BENSON TECH

ALUMNI TEXT

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The Official Newsletter of the Benson Polytechnic High School Alumni Association (BPHSAA), April 2023 Edition













(Photos courtesy of PPS and the BPHSAA.)

Tech Show celebrates 100

By Dale Bajema (Class of 1954)

April 20 and 21 marks Benson's 100th year of its acclaimed Tech Show. What started out in 1919 as a way to showcase what students were learning in a recently opened "polytechnic high school" (then a new educational idea), turned into annual Benson Tech tradition. Plans to celebrate the 100th year in, while still in the original building, were interrupted by the onset of the COVID-19 pandemic.

After its inauguration on May16, 1919, Tech Show grew in popularity among students, teachers and the general public. It was interrupted in 1945 by World War

II and revived the next year. Over the years, the students' demonstrations of the skills they were learning changed as the school's technical courses evolved with the needs of the work world.

As with changing technical courses at the school, events and activities at Tech Show have varied, including elements like a talent show, performances by Benson's often award winning marching band, foods for sale, student fundraising tables, and various games. Up until the 1990s, reasonable priced admission tickets were even required, with the proceeds helping to fund various student activities and initiatives.

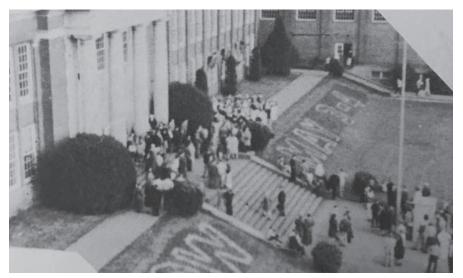
Tech Show, continued from front cover

Tech Show, however, always was a natural way for Benson to attract future students as many of the grade school children who attended became captivated by the prospect of learning hands-on technical skills while simultaneously completing their high school requirements.

Perhaps as fitting for an ever-evolving event, this year's Tech Show will be held on the Marshall High School campus at 3005 SE 91st Avenue (Benson Tech's interim home while its historic building on NE 12th Avenue is being modernized). While the setting is different — an ordinary high school adapted for career technical education plus a specially built annex for automotive and

construction — Tech Show will again feature students demonstrating some of the technical skills they are learning. This year, Benson Tech's radio station KBPS 1450AM will have special exhibits set up in its studio as it also celebrates its 100th year.

The 101st Tech Show will again be at Marshall in the spring of 2024. After moving into its modernized school in the fall of 2024, one might expect the 102nd Tech Show in the spring of 2025 to be very special — a new showcase of career technical education for the 21st century in a building uniquely redesigned for changing times.

















(Photos courtesy of PPS and the BPHSAA.)

(1) IN BRIEF | BPHSAA AND BENSON TECH NEWS

Old yearbooks are being digitized

All of Benson Tech's old yearbooks are being digitized as part of the Benson Tech Modernization project. When all of the 18,000 pages covering 100+ years are digitized, Alumni will probably be able to view them via the BPHSAA web page, bensontechalumni.org.

Annual August picnic date set

The Benson Community Picnic will be held on Saturday afternoon, August 12, from noon - 4:00 p.m. on the Marshall High School campus at 3005 NE 91st Ave. More details will be available at bensontechalumni.org.

Second invitational Track & Field (T&F) Meet on April 22

Benson Tech's second Invitational T & F Meet will be held on Saturday April 22 on the Marshall High School campus. This year's meet will include teams from Battleground (WA), Beaverton, Cleveland, De La Salle N. Catholic, Ft. Vancouver (WA), Jefferson, Jesuit, Kelso (WA), Kennedy (Mt. Angel), Liberty (Hillsboro), Parkrose, Putman (Milwaukie), and Reynolds. The title sponsor of the meet will be BSN Sports. Other Tech supporters are funding many of the individual events. Benson Tech's team is coached by Jay Miles (Class of 1990), assisted by other Benson Tech graduates: Jerome Person, Geoff Balke, Mychal Gann, and Duy Do. (Janita Jones, who coached the girl team last year, will be handling awards, etc. for the meet this year.)

TYP's summer camp to return a second year

Following the last year's success, Benson's Tech Youth Project (TYP) will have a separate camp for boys and girls. The camp on the Marshall High School campus will be held during the last two weeks of June and will be open for students from anywhere in Portland. Attendees will gain some experience in several sports as well as awareness of the school's growing athletic programs. For more information and how to apply, go to bensontechathletics net.

