February about "Fifty Years of Public Television."

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (11 February 2015)

President Stephen Smith called the meeting to order at 6:50 p.m. Roy Hammerstedt introduced his guest, Ming Tien, a biochemistry professor and business entrepreneur. Gary Miller introduced Laura Miller, director of marketing for WPSU. Steve reported that our club has bought a projector for \$380 for use at meetings and then introduced Gary Miller, speaking on "Fifty Years of Public Broadcasting," aided by Dave Phillips, a former member of our club, who served as WPSU director of operations and general manager during its first twenty years.

Penn State pioneered in broadcasting educational programs, initially on radio in the 1940s. Ray Carpenter pioneered in the educational use of film. Penn State initially used on-campus television to teach large classes, using one-way video and two-way audio, for twenty years, notably in introductory accounting. In 1962 Congress passed the Educational Television Facilities Act, notable for funding K-12 use of television. In 1964 Penn State got a construction permit to start WPSX-TV. Early leaders included Marlowe Froke, Les Greenhill, and Art Hungerford. The new station was initially assigned UHF Channel 45, which did not work well in rural areas, so it switched to VHF, which had to be located more than 120 miles away from a competing channel, which is why the station transmits from Clearfield. A junior college in Northern Virginia already had the call letters WPSU for its radio station, so Penn States were initially WPSX. Broadcasting began in March 1965, mainly to schools in daytime only, and evening scheduling was authorized on 7 June 1965. Ten days later WPSX received its license as the nation's 101st educational station. Lacking a studio, it used rooms in Wagner Building, then in Wagner Annex, plus a truck parked outside. Its first live program was the College of Agriculture's "Farm, Home, and Garden," followed by "State of the Weather, Shape of the World" (now "Weather World"). WPSX used two bulky black and white video cameras that took six men to use. To telecast Penn State football games it used the coaches' film, but sparingly. Documentaries focused at first on central Pennsylvania and on sports, notably "TV Quarterbacks," featuring Joe Paterno live.

WPSX tried to build bridges between Penn State and Central PA's 29 counties, which have many small school districts. Marlowe Froke met with school superintendents and established the Appalachian Educational Broadcast Council so that the schools could select—and help fund the acquisition of—programs for use in the schools. Early offerings included Paul Welliver's science program for grades 1-3 and "What's in the News" for grades 4-6, which was later broadcast nationally. Adult education programs included sewing, parenting, wood carving, fly fishing, and formal telecourses, using Penn State faculty (some in conjunction with Pitt and Temple), e.g. accounting, business logistics, and science, technology and society. Community Service Project in the 1970s put out programs on local problems, sometimes working with local agencies. These included rural mass transit, food shopping, aging, such diseases as heart disease and cancer. Penn State faculty visited area libraries to speak in conjunction with these programs and get people involved. WPSX was aided by the Educational Radio and Television Center, renamed NET. The Eastern Educational Television Network linked WPSU with big city producing stations. In 1967 WPSX partnered with WITF (Harrisburg) in a weekly public affairs program. This helped to justify the development of PPTN, a network of seven Pennsylvania stations, a network of seven Pennsylvania Stations supported by state funds and external funding. PBS was formed in 1969, but Congress was slow to appropriate the funds needed for public television. Later WPSX used experimental satellites to deliver courses throughout the Appalachians until PBS shifted to satellite delivery of programs in 1978. National Teleconferences began in 1980, with the first program drawing on PSU faculty from Nuclear Engineering. Walter Annenberg gave \$150 million to fund high quality educational programs for adult learners. As cable television matured, a group of operators created PENNARAMA, a 24-hour, statewide delivery system managed by WPSX, as a second channel. In today's digital world, WPSU-TV has three channels, as does the radio station. Government funding was initially generous, then declined as business firms and individuals took up the slack but is now starting to revive.

In the question period Laura Miller spoke on the commitment of past and present WPSU employees, enduring programs, Darlene Chronicles' high ranking on YouTube, the new website to be launched 1 March, the station's renaming as WPSU Penn State, and a new platform that enables viewers to send in comments and questions while a program is in progress. Club members asked how WDFM, a student station, evolved into WPSU; how

to access the subsidiary stations; the effect on WPSU of new cable channels; public television's role in training school children in STEM disciplines.

The meeting adjourned at 7:45. Amit Das will talk on "Ramanujan: India's Most Famous Mathematician" on 11 March.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (11 March 2015)

Steve Smith called the meeting to order at 6:53 p.m. Frank Deutsch introduced Mary. Amit Das just returned from India, saw Goa for the first time, and read *I am Malala*. Ming Tien was approved for membership unanimously. Art reported that recent issues of *Voices* and *Centre County Gazette* have printed articles about this club. Steve urged members to consider a new vice president for next year. Gordon DeJong will seeking paper presenters for 2015-16.

