Core memory weavers and Navajo women made the Apollo missions possible

Joy Lisi Rankin • February 18, 2022

The historic Apollo moon missions are often associated with high-visibility test flights, dazzling launches and spectacular feats of engineering. But intricate, challenging handiwork — comparable to weaving — was just as essential to putting men on the moon. Beyond Neil Armstrong, Buzz Aldrin and a handful of other names that we remember were hundreds of thousands of men and women who contributed to Apollo over a decade. Among them: the Navajo women who assembled state-of-the-art integrated circuits for the Apollo Guidance Computer and the women employees of Raytheon who wove the computer’s core memory.

In 1962, when President John F. Kennedy declared that putting Americans on the moon should be the top priority for NASA, computers were large mainframes; they occupied entire rooms. And so one of the most daunting yet crucial challenges was developing a highly stable, reliable and portable computer to control and navigate the spacecraft.

NASA chose to use cutting-edge integrated circuits in the Apollo Guidance Computer. These commercial circuits had been introduced only recently. Also known as microchips, they were revolutionizing electronics and computing, contributing to the gradual miniaturization of computers from mainframes to today’s smartphones. NASA sourced the circuits from the original Silicon Valley start-up, Fairchild Semiconductor. Fairchild was also leading the way in the practice known as outsourcing; the company opened a factory in Hong Kong in the early 1960s, which by 1966
February 2022 employed 5,000 people, compared with Fairchild's 3,000 California employees.
At the same time, Fairchild sought low-cost labor within the United States. Lured by tax incentives and the promise of a labor force with almost no other employment options, Fairchild opened a plant in Shiprock, N.M., within the Navajo reservation, in 1965. The Fairchild factory operated until 1975 and employed more than 1,000 individuals at its peak, most of them Navajo women manufacturing integrated circuits.
It was challenging work. Electrical components had to be placed on tiny chips made of a semiconductor such as silicon and connected by wires in precise locations, creating complex and varying patterns of lines and geometric shapes. The Navajo women's work “was performed using a microscope and required painstaking attention to detail, excellent eyesight, high standards of quality and intense focus,” writes digital media scholar Lisa Nakamura.
In a brochure commemorating the dedication of the Shiprock plant, Fairchild directly compared the assembly of integrated circuits with what the company portrayed as the traditional, feminine, Indigenous craft of rug-weaving. The Shiprock brochure juxtaposed a photo of a microchip with one of a geometric-patterned rug, and another of a woman weaving such a rug. That portrayal, Nakamura argues, reinforced racial and gender stereotypes. The work was dismissed as “women's work,” depriving the Navajo women of
appropriate recognition and commensurate compensation. Journalists and Fairchild employees also “depict[ed] electronics manufacture as a high-tech version of blanket weaving performed by willing and skillful Indigenous women,” Nakamura notes, yet “the women who performed this labor did so for the same reason that women have performed factory labor for centuries — to survive.”

Far from the Shiprock desert, outside of Boston, women employees at Raytheon assembled the Apollo Guidance Computer’s core memory with a process that in this case directly mimicked weaving. Again, the moon missions demanded a stable and compact way of storing Apollo’s computing instructions. Core memory used metal wires threaded through tiny doughnut-shaped ferrite rings, or “cores,” to represent 1s and 0s. All of this core memory was woven by hand, with women sitting on opposite sides of a panel passing a wire-threaded needle back and forth to create a particular pattern. (In some cases, a woman worked alone, passing the needle through the panel to herself.)

Apollo engineers referred to this process of building memory as the “LOL,” or “Little Old Ladies,” method. Yet this work was so mission critical that it was tested and inspected multiple times. Mary Lou Rogers, who worked on Apollo, recalled, “[Each component] had to be looked at by three of four people before it was stamped off. We had a group of inspectors come in for the federal government to check our work all the time.”

The core memory was also known as rope memory, and those who supervised its development were “rope mothers.” We know a great deal about one rope mother – Margaret Hamilton. She has been recognized with the Presidential Medal of Freedom, among other awards, and is now remembered as the woman who oversaw most of the Apollo software. Yet, little is known about the thousands of others who performed this mission-critical work of weaving integrated circuits and core memory.

At the time, Fairchild’s representation of the Navajo women’s work as a feminine craft differentiated it from the high-status and masculine work of engineering. As Nakamura has written, the work “came to be understood as affective labor, or a ‘labor of love.’” Similarly, the work performed at Raytheon was described by Eldon Hall, who led the Apollo Guidance Computer’s hardware design, as “tender loving care.”