Benson Tech football is coming back

After a five-to-six-year pause, football is coming back to Benson Tech in Fall 2024 in concert with moving into the modernized campus. The plan is to field a junior varsity (JV) team for Portland Interscholastic League (PIL) play and a JV2 team. With success, Tech plans to move up to varsity by 2026. More details are likely to be available this fall.

Highlights of Benson Tech's winter sports

Basketball: After winning seasons in PIL play and advancing to Oregon's playoffs, both the boys and girls basketball teams were unfortunately eliminated in the 16th round. Mahogany Chandler-Roberts (junior) was selected as PIL's Player of the

Year and Samara (Mar Mar) Massey (junior) as Defensive Play Leader of the Year.

Wrestling: There was an improved turnout for wrestling, plus Benson Tech hosted the PIL's novice meet.

In addition, Benson Tech's *dance* and *cheerleading* teams were revived, as well as the swimming team.

A *Student Athletic Leadership Team (SALT)* was recently formed. Its first project was to create a Student Section for the basketball games. The plan is to expand this to other athletic programs in the coming years.

Benson Bowling

For the first time ever, Benson Tech's **bowling team** made an appearance in the state tournament in Medford and though the team did not place, it made a credible showing.

New nickname and mascot coming Fall 2024

A committee of students, alumni and other Benson Tech stakeholders, chaired by Principal Curtis Wilson, has been developing a new school mascot and nickname. Students, alumni, parents, and other stakeholders were initially asked for suggestions. From those, a short list was sent out for further input. The criteria for making a final selection included gender neutrality, historical context, edge or ferocity, rhyme or ring, and marketability. Principal Wilson expects the committee to act by April 20. Its recommendation will go first to the Portland Public Schools (PPS) District and then to the Oregon School Activity Association, which has final authority.

The new nickname and mascot will only become official in the fall of 2024 when Benson Tech moves into the modernized campus on NE 12th Avenue.

There are *absolutely* no plans to change either the name of the school or the blue and orange school colors.

ALUMNI TEXT CREDITS

Co-Editors: Dale Bajema and Roger Edwards

We'd like to thank Gerry Ochs, Rachael Lizio Katzen Kurynny, Lisa Yanase (Benson Tech Boosters), Rob Johns, Curtis Wilson, Mat Clarke, and Jay Miles for the articles, background information and facts, and photos included in this issue. And a special thanks to Connie Mar, our newsletter designer.

MODERNIZATION CONSTRUCTION SPOTLIGHT





Benson Tech Modernization Status Update for Spring 2023

By Gerry Ochs (Class of 1977)

The original school building has one classroom complete as a mock-up. Appointments include upgraded lighting, audio visual equipment and communications. The room was used to mock up the window framing paint schemes, installation of audio visual equipment, phone communication, sound dampening panels and various utility outlets. Progress continues throughout the original building with numerous rooms receiving sheet rock. There is a community room and adjoining teachers' annex located off the main hallway near the main entrance of the school. The community room will serve various purposes, including for school related gatherings and instructional use. Upgrades to all electrical, plumbing, fire protection and HVAC systems continues throughout the building. Progress continues on the necessary upgrades to both gymnasiums, G1 and G2.

Building H improvements have progressed with the mechanical, electrical and plumbing (MEP) installations well underway into the second floor. The metal stud

walls are in place throughout the building. Building H will house the automotive shops and the framing for the garage door entrances are evident (Photo 2 on next page).

The original windows have all been restored and are in place in the brick wall along Irving Street or the north façade of new Building C. Building C's lower level will house classrooms for freshman manufacturing, arts, engineering, construction shop and chemistry. There will also be chemistry classrooms on the second story. Chemistry classrooms are along the Irving Street or north side of the building. Gas, water and waste lines are plumbed in for the chemistry rooms.

Building F is now underway. Photo 3 on the next page shows concrete work being finished for the hallway and classrooms. The photo was taken from the top floor of Building B, looking south at the New Gym, now designated as G2.