Steve displayed the club's new projector and introduced Amit Das, who spoke on the life and work of Srinivasa Ramanujan: India's greatest mathematician. He was born in 1887 in Erode where his mother's parents lived; father stayed in Kumbakonam, where he was a bookkeeper. Their house was permeable, and several of his siblings died in infancy. He showed his genius by arranging cooking pots in straight line but did not talk till he was 3. He was enrolled in a school for Vedic chants at age 5. Always curious, he posited that trigonometric functions could be related to an infinite series, long before he learned that Euler had proved it. He attended the town high school, where teaching was in English, and challenged his teacher in mathematics. He solved cubic equations, trig functions, and the value of pi. He read Carr's Synopsis of Elementary Results in Pure and Applied Mathematics. He flunked out of two colleges because he was bored by subjects other than math, although abler than his instructors, solving problems in 3-4 steps instead of 12. Unable to find a job, he stayed home, but his father made only 20 rupees/month, too little to support him. Living off his parents and neighbors for 5 years, Ramanujan sat on a bench before his parents' house, filling notebooks with equations, discovering new formulae, even without contact with other mathematicians, learned journals, or societies, using his own system of notation and unable to tell if his proofs were right or wrong. He used math to explain the primordial God and other divinities, creating a theory of reality around zero and infinity. To cure his apparent insanity, his mother arranged his marriage to a girl of 9, Janaki, who shared his caste and econ background. They did not meet until their wedding day, which almost did not occur because the groom's family reached the bride's family house six hours late. Janaki had to learn domestic duties until she reached puberty.

He tried to sell his math textbooks from door to door, but no one understood them. Hoping to find a job, he went to Madras, where in 1910 he met an old school friend and showed him how quickly he could solve problems. The friend presented him to Rao, founder of India's first math society, who found him a scholarship in Madras to learn how to publish his papers and books. His first paper was returned 4 times as he did not show the precise steps he took to solve a problem, for as a poor student he was used to writing on a slate and skipping steps, so its readers could not understand his solutions, or the connections in his concepts. Once he found a job paying 30 rupees/month, he could finally live with Janaki. Until then she slept beside his mother and was treated like a domestic slave. The mathematicians in Madras recommended him to Cambridge, but his work was ignored until G.H. Hardy saw its intrinsic merit. Although Hardy too had been challenged, he earned an MA in 1903, then the highest degree in English universities. He was willing more than others to consider taking an Indian, then seen as like as a black man. In a letter to Hardy, Ramanujan admitted his lack of university education but displayed his efforts to solve math problems. Hardy tested them, solved some, and realizing his potential, wrote to officials in India to get him admitted to Cambridge. A Brahmin, he could be ostracized for crossing the seas, eating beef, or removing his sacred thread. His first offer was withdrawn. Neville met him, read his notebooks, and said: "No Englishman would understand it; and no Indian could be trusted with it." Then his mother saw in a dream her primary goddess, who told her not to stop him from traveling overseas. He too saw the goddess. Cambridge offered him a £250 scholarship plus money for his passage and western style clothes. His wife could not accompany him. He could only don trousers after parting from his wife and mother. During his passage he got seasick, could not eat, and suffered from the heat. When he arrived in Apr 1914, he had never seen Englishmen doing manual labor, worn a necktie or shoes, used cutlery, or slept in a blanket. While living in Cambridge rooms, he cooked his own meals, worked on problems daily, filled his notebooks with 3,000 theorems, and attended lectures on elliptical integrals. One day he wrote on a blackboard results that the professor had not proven yet. Hardy had never met his equal. When WW I broke out, rationing began, street lights were blacked out, wounded soldiers filled every hospital, and many instructors left for the front. His clothes inadequate for England's chill, he wanted to return to India but could not because of the German U-boats. He graduated and

published first English paper in 1916. His scholarship was extended, but he felt isolated socially, for he had a strict diet of rice, yogurt, raisin, and lentil soup, wore a dhoti and followed Hindu rituals. Once he invited English guests, but the women refused to eat second helpings of the food he served, so he felt hurt & insulted. He studies partitions: different ways of adding up numbers.

He became ill in spring 1917. Told he was suffering from an incurable disease, he entered a nursing home. The war prevented him from returning to India when he learned of trouble back home from his mother's letters. When denied acceptance as a Fellow of Trinity College in Oct 1917, he became dejected and entered Matlock. But then elected to membership in London Math Society and was nominated in Jan 1918 to become a Fellow of the Royal Society for distinction in pure mathematics, a huge honor, but he wasn't told. Dispirited, he throw himself before a train, which barely stopped in time. Of 104 nominees he was one of 15. His health declined, for he could not eat the food served to him. Reconsidered for College fellowship, he still encountered resistance as a "black man" but denying his fellowship would have been scandalous, so he finally was admitted. He moved to London, where his health improved. In Oct 1918 his paper was read at London Philosophical Society. After the war ended, he was proposed for a post at Madras University. He returned to India with leather bag full of his papers. Seeing the number 1729 on his cab, he remarked it was the lowest number that could be the sum of two different cubes. Reaching Madras in April 1919, he was reunited with his wife and could have lived with her, had he undergone a purification ritual at Rameswaram, but was too sick to go there. He had a final flurry of creative and original work on mock beta functions, writing 650 formulas in his notebooks, which Penn Stater George Andrews studied 50 years later. He lapsed into coma on 26 April 1920 and died two days later. Most orthodox Brahmins boycotted his funeral. His widow had to supplement her income by sewing clothes. An Indian stamp honoring him was issued in 1962. Many scholars have struggled to describe his greatness. Amit and his wife just visited the area where he lived. Questions about his notebooks and religion followed.