Recently, the communications scholar Samantha Shorey, engineer Daniela Rosner, technician Brock Craft and quilt artist Helen Remick firmly overturned the notion that weaving core memory was a “no-brainer” with their Making Core Memory project. In nine workshops, they invited participants to weave core memory “patches” using metal matrices, beads and conductive threads, showcasing the deep focus and meticulous attention to detail required. The patches were then assembled in an electronic quilt that played aloud accounts from 1960s Apollo engineers and Raytheon managers. The Making Core Memory collaboration challenged the dichotomy of masculine, high-status, well-paid science and engineering cognitive labor versus feminine, low-status, low-paid, manual labor.

A 1975 NASA report that summarized the Apollo missions spoke glowingly of the Apollo computing systems – but mentioned none of the Navajo or Raytheon women. “The performance of the computer was flawless,” the report declared. “Perhaps the most significant accomplishment during Apollo pertaining to guidance, navigation, and control was the demonstration of the versatility and adaptability of the computer software.”

That computer, and that software, relied on the skilled, technical, embodied expertise and labor of thousands of women, including women of color. They were indubitably women of science, and their untold stories call us to reconsider who does science, and what counts as scientific expertise.

READ MORE AT: https://www.sciencenews.org/article/core-memory-weavers-navajo-apollo-raytheon-computer-nasa
Heavy Equipment Updates

Heavy Equipment Policies and Procedures now available on nndcd.org website and you can click--> HERE

February Delivery
February 18 - Little Water - Trailer

Teamwork makes the Dreamwork!
‘They shouldn’t be afraid’: Non-profit provides relief for COVID-positive Navajo & Hopi families

BY: SHONDIIN SILVERSMITH - FEBRUARY 10, 2022

Glenda Wheeler handed a list of food items to her helpers for the day as they all stood behind their shopping carts inside the Window Rock Bashas’, ready to shop.

Wheeler let them know they are serving four families today, and everything listed on the shopping list needed to be purchased to fulfill the request.

She divided the team into two groups, telling them to pay attention to the list and mark off the items as they were collected.

Once the groups started moving, she looked at the Community Health Representative (CHR) helping her shop for the day and gave a simple direction: “Follow me.”

Wheeler moved quickly toward the aisle, holding up her shopping list as the CHR pulled up behind her.

“We’re getting the ramen noodles,” she said to him as she took her pen to her shopping list. “Get eight of them,” she said as she crossed noodles off the list.

The food that Wheeler and her team purchased would soon be delivered to Navajo families who are currently in quarantine or isolated due to COVID-19, as part of the Direct Relief Program operated by the Navajo & Hopi COVID-19 Relief Fund.

The Direct Relief Program is available to those living on the Navajo and Hopi Nations who are currently in quarantine or isolated due to COVID-19, as part of the Direct Relief Program operated by the Navajo & Hopi COVID-19 Relief Fund.

“I have it memorized,” she said. “We know the store from one side to the other.”

Once they were all done shopping, Wheeler worked with the Community Health Representatives to load their truck with the food and goods for the families they were serving. They buy anything from water to fresh produce, from dog food to hygiene products to baby formula. Each aid box contains enough food to last a family of four up to two weeks.

The supplies were soon on their way to four families in the Fort Defiance area. Wheeler often partners with CHR’s because they know the service areas well and the families that are often recipients of the program.

More than $500 worth of food and goods were loaded into a CHR’s truck that day.

Helping victims of the virus

Wheeler has been working with the Direct Relief Program since October, but she’s worked for the Navajo & Hopi COVID-19 Relief Fund before. She worked with them for over a year during the height of the pandemic before she left in early 2021 to get some rest. The organization asked her to come back in the fall, and she said she agreed because she likes to help her people.

Wheeler is originally from Steamboat, a Navajo community just east of Hopi tribal lands, but she set up her base of operation at the nearby Ganado chapter house, collaborating with the Ganado chapter president and council delegate to run her operation out of their facilities because it makes it easier for her to deliver in her service areas.

Since there are only two of them on the team, Wheeler said it’s nice to have people from the community volunteer their time to help her fulfill requests. They help her in various ways, from packing the boxes to sanitizing all the goods and making deliveries.

Ganado Chapter President Marcarlo Roanhorse has helped Wheeler pack boxes before, but he was also a recipient of the Direct Relief Program when his family tested positive for COVID-19 a few months ago.