The auditorium restoration and upgrades continue. There has been lots of progress in the lower level, or the

(story continues on next page)

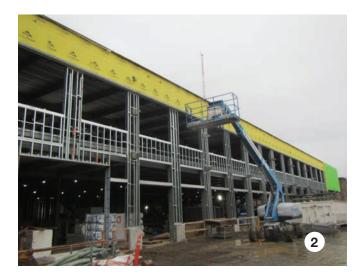








Photo 1 (on Page 4): View west in the auditorium from in front of the stage as restoration of the facility continues. **Photo 2:** The exterior walls of Building H framed in. Auto shop garage doorways are framed along the bottom row. Mechanical, electrical and plumbing systems are now being installed on the second story. **Photo 3:** Concrete slab work in the background; the surface is being finished. The concrete slab is for classroom space and the hallway inside the future Building F. The New Gym (G2) is in the background, and the view is south from Building B. **Photo 4:** Seismic upgrades continuing on second floor of the foundry building, now Building D. Note the mass plywood with hurricane strapping nailed in place across the floor. The view is southward. **Photo 5:** Benson Tech Principal Curtis Wilson and Vice Principal of Construction Dan Malone stand in the future principal's conference room during the March 9 site tour. (Photos courtesy of Gerry Ochs.)

old cafeteria, which is the future mechanical room for the air handling units. There are lavatory facilities in the lower level of the auditorium at both east and west ends. The restroom at the west end of the lower level is located adjacent to the elevator. The elevator is in the southwest section of the building and will serve all three levels.

Building B has major structural steel framing complete and work is underway constructing the sound proof floor system between the upper two floors. The top floor of Building B will house the occupational health classrooms, The main floor will house the library and the basement will house the music room. Both separation floors in Buildings B are constructed with a sound dampening system of concrete, foam, and plywood. The sound dampening system is the same system installed in buildings C and H to separate noise from shops and classrooms.

There are four new elevators to be installed throughout the campus for all-level access: one is in Building C, another in Building B, one near the Old Gym (G1), and the fourth is the aforementioned elevator located at the back of the auditorium near the southwest corner.

My thanks to Jen Sohm, Senior PM PPS, and Mark Kline, PPS-CBRE, for my site tour on March 9, 2023.

Do you remember the Tesla coil?

How many youngsters are there who went home from their first Tech Show thinking about the 1-million-volt Tesla coil? Amid much crackling and a sizable electric arc, it would light up a full-size fluorescent light tube held aimed toward the spark gap. The Tesla coil has been a staple at nearly all of Benson's Tech Shows. It is mentioned in the

Tech Pep as part of the 6th Tech Show in 1924. The 1981 Blueprint has a photo of its performance at the 61st Tech Show. There will likely be a Tesla coil on display at the 100th Tech Show, but it won't match the grandeur of its predecessors. Concern for the safety of students, nearby computers, and electronics has brought a voltage threshold of 30,000 volts, which is still sufficient to light up a much smaller fluorescent tube.

The idea for a Benson Tech Tesla coil came to Claud Brereton, an electric theory teacher at the Portland School of Trades, who also took charge of the newly organized school band in the fall of 1913. Mr. Brereton retired from Benson Tech in 1942. In September 1925, he organized the Electric Club for advanced electrical students with interest of the commercial side of the trade.

A project for the club's first year was to rebuild the former coil, which had worn out. The June 1920 Poly Tech mentions demonstrations of high frequency and wireless apparatus at the 2nd Annual Tech Show. The new improved model was expected to produce an 8- to 12-inch arc, which would require a generation of about 300,000 volts. The coil on display in 1926 was said to produce 900,000 volts. Reviews of the 1927 Tech Show claimed 1 million volts.

Based on the observation that 30,000 volts are required to produce a 1-inch arc, the length of an arc can be used to estimate the voltage of a Tesla coil. Increasing the voltage to 300,000 should raise the arc length by an order of magnitude to 10 inches, and 900,000 volts should produce a 30-inch arc. The increase of voltage in a Tesla coil comes at the expense of the supplied amperage. This high-voltage, low-amperage arc appears as a standing wave due to the resonance of the induced cycles of electricity coming from the many wraps of wire on the secondary coil of the step-

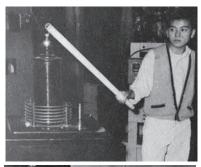
up transformer. The arc presents little hazard to a crowded audience because electrical shock depends on amperage, resistance at the point of contact, and the current pathway through the body. The cycle frequency of alternating current creates a greater hazard than does direct current, but this risk decreases with increasing frequencies and so is negli-

gible in Tesla coil arcs.