The meeting adjourned at 8:10.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (8 April 2015)

President Stephen Smith called the meeting to order at 6:40 p.m. Art urged members to invite guests to the next meeting(s). Gordon DeJong will line up speakers for the coming year. The Club must elect a new vice president. Steve welcomed Ed Buss back. Jim Serene and his family rode bicycles from Miami to Key West and back.

Art Goldschmidt toured the Newseum in Washington, DC. Steve introduced Lee Stout, who spoke about his book, *Ice Cream U*, made possible by Eleanor Smith, granddaughter of an early Creamery supervisor. He showed a 1759 map of eastern Pennsylvania, when it was the breadbasket for the Colonies, leading in grain production, hence flour and bread. By the 19th century cereal production shifted to the Northwest Territory states, so many Pennsylvania farmers shifted to mixed agriculture, mainly diary, meaning butter and cheese, the processing of which was done by wives and children. The market for fluid milk grew up later, and ice cream even later, when mechanical refrigeration became available. Preservatives for milk included formaldehyde and other substances, so few people drank it or viewed it as conducive to good health. Ice cream was a luxury, mainly served in homes of the wealthy or powerful. It was more like a gelato. The cranked ice-cream maker was patented only in 1843. Instruction in dairy management began later, mainly after the 1862 Morrill Land Grant Act. The idea of adding science to agriculture was new. The Farmers High School (which became Penn State) began offering classes in 1859, a pioneer in agriculture teaching, along with Michigan State and Cornell. A discourse followed on differing agriculture schools in the Northeast, as compared with the purposeful foundation of agricultural colleges such as Ohio State, Purdue, and Illinois. By the 1880s, however, engineering became Penn State's dominant subject, and by 1900 three fourths of its students were enrolled in the School of Engineering.

The first Dean of Agriculture, Henry Armsby, an animal nutritionist, was a pioneer scientist who wrote the basic book on cattle feeding. He set up experimental stations, research bulletins, correspondence courses (via the Chautauqua Institution), and short courses for farmers, typically two weeks). Penn State offered its first course in ice cream making in 1892, the first course of that type anywhere. Its first dedicated creamery building was erected in 1894 for scientific work in dairy husbandry. By 1903 dairy ranked first among PA agricultural products, leading to the construction of Patterson Hall, with laboratories. Penn State had to buy milk or cream from 300 farmers to supply its research and production needs. In 1932 Penn State opened Borland Lab as a stateof-the-art dairy science building, containing labs and classrooms. There was no large dining hall; most male students ate in downtown restaurants. There was less campus demand for dairy products than now, but Borland did have a sales room on its second floor. Penn State also delivered dairy products throughout Centre and parts of Blair County. Commercial dairies resented this competition and lobbied to eliminate off-campus sales by 1959. As Penn State's enrollment increased, it began housing and feeding more students, leading to demand for dairy products in dining halls and union bldg. snack bars. In 1961, however, it opened the Creamery sales room adjacent to Borland. Now Penn State has the Rodney A. Erickson Food Science Building, with 25,000 sq ft of floor space for classrooms, offices, and labs, with the Berkey Creamery, three times larger than its predecessor, on the first floor, convenient to Beaver Stadium and the Arboretum. Behind it are the production area and test facilities, with equipment worth \$7 million. Penn State enjoys a worldwide reputation as best place to learn how to make ice cream. Annual production: 310K gallons milk, 60K lbs yogurt, and 225K gallons of ice cream. The Creamery sells more than 750K cones & dishes. All this could have been lost in the 1980s, as Borland suffered from its obsolete equipment, getting negative warnings from health inspectors, and proposals to close the Creamery.