Roanhorse said when his family tested positive, they took immediate action and ended up staying in quarantine for 15 days, and he’s grateful that Navajo & Hopi COVID-19 Relief was able to provide them with assistance.

They got fresh produce, non-perishables, vitamins, medication, teas, and a variety of other household items — all the things they needed to help sustain them for the duration of their quarantine.

“I’m very thankful for this program,” he said. “This program is needed for the purpose of providing services to encourage our relatives, our families, our Navajo community members, and our Hopi neighbors to stay in quarantine to stop the spread of COVID.”

Roanhorse said the collaborative efforts put into the relief that the organization provides are what make it such an important program.

“I became a victim to this virus,” Roanhorse said, and knowing that help was there when his family needed it was a relief.
I understand the feeling that these recipients feel when they have that relief,” he added. “And that’s really what it is, is knowing that they have relief and the ability to rely on others.”

Wheeler’s territory is large, ranging from Sanders on the southern edge of the Navajo Nation to Fort Defiance near Arizona’s eastern border and north toward Pinon. She’s even traveled as far as Kayenta to pitch in and deliver aid packages.

She’ll partner with Community Health Representatives in the area to help fulfill more requests because she can’t get to all of them by herself.

The Direct Relief Program grew out of an immediate need when the delta variant of COVID-19 hit the Navajo Nation in 2021.

Navajo & Hopi COVID-19 Relief Fund Co-Founder Ethel Branch said the organization was hopeful in the Spring of 2021 because the numbers in the Navajo Nation were dropping and there was an “aggressive vaccination rollout.”

“We were very hopeful that we were through the worst of things with COVID here on Navajo and Hopi,” Branch said, but they monitored the situation constantly.

When the COVID-19 case numbers looked good in June, Branch said the organization wanted to shift its main work from direct relief work to more sustainable community work within the Navajo Nation.

“We were pretty much at the end of our budget for direct relief work, so we started to wind down our operations,” she said. They started to look to the future, which meant long-term work within the community.

But then the delta variant of COVID made its way onto the Navajo Nation, and by August, the number of positive cases was increasing again.

Branch said when cases went from single- to double-digits in June, to triple-digit cases by the end of August, the organization knew the situation was getting critical.

And that’s when they re-engaged their direct relief efforts. When cases started to pick back up, Branch said it may have been because the Navajo people were given this sense of false security and safety in the face of the delta variant because of the vaccination numbers the Navajo Nation government was providing at the time.

When the Navajo & Hopi COVID-19 Relief Fund leaders saw the numbers increase to over 400 positive cases per day by the end of August, Branch said it was clear that the Navajo Nation was not well-positioned to withstand the new variant.

“We were not well (prepared), and nobody is responding and preparing to protect our community because they’re all buying into this idea that we’re highly vaccinated and we’re going to be OK,” Branch said.

More than 400 families helped in 2021, more than 1,200 requests in January 2022.

That’s when the organization launched its Delta Relief Program, which was later renamed the Direct Relief Program. Branch said the program took off slowly when they launched it, but soon grew to 17 teams working to meet requests for help, but as caseloads fell in the fall, they scaled back. Now, they’re trying to build back up to at least 14 teams to get through the surge of requests due to the spread of the omicron variant.

From September to December 2021, Branch said they were able to serve 426 families. In January alone, the Direct Relief Program had more than 1,200 help requests, Branch said.

As of Feb. 8, the Navajo Nation Department of Health has reported more than 6,800 new COVID-19 cases and 30 deaths since the beginning of the year. On Feb. 7, officials reported that 83 of the 110 chapters in the Navajo Nation were experiencing an uncontrollable spread within the communities.

Families that enter quarantine or isolation and need help with food and supplies can fill out a request form online, where they answer several questions related to the household. If families can’t do it online, they can call a hotline and work with a Navajo & Hopi COVID-19 Relief Fund team member to get the form filled out.

Due to high demand, requests are taking anywhere from 72 to 96 hours to be completed. Once a request is checked by the program director, it’s sent to team leaders like Wheeler to fulfill.

Wheeler said she delivers more than 30 requests some days.

The team follows a set shopping list, but augments their shopping to meet the needs of the household that can’t go to the store. So, if a family needs to have dog food and baby formula, they buy it for them.

“Everything’s provided,” she added.