Tesla patented his coil in 1891. It is a two-stage step-up transformer that takes a continuous source of alternating current through the first set of coils and feeds this output to a second set in a higher-frequency circuit containing a capacitor and a spark gap. His initial hope for this device was that it would provide a practical and efficient source of lighting. He achieved this objective but it was the coil's ready production of high voltages and high-frequency currents that proved most useful. Further research from this base led him to phosphorescent lighting, the colorful lights of noble gases, induction heating of metals, and radio wave transmission, among others.

There is a curious addendum to this story. During the search for more space at the school in 2015, an unlabeled box taking up shelf space was found to contain

a near-complete set of periodicals titled "Industrial Arts and Vocational Education." The issue dates went from 1930 into the 1950s. A scan of the table of contents found no direct connection to Benson Tech, but it was not unreasonable for the school to subscribe to this journal, which included its Industrial Arts Index to technical literature. The Multnomah County Library was contacted for more information and it also had copies going back to 1914. There was no Benson Tech connection in these issues either, but there was an article describing the construction of a 1-million volt induction coil, and another titled "A Tesla Coil Outfit," written by three high school teachers in the Chicago area. Their coil was said to produce an arc of about 20 inches. The articles suggest that Tesla coils have attracted interest for some time, both as a research tool and as a teaching tool at the high school level. It is uncertain whether the subscription to this journal brought the inspiration for a Tesla coil to Mr. Brereton.





Top: Tesla coil demonstration at Tech Show circa 1959. **Bottom:** The 1981 version of the Tesla coil demonstration.



Above: Students competing in the 2022 Invitational T&F meet at Benson Tech's temporary home at Marshall High School.

Update from the Benson Tech Boosters

The Benson Tech Boosters were proud to deliver our winter quarter check for \$6,985 for our students. Most of that amount was raised through winter sports concessions, under the new leadership of BPHSAA member Jeff Strachan.

We also appreciate the alumni who support the Benson Tech clubs and teams through automatic monthly donations through our website, and through our Fred Meyer community partners. Please stop by our table at Tech Show or see our website (bensontechboosters.org) for details!

-Benson Tech Boosters

BPHSAA TRIVIA QUIZ

It's Tech Show time! Test your knowledge about this highlight of the Benson Tech experience!

- Question 1: When did the first Tech Show take place?
- Question 2: How did the Tech Show become an annual event??
- Question 3: Has public interest in the Tech Show been sustained over the years?
- Question 4: How did Tech Show ticket sales enhance the event?
- Question 5: Why are 105 years required for 100 annual events?
- Answer 1: Students first entered the new Benson Polytechnic High School buildings in September 1917. There was a lot of interest in the new school and informal tours were surely available. Early issues of the Poly Tech have brief mentions of public walk-throughs during 1918. The comments of these visitors may have produced the idea of a scheduled open house. But in the summer of 1918, the school became a training facility for the U.S. Army and so it remained until January 1919. Once re-established as a high school, plans quickly came together and the school doors were opened for public inspection on the evenings of May 16-17, 1919.
- Answer 2: The June 1920 Poly Tech reports that after the success of the second Tech Show, a decision was made that, "Hereafter, it is intended that the Tech Show will be an annual event, and students and parents alike are looking forward to the exhibitions of future years"...
- Answer 3: The Benson Tech Show has attracted thousands of attendees since its inception. The first recorded attendance number is from Tech Show #2 in 1920: 3,500 attendees. The event was increased from two nights to three for Tech Show #4 (returning to the two-night format by the 1940s). By Tech Show #5 held in 1923, the number of visitors had swelled to more than 10,000, a level that was sustained for decades. The

- record for highest attendance is held by the 1961 Tech Show and 1929 Tech Show, which both recorded more than 13,000 visitors for each event. In more recent years, the number of Tech Show attendees has averaged between 3,000-4,000 per event, a more modest but still respectable turnout.
- Answer 4: Ticket sales were a big part of the Show's preparation until they were discontinued sometime in the 1990's. Each student was initially assigned 10 numbered tickets and prizes were awarded for the best sales records. These sales efforts brought enthusiasm to the student body and awareness of the event throughout Portland. Profits were never more important than showcasing the school and the programs taught there. Ticket pricing was nominal and many were available on a complimentary basis. The funds that were raised though did offset expenses and contributed to school projects. The tracking of tickets enabled good estimates of the crowds attracted.
- Answer 5: There was no Tech Show in 1945 because it
 would have disrupted World War II troop training underway
 at the time. The 2020-2022 shows were scheduled but then
 canceled due to COVID-19. Hopefully, this concern will have
 finally ended for this year, and for the Centennial Tech Show.