At first Penn State tried to raise funds to renovate the Creamery but decided it needed a whole new building. Erickson cost \$48 million to build. Tom Palchak supervised its planning and also strove to raise ice cream production by a factor of 2.5 times. No one but Bill Clinton has ever gotten two ice cream flavors on one cone; Lee surmised that he couldn't decide and the awestruck server behind the counter panicked. It is amazing that Penn State can retain the Creamery, whereas even the University of Vermont had to close its dairy store, and only fifteen remain. Though Penn State no longer has a dairy science department, it maintains its ice cream short course, drawing people from all parts of the world. Dairy production has consolidated. More research moneys come from scientific firms than the Department of Agriculture. The Creamery ranks second only to football in the minds of Penn State alumni. Only a third of the world's people can digest dairy products. Most live in areas

conducive to herding animals, mainly northern and western Europe. Dairy consumption leads to efficient land use, more frequent childbirths, higher population density, better organized societies, more specialized labor, and larger armies. The ALA listed Lee's book as one of the ten best university press publications of 2010. Discussion ensued: Why is ice cream popular in areas where most people are lactose intolerant? Does the Creamery's income benefit the University? Are the short courses mainly in winter? Do they attract entrepreneurs more than farmers? How has consolidation of departments into Animal Science affected Dairy Science? What about businesses that compete with Penn State? How does PSU compare with other creameries? Association of University Creamery Managers has a list, but some may not make ice cream. Dairy owners strive to find fresh ideas to stay in business? Agricultural coops play a growing role in milk production; they sell to powerful buyers like Wal-Mart or Target. How will water shortages, e.g. in California, affect cattle raising?

The meeting adjourned at 7:45 p,m.

Dick Held will speak next month on the Characteristics of Successful Small Businesses.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (13 May 2015)

President Stephen Smith called the meeting to order at 6:45 p.m. Art Goldschmidt announced the death of member Jack Hargleroad (condolences may be sent to one of his children: John Hargleroad, Karen Clautier, or Janet Snyder, using his Foxdale address: 500 E. Marylyn Ave., #F-89, State College, PA 16801) and Ed Buss's stated plan to attend this year's IATC convention. Our club will need a new vice president soon. Roy Hammerstedt introduced his guest, Robert Igo, who has chaired the Harris Township Planning Commission, held executive posts at Murata Manufacturing Co, and currently manages grants and contracts for Penn State Outreach.

Steve introduced Richard Held, who spoke about "Characteristics of Successful Small Businesses." Having served as a consultant to 200 businesses in Pennsylvania, Dick's study considers what 13 of them have done that caused their success. He described his sample, classified by industry, success type, type of ownership, by whom they were started, and (in the case of non-family businesses) their management structure. All got off to a good start, even though their capital in no case exceeded \$400,000, gaining rapidly, without major losses and with large early orders. Three of the firms studied refocused their business on something else. Almost always reinvested their profits in the business. Employee turnover was low, and always paid at least competitive wages. Successful entrepreneurs built up great loyalty, and selected their employees with care, even trying to recruit the best ones nationally, not just locally, and paying them well. The firms spent much on production equipment (retraining valued employees, importing capital goods as needed, and introducing robotics), upgrading vehicle fleets, seeking competitive advantage, and reinvesting profits. They minimized expenditure on office staff, support positions (using outside contractors), and insurance. They purchased newer vehicles. Agility is factor in the success of small businesses: they can redirect quickly as conditions change and revise their production scheduling. Another is simplicity: how they keep financial records, structure their organization, outsource what they don't do well, and keep their product line focused.

Stock ownership is usually closely held, unless they need more capital, in order to keep more control and have fewer shareholders to placate. They pay key employees with money; not by issuing shares. Financial characteristics: low debt levels, cash flow valued above profit orientation, savings from being taxed like partnerships, keeping cash on hand as a profit driver, and little or no formal financial planning. Dick noted that three formerly well-established businesses failed due to heavy debt load and loss of their ablest customer interface person (in sales or marketing). Successful firms need good advisers: accountants, tax planning experts, expert consultants, and lawyers. His study included seven non-family businesses of which five were sold, typically due to the owner's other business interest, offers received, or plans to sell after a certain time. Dick's conclusion—what works for small businesses: having two or more managers, of whom one must be good at customer interface; acquiring needed expertise by adding owners (shareholders) or board members; starting off well - no major losses at outset; recruiting and retaining good employees by compensating them well; reinvesting in the business; keeping ownership limited; practicing aggressive business expansion but conservative finances; maintaining agility; improving constantly; and considering selling if the right opportunity presented itself. In the ensuing discussion, members said that some types of business are inherently risky, e.g. restaurants; an entrepreneur may fail at one business but come back to succeed in another; small businesses are less likely to be sued than large ones; finding investors may raise capital, but owners of small firms often don't want to give up control; small businesses are apt to have fluctuating fortunes; management may get tired and stop improving the business; the importance of grooming a successor; in a family-owned firm the third generation may do better than the second; and the fate of O.W. Houts & Sons.