Fulfilling a request involves shopping for a list of food that includes fresh produce, canned and dry goods. They also provide essential supplies such as toilet paper, hygiene products, and over-the-counter medication.

Each family is also provided with an isolation kit that contains at-home COVID-19 tests, PPE like KN95 masks and three-ply masks, disinfectant wipes and spray, hand sanitizer, a thermometer, and an oximeter with batteries.

“We wanted to give people the tools that they needed to, to minimize that spread in their household and minimize potential adverse impacts and loss of life,” Branch said. “There was a lot of thought and care and planning that went into the design of that program.”

In January, Wheeler said her team was shopping day and night to serve people. The work is difficult. Most days it’s just Wheeler, her teammate and a volunteer to fulfill requests. The teammate and volunteer both happen to be her daughters.

“This job is hard to do, you have to be strong, you have to be open-hearted, and you have to care for everybody,” Wheeler added. “It’s important, because we need to help one another to overcome this virus.”

For people who sign up for help with the Direct Relief Program, Branch said she hopes that they see that someone cares about them and that they matter because there is help for them through this difficult time.

“They shouldn’t be afraid,” she said. “They will get the help and the tools they need to stay safe.”

The organization is hoping to see a drop in requests this month as the number of positive COVID-19 cases continues to decrease.

READ MORE AT: https://bit.ly/3K0Eky8
The United States Senate yesterday voted to confirm Shelly C. Lowe as the twelfth Chair of the National Endowment for the Humanities (NEH). The White House is expected to make the official announcement in the coming days and Lowe will begin her appointment shortly thereafter.

Lowe issued the following statement after her Senate confirmation:

"I am honored and privileged to serve the nation as Chair of the National Endowment for the Humanities and am grateful for the bipartisan support of the Senate and of President Biden and Vice President Harris.

"Having grown up in a small rural Navajo community in Northeast Arizona, I have personally seen how the humanities can help sustain and strengthen individuals, communities, and institutions, yet I am alert to the fact that access to humanities resources remains unevenly distributed across our country. I look forward to working with NEH staff and the network of state and jurisdional humanities councils to expand opportunities for all Americans to participate in and benefit from humanities-centered research, education, and public programs."

Lowe is a citizen of the Navajo Nation and grew up on the Navajo Reservation in Ganado, Arizona. From 2015 to 2021 she served as Chair of the National Endowment for the Humanities and is grateful for the privilege of serving her home community in this role.

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Lowe is a citizen of the Navajo Nation and grew up on the Navajo Reservation in Ganado, Arizona. From 2015 to 2021 she served as a member of the National Council on the Humanities, the 26-member advisory body to NEH, an appointment she received from President Obama. Lowe’s career in higher education has included roles as Executive Director of the Harvard University Native American Program, Assistant Dean in the Yale College Dean’s Office, and Director of the Native American Cultural Center at Yale University. Prior to these positions, she spent six years as the Graduate Education Program Facilitator for the American Indian Studies Programs at the University of Arizona.

Lowe has served in a variety of leadership roles nationally, most recently as a member of the University of Arizona Alumni Association Governing Board and of the Challenge Leadership Group for the MIT Solve Indigenous Communities Fellowship. She has served on the board of the National Indian Education Association and as a trustee on the board for the National Museum of the American Indian.

Lowe holds a Bachelor of Arts in Sociology, a Master of Arts in American Indian Studies, and has completed doctoral coursework in Higher Education from the University of Arizona. Those interested in scheduling an interview should email presday@neh.gov or media@neh.gov.

READ MORE: AT: https://www.neh.gov/news/statement-shelly-c-

Navajo woman tackles lack of access to healthy food in her community

As a Navajo social worker with a passion for public health and nutrition, Cherilyn Yazzie’s goal was to advocate for her community’s health by teaching them how to eat. But she soon realized something was “not clicking.”

“It was also the disconnect,” she said. “I’m trying to teach them, ‘Be healthy, eat this kind of food.’ But then on the other hand, in their systems, in their environment, they don’t have that access.”

“I’m the one who’s doing this wrong,” she thought. She knew she had to find a way to get these foods to the families in her community, but the odds seemed crushing. Growing the food herself became the goal.

But Yazzie couldn’t access enough water, electricity, and the infrastructure they lacked and started a business in Yazzie’s hometown in Dilkon, Arizona, in 2018.

Four years later, Yazzie’s business, Coffee Pot Farms, is now a 36-acre operation that grows and sells fresh produce including lettuce, bok choy, brassicas, tomatoes, peppers, onions, spinach, and beets to families across the Navajo Nation and Arizona.