CLASS OF 1964 - 60th Reunion

We are in the early planning stages, and have not yet selected a venue or a date for 2024. We have formed a small planning committee consisting of Ron Hoff, Dan Burgess, Gil Lissy, Richard Probasco, and Phil Bisner, and welcome your ideas and input. We're also trying to update our mailing list so please pass on any contact info you have for our classmates.

CONTACT:

Please send suggestions and contact information to:

- Ron Hoff qballhoff@gmail.com (503) 789-1662
- Dan Burgess <u>dburgess38@att.net</u> (503) 930-9899

CLASS OF 1973 - 50th Reunion

WHEN: Saturday, August 19, and Sunday, August 20, 2023 **WHAT:** Saturday evening adults-only dinner, and dancing, 6:00 – 11:00 p.m.

WHERE: Sah Hah Lee Golf Course (17104 SE 130th Avenue, Clackamas, OR 97015)

WHAT: Sunday afternoon all-ages picnic, 12:00 – 4:00 p.m. **WHERE:** Blue Lake Park (1224 NE Blue Lake Road, Fairview, OR 97024)

CONTACT: Questions? Reach out to Jeff Dixon via email at jeffdixson@comcast.net.

CLASS OF 1978-45th Reunion

WHEN: Saturday, September 9, 2023

WHAT: Saturday evening adults-only gathering, time TBD. **WHERE:** McMenamin's Kennedy School Gym (5736 NE 33rd

Ave, Portland, OR 97211)

CONTACT: For updated information and tickets (available in late spring), please visit the BPHSAA Reunion webpage and join the Benson Tech Class of 78 Facebook group.

Questions? Contact Brad Cameron at 503-236-1213, or email the planning committee at BensonTechClassfo1978@gmail.com.

CLASS OF 1983 - 40th Reunion

WHEN: Saturday, September 23, 2023

WHAT: Friday evening adults-only gathering, 6:00 p.m. **WHERE:** The Village Ballroom (704 NE Dekum, Portland, OR 97211)

FACEBOOK: Join the Class of 1983 Facebook group for updates and details: https://www.facebook.com/groups/ben-sonclassof83.

CONTACT: If you have questions or if you'd like to help with the event, email Bensontech83@gmail.com

CLASS OF 1993 - 30th Reunion

WHEN: Friday, August 11, and Saturday, August 12, 2023 WHAT: Friday evening adults-only gathering, time TBD WHERE: TBD

WHAT: Saturday afternoon BPHSAA-sponsored all-ages

picnic, 12:00 - 4:00 p.m.

WHERE: Benson Tech's interim home on the Marshall High

School campus (3905 SE 91st, Portland 97266)

TICKETS: https://www.eventbrite.com/e/30th-class-re-

union-tickets-596019589637?utm-cam-

<u>paign=social&utm-content=attendeeshare&utm-medium=discovery&utm-term=listing&utm-source=cp&aff=escb</u>.

FACEBOOK: Visit the Benson Polytechnic Class of 1993 Alumni Facebook Group for updates and details: https://www.facebook.com/groups/Benson93.

CONTACT: Questions? Contact the planning committee at BensonTech1993Reunion@gmail.com.

Is your class planning a (rescheduled or otherwise) reunion in 2023 or 2024?

If you and your classmates are actively planning a reunion, or are simply interested in beginning the process, please let the BPHSAA know. Send your updates to info@bensontechalumni.com, and don't forget to include:

- When (dates and times)
- What (the nature of the events—adults only or families welcome, catered or potluck or byo food & drink, etc.)
- Where
- Cost and how to purchase tickets
- Event website or Facebook page (if applicable)
- Contact information for the organizer(s)

We can help you to spread the word through our alumni emails and social media accounts, and will even post announcements on our webpage (www.BensonTechAlumni.org) and in our seasonal newsletters!