Next meeting: on 10 June, Mick McKay will speak about "The Fabulous Year of 1927." The meeting adjourned at 7:45.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (10 June 2015)

Stephen Smith called the meeting to order at 6:50 p.m. Mick McKay introduced his wife, Joyce. Lee Stout introduced his guest, Bob Hendrickson, and reported that the Club remains solvent. Gary Miller spent a week in Ogunquit, ME. Marylee Taylor spoke about reading *The Boys in the Boat*. Lee and Dee Stout attended a wedding in the Florida Keys. Steve has just returned from a trip to Washington and Idaho for his brother's 50th wedding anniversary. He presented for membership Robert Igo, who was approved unanimously. The new president is Gordon DeJong, who announced that James Serene will be our next vice president. He also distributed a list of the speakers and their talks for the 2015-2016 program year, Steve introduced Meredith Rousseau (Lancaster Club), our district director, here for her second visit. She urged members to attend IATC conventions and to consider hosting a regional meeting of District 2 clubs. She presented to the club a certificate of congratulations on the 60th anniversary of its founding.

Mick McKay's talk was on America in "The Fabulous Year 1927." It was an exciting time. The American people were proud and felt themselves financially invincible. Their hero, Charles Lindbergh, made the first solo flight across the Atlantic in a light single engine plane with ample fuel but very few instruments. Everyone wanted to meet him on his triumphal tour across the US. In that year Chicago opened its first airport, and the first scheduled flights, between New York and Boston, began. Home electrification rose from 1/3 in 1920 to 2/3 in 1927. US industry led the world, with a large and skilled workforce, plus ample natural resources that Americans viewed as inexhaustible, and ample capital due to European repayment of their war debts. 1927 saw the invention of pop-up toasters, the laying of the first transatlantic telephone line, and the first public demonstration of television. Cars revolutionized American life: independence, changing family life, cities and suburbs, and greater mobility for rural people. Thanks to Henry Ford's invention of the assembly line, the cost of a Model T fell from \$850 in 1910 to \$260 in 1927. Competition from other brands forced him to shut it down for six months to retool for the innovative Model A, which cost \$470. The time it took to produce a car had fallen from 12 hours in 1910 to 10 seconds in 1925. In 1927 85 percent of US households owned a car. Production outstripped demand for the first time in 1928. Aided by an influx of Southern Blacks, Northern cities grew, and labor was plentiful. Though the average work week had been 60 hours as recently as 1920, it was down to 40 hours industries by 1927.

That year saw the completion of the River Rouge Plant near Detroit, Cleveland Terminal Tower, and New York's Holland Tunnel. Women could vote, but most followed their menfolk in how they voted. They could get jobs and earn their own money. They could display affection in public, dance, drink alcohol, and take risks just like the men. Freed by the new household appliances, women had more free time. 1927 was a banner year for Broadway shows; Showboat allowed black and white actors to sing together on stage for the first time. The first "talkie" was released: The Jazz Singer. The first acting award was made, at first to Rin Tin Tin but then to Emil Jennings. The Fight of the Century took place: Gene Tunney vs. Jack Dempsey, and 50 million heard the boxing match on radio. Baseball, the national pastime, featured Babe Ruth (60 home runs that year) and Lou Gehrig. Silent Cal Coolidge was a popular president, although he did nothing. Stock prices rose 2.5 times in five years, fueled by speculation and the ability to buy shares for just 10 percent down, and Washington left Wall Street alone. But the federal government did respond to the great Mississippi flood, for which Herbert Hoover headed the relief effort. The father of Prohibition died in 1927, when the manufacturing of alcoholic beverages became the fifth largest US industry. Gang-sters who flouted Prohibition flourished, as murders of gang leaders rose. The only way authorities could arrest them was on federal income tax evasion. Al Capone opened soup kitchens for poor people and provided free milk to school children. He controlled Chicago's 10,000 speakeasies and made \$105 million in 1927. It was an exciting year, notably for women. Birthrates fell, divorces rose, and wives shared in making major household decisions. In the discussion, Art and Lee told of their fathers' coming to New York in 1927, Meredith noted that women's political participation lagged because they had less education, and Ming Tien asked how many Americans lived on farms. The meeting ended at 8:10 p.m.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (8 September 2015)

President Gordon DeJong called the meeting to order at 6:35 pm. Introductions: Diana, wife of Amit Das; Caroline, wife of Gordon DeJong; and Mary and Geoff, wife and son of Gary Petersen. Ed Buss reported on his attendance at the June 2015 convention of the International Association of Torch Clubs in Lincoln, Nebraska, and distributed a written report, which he summarized. He also gave the secretary the papers prepared by the IATC leaders, including the IATC Business Plan, proposed amendments to its Bylaws, plans for its 2024 centennial celebration in Minneapolis, a draft brochure updating "Torch Is....," and copies of the membership application. [I will make these available to any member upon request-AG] Membership in the IATC is around two thousand. Clubs range in size but average around 38 members. Art reported on our move from Celebration Hall to the Ramada Inn, his need to get responses from the members as to whether they will attend or not, and how we are charged more if fewer than 20 attend a dinner. Lee Stout stated that the treasury contains about \$2500. Gordon strongly urged each member to try to recruit at least one new member; he aims to increase the club's size by ten this year. Tell recruits that we are a knowledge-sharing association, not a service club or a fundraising operation.

Lee Stout nominated for membership Bob Hendrickson, who attended in June but could not be present at this meeting. His nomination was passed unanimously. At the president's request, all members present introduced themselves and described something interesting that happened to them during the summer. He then introduced Gary Petersen, Distinguished Professor Emeritus of Crop and Soil Sciences, who spoke on "Soils around Your House: Factors for Siting and Managing Your House." He began by explaining the diversity of soils and described their impact on every level from the farm to the globe: precision farming, on-site waste disposal, wetlands, farm land preservation, nutrients, the "clean and green" program, urban soils, flood plain management, water quality, urban sprawl, land degradation, climate change, and food security. Loss of agricultural land is a local, state, and national problem with many causes. In our region, mountain ridges consist of sandstone and shale; our valley soils are basically well-weathered limestone. The seasonal perched water table in some soils varies in depth according to the season, rising closer to the surface during wet periods. Colluvial soils flank our ridges and they have an almost impervious fragipan layer that perches water above it. Colluvial soils are unstable and pose a problem to developers. A home builder should first consult a soil map before siting a house in our region. Although Pennsylvania has more people using septic tanks than any other state, they often malfunction on our soils, leading to a high incidence of water-borne diseases. Flooded basements are often the result of improper siting of the house, poor construction techniques, and badly designed downspouts, among other problems. Landscaping and gardening need a one-foot layer of topsoil, but developers often remove topsoil and sell it. Shallow depth to bedrock or seasonal water tables will pose problems for landscaping and gardening. Penn State will test your soil for acidity and chemical content for \$9. Careful site selection and proper construction techniques are needed to ensure good management of storm water runoff. The controversial Toll Brothers construction project, which would build student housing on former farmland in Ferguson Township, near the junction of Whitehall Road and Blue Course Drive, was discussed. The project's land area, roughly 60-75 acres, covers less than two percent of the recharge area for local wells. The State College Area Water Authority has seven well fields and 23 different wells. A lively discussion ensued. Questions included how clay and sandy soils affect drainage, French drains, the two wells that are near the Toll Brothers project, why the issue has become so emotional, why the land cannot be rezoned back to its original state, how water scarcity will eventually make a meat-based diet unsustainable, why family farms are vanishing, new methods of waste disposal, gray water, failed attempts to pump sewage uphill, the need to avoid contaminating our flood plain soils, the proposed park to be built near Whitehall Road, and the often misinformed nature of Centre Region politics. Gordon thanked the speaker, announced the next talk, and adjourned the meeting at 7:50 p.m. Twentythree people attended, of whom 19 were members.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (14 October 2015)

President Gordon DeJong called the meeting to order at 6:45 p.m. Ming Tien introduced his guests: Kendall Munk, Paul Chidester, Sarah Schwartz, and Lulu Yarber. Amit Das introduced his wife, Diana. Steve Smith proposed for membership Gary Herbert, a retired philosophy professor, who will be invited to the next meeting. Gordon reminded members of his goal: a net addition of ten new members this year. Each member should identify and ask one potential member. He drew attention to the membership applications on the tables and noted the household membership: half-price for the spouse or partner of a current member. He invited each member to speak about a book, TV program, or experience that sensitized him/her to ethnic or gender inequities in our society. He cited examples from his life, as did many members.

He introduced John Kramer, Penn State Professor Emeritus of Sociology and Criminology and first executive director of the Pennsylvania Commission on Sentencing and also staff director of the US Sentencing Commission, who spoke on The Death Penalty in Pennsylvania. His commission wrote guidelines for judges in death penalty sentencing. Pennsylvania Governor Thomas Wolf has declared a moratorium on the death penalty, one of four states to do so, and six states have recently abolished it. The Supreme Court ruled in Furman v. Georgia (1972) that there must be a degree of consistency in applying the death penalty. This decision was clarified by the Court's ruling in Gregg vs Georgia (1976) that allowed the death penalty if it was proportional to the crime committed and if the state had sentencing guidelines. This led to the creation of state commissions on sentencing, including the one that Kramer directed. In Woodson vs NC (1976) the Supreme Court ruled against the death penalty if the methods of execution used were capricious or "cruel and unusual." In Pennsylvania each county lets its prosecutor decide whether to seek a death penalty in a given case, based on the nature of the crime committed, defendant's ability to tell right from wrong, his age, or his possible mental retardation. This state's guidelines list 18 aggravating factors (proved beyond a reasonable doubt) and 8 mitigating factors (based on a preponderance of the evidence). The jury's decision need not be unanimous. There must be at least one aggravating factor; judge or jury must be unanimous when there also is a mitigating factor. Jurors must have been selected who accept the death penalty. One aggravating factor is malice aforethought: was crime intentional? Did the prosecutor file notice for the death penalty? The defendant can negotiate his execution by accepting conviction and life imprisonment, but only if notice is filed before the judge decides. Some aggravating or mitigating factors may exist that could not have been considered during the trial. There may be disparity in the process, leading to unwarranted discrimination, for over half the convicts on death row are African American? The commission has studied this question for six years.

Some aggravating issues: Did the murder occur while committing a felony? Does the defendant have a history of violent felony convictions? Was the victim a child under 12? Did the defendant have a protection from abuse order? Did the act cause grave risk of death to someone else? Was the defendant perpetrating a drug felony? Mitigating circumstances: did the defendant have a mental or emotional disturbance? Did s/he have the capacity to know right from wrong? Did s/he act under duress? Is there any other evidence of mitigating circumstance in character and record of defendant? The commission has studied 6622 murder cases, classified by their nature. 99% of the verdicts have been life imprisonment without parole; only 1% actually led to execution. 184 are on death row now; 221 in 2010. Only three executions in PA: 2 in 1995, 1 in 1999, all of which could have been appealed. Six were freed after they were found innocent on appeal. Of the 184, 100 are black, 65 white, 17 Latino, and 1 Asian. Blacks are 12% of Pennsylvania's population. Ongoing issues: execution of mentally ill, effectiveness of counsel, death-qualified juries, exonerations, and unwarranted disparity in death penalty decisions in Philadelphia especially if murder was black and victim was white. Wolf argues that PA system is proven to be flawed, ineffective, unjust, and expensive. The commission's study is scheduled to be released in 2016. Members' questions: aren't all murderers mentally disturbed? Can courts ever achieve mathematical perfection in sentencing? How reliable are IQ tests of mental competence? Do blacks commit a preponderance of heinous crimes?

Meeting adjourned at 8 p.m. The next program, on 11 November, will feature Dean Snow's talk on Indian Law.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (11 November 2015)

President Gordon DeJong called the meeting to order at 6:45. Steve Smith introduced his invited guest, Gary Herbert, a retired philosophy professor at Loyola University, and proposed him for membership. He was approved unanimously. Marylee Taylor introduced her guests: Doug and Maryann McCall-Taylor, and Don and Ginny Mulhatten. Gordon invited members whose surnames begin with A to H to introduce themselves and tell something about their professional activity. He described his work as a demographer, Ed Buss spoke on his genetic research on turkeys, Frank Deutsch told about seeking the solution to a long perplexing mathematical puzzle, Louise Goldschmidt spoke on Islamic art history and Art (a historian) about his Middle East textbook that has gone through 11 editions, and Roy Hammerstedt (a biochemist) spoke on miniaturizing the extraction of information.

Gordon then introduced Dean Snow, a retired anthropologist, who spoke about Indian law and why it is different. He cited the US Constitution, Art. 1, Sect, 8, which empowers Congress in par. 3, "To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes." But some states had as English colonies made separate treaties with Indian tribes, notably Massachusetts regarding Maine, even though Congress in the 1790s passed a series of "Nonintercourse Acts" forbidding state governments to deal with tribes within their borders. Some state governments argued that these acts applied only to the tribes beyond the 13 original states. In 1820 the Missouri Compromise admitted Maine to the Union, apart from Massachusetts, as a free state, with Missouri's admission as a slave state to keep the number of free and slave states equal as the US spread westward. A legal issue remained: in 1786 a wealthy man named William Bingham had bought two million acres of Maine land, which he gradually sold off in lots to would-be farmers, as did some of the Indian tribes in 1822 and 1833, all without federal involvement, but ownership issues festered for the next 150 years, until some Indian tribes in Maine sued the Bureau of Indian Affairs successfully, demanding compensation. The Bureau referred the case to the Department of Justice, which phoned Dean and asked him to come to Washington to advise them, while concurrently interviewing a distinguished lawyer who had been hired by the State of Maine, Edward Bennett Williams, each in a separate room without knowing that the other man was being consulted. Snow's later report argued that Maine had no case and the Indian tribes must be compensated. This was affected by the 1980 Settlement Act, awarding money and land to Indian tribes in Maine, chiefly Penobscot, Passamaquoddy, Malacites, and Micmacs.

More recently the Penobscot Indians have argued that the settlement included the river and not just the islands in it, hence tribal game wardens could stop duck hunters and fishermen with valid Maine permits from hunting and fishing on rivers and streams unless they got separate licenses from the tribes. Indians were enfranchised by the 1924 Indian Citizenship Act, yet many Indians refuse to vote because they argue that the Constitution underscored their independence, yet many do serve in the US Army. What is Indian land? In New York the Oneidas are buying up farms, which are removed from county and township tax rolls, and even claiming portions of the NY Thruway. They, as well as some New England tribes, have successfully built profitable gambling casinos in collusion with state governments, which take a share of their revenues. This wasn't an option for the tribes in Maine, because the population is still not dense enough to support casino gambling, except for bingo. Indian rights even trump the First Amendment clause: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof," as shown in the Native American Graves Protection and Repatriation Act (1990). A lively discussion ensued regarding the Bingham family, Longfellow, Jackson's removal of "civilized" tribes, tribal rights in Oklahoma, how tribes reach decisions, Indian-owned casinos, tribes that prosper, the Indian Medical Corps, indigenous peoples' games, comparisons with Canada and other countries, tribal archives and oral tradition, and the Penobscot language's disappearance. The meeting adjourned at 8:05.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (9 December 2015)

President Gordon DeJong called the meeting to order at 6:45. Frank Deutsch presented Jim Ultman (chemic engineer), Roy Hammerstedt introduced Phil Park (expert on business startups), Art Goldschmidt introduced Jim Sullivan's friend and former colleague, Chuck Yackeren, and Lee Stout introduced his wife, Dee. All are considering membership now that we meet in the Ramada Inn. Gordon urged members to bring guests who might become new members, including spouses or significant others. Art announced the 2016 IATC convention in Columbus, Ohio. Gordon invited members to introduce themselves and state key issues in their professions. Bob Hendrickson, a retired professor of Higher Education, spoke on the issue of freedom of speech vs "safe zones" for students, a conflict that has roiled Missouri, Yale, Hamilton, and the University of San Diego. Instructors must warn students if they treat issues that could offend some, e.g., Islamic terrorism. John Kramer, criminal justice, is concerned with researchers who write polemics on key issues, such as the death penalty. Mick McKay, worked for Dow Chemical and is concerned about its business side, how to find the money for research and development, especially energy, Dave Mudgett started out in math & physics, did research for industry, went to graduate school in electrical engineering to study control systems, taught it at Penn State, but took leave to play guitar and run a guitar shop, then returned to study computer science, and now teaches in Information Science and Technology, but he seeks people who share his interest in control systems. A student of Norbert Wiener, he teaches mathematics, computer programming, and sophomore engineering courses. He still thinks at age 62 that he can do something meaningful.

Gordon advised members of changes in the printed program: Jim Serene cannot speak in February, so he and Gordon will exchange dates for their Torch Talks; in March Art will speak on the Middle East, replacing Mark Meckstroth, who has moved away. He then introduced Lee, retired University Archivist and Penn State historian, to speak on "Our Fascination with Stuff: Keeping and Explaining Things that Matter." His talk started with reading Eric Rutkow's American Canopy: Trees, Forests, and the Making of a Nation, for lumbering and the wood products industry matter to Centre County, about which he plans to write a book, leading into the history of objects, social history, and ending with downsizing. I history books used to focus on military, political, and diplomatic matters well into the 20th century and even now, such as Mary Beard's SPQR: A History of Ancient Rome. Historians still write biographies, histories of cities, shipwrecks, and sports. Starting in 1960s, however, social history--everyday people and their lives--came to the fore, e.g. Poverty and Progress in a 19th Century City by Stephan Thernstrom, putting the people back in: underdogs, minorities, and women. Scholars ask how subordinate groups function and interact with authority, relying less on letters and diaries, but more on large data sets like the US census records, and on quantification.

France's Annales School, typified by Fernand Braudel, The Structures of Everyday Life, which shows how people lived over the course of time and focuses on the mentalities of nations and cultures. A non-specialist can read Eric Sloane's Our Vanishing Landscape and Jack Larkin's The Reshaping of Everyday Life, 1790-1840. Local history and genealogy matter more. How to be a Victorian by Ruth Goodman covers even washing clothes, cooking food, and traveling to work in Victorian Britain. Bill Bryson's At Home: A Short History of Private Life goes through his house, room by room (even stairs), and reflects on how people lived and what was changing. Commodity history includes Antony Wild's Coffee: A Dark History and Mark Kurlansky's Salt: A World History, which treats its production, trade, and its role in the rise of capitalism. Historians study commodities that have been superseded by others, as coal by oil. Why some and not others? Historians may expand into broader topics, like beverages in Tom Standage's History of the World in 6 Glasses. A History of America in 36 Postage Stamps tells broader stories. Neil MacGregor wrote A History of the World in 100 Objects based on objects from the British Museum collection. A similar history was put out by the Smithsonian. Both treat how we look at objects, e.g. in a collection, a means of promoting an institution. Lee Stout himself wrote on 15 objects in the Penn State archives, such as a peace pipe and a photo of Mrs. Atherton as a 14-year-old girl. Which heirlooms matter? History of Secrets by Dawn Raffel tells about objects in her mother's house. How do we teach our heirs a sense of respect toward an heirloom? What if no one cares? People must learn how to maintain and preserve metal, wooden, or paper objects. People have many photos, films, and videos, and digital preservation is harder than it sounds, for operating systems keep getting upgraded. Should you throw unwanted objects into a dumpster, find other people to buy or take them, or give them to an institution? Many seemingly unvalued

objects have value for social historians. Members' questions: How did he find books on commodities? Windows 10? How the internet enhances our ability to find objects, like vintage guitars, online, but some evil-doers collect commodities for investment.

Our January meeting will feature John Vincenti on "Steward's Treasure: Alaska." The December meeting adjourned at 7:50 p.m.