What we wanna do is be able to offer something that’s gonna be local, that’s gonna be from the land here,” she said. “Build up that community here and really figure out how to take care of one another.”

Yazzie said her goal is to establish a bridge between present and future generations by building a healthy community that is capable of focusing on living and learning as much as they can to pass on to their descendants.

“We wanna be able to have people that are healthy in order for us to carry on our traditions, our stories, our songs, our prayers,” she said.

And supporting that connection gained more meaning when the COVID-19 pandemic first hit, which took a toll on grocery store shelves across the nation. Yazzie’s work offered relief to Navajo families who came to her seeking to secure food for their households.

“It hit us a lot harder because a lot of reservation residents travel to the nearby border towns to buy our groceries and supplies, but when the supply chain was interrupted, we had a hard time finding basic food supplies,” said Cara Dukepoo, a Navajo mom of four who became a regular customer of Yazzie’s at the beginning of 2020.

Dukepoo found Yazzie’s business one afternoon through a Facebook ad, she said, and she didn’t hesitate to sign up.

“It made me feel more comfortable as a mom knowing that I was able to buy fresh, local, organic produce for my kids,” she said.

Through Yazzie, Dukepoo was able to have a guaranteed supply of 4 eggs a week for her family even through the toughest downturn of the pandemic.

“What it showed us is that people were actually searching out and asking if we had any food boxes,” Yazzie said. “So it helped us to think about what would be most helpful as we move forward and that was one of the areas we really worked at.”

How to get Navajo hardship checks: Moved? Had a baby? These and other questions answered

Later that year, Yazzie started offering food box subscriptions and biweekly veggie box pick-ups available for her community at different locations.

“We always knew that we were gonna get enough vegetables that last us for two weeks, we also knew that the vegetables wouldn’t spoil, so we were pretty confident that we would be OK,” Dukepoo said.

Yazzie was committed to helping families in her community when they most needed it, she said, even when the pandemic had impacted her on a personal level.

She said losing her dad to COVID-19 in 2021 was the hardest challenge she has faced since she started her business.

“That was hard. I still cry every day. I’m still emotional,” Yazzie said. “But I know he’s proud of what we have done.”

Even though she said some days she struggled to find motivation, that moment helped her find more meaning behind supporting the health of her community.

Inspiring a community

“It was personally the first time I’d seen a commercial farm being run on the reservation, ‘cause you usually only see home gardens or traditional fields,” Dukepoo said. “Seeing something at her scale, at a very professional level – it was surreal.”

Dukepoo said Yazzie’s work inspired her and her family to expand their own home garden as they realized it was possible to grow many more things than they used to think.

And Dukepoo is not the only one. Yazzie said since she started using social media to tell her story and share more information about her business, people from her community reached out to her expressing how they felt represented and inspired by her work.

“It’s a part of showing people that it’s possible, even through lots of these obstacles,” she said. “We can figure it out if we have that purpose and have that reason of why we wanna do something.”

Navajo Nation nears completion of Chinle berm project designed to prevent flooding

Navajo Nation officials are nearing completion of a newly restored wash berm project in Chinle. It’s designed to help prevent flooding in residential areas that have experienced significant water damage from monsoon rains and spring runoff from the Chuska Mountains.

“We at the Chinle Chapter sincerely appreciate the Office of the President and Vice President, Division Directors, NDOT, and all the other entities for their dedication in providing a safer environment for our Chinle community members. We have had a lot of flooding that has impacted our livelihood in the past, so we appreciate how they’ve taken the time to prioritize and protect our goals as a community,” said Chinle Chapter President Jumbo-Fitch in a press release.

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Chinle Chapter Vice President, Division Directors, NDOT, Vice President, Division Directors, NDOT, Appreciation to Tribal and All Other Entities

The Navajo Division of Transportation along with the Chinle Chapter and the U.S. Army Corps of Engineers as of last week had completed nearly a mile-and-a-half of the two-mile section along the Chinle Wash.

They expect the project to be finished by the end of next week.

The new wash stands about six feet tall and has a broader base than previous berms. Officials say the area has experienced considerable flooding that’s threatened livelihoods and public safety and damaged property.


Southwestern Colorado rangers share sustainable firewood with Navajo community

The Dolores Ranger District of the San Juan National Forest is providing firewood to help heat homes in the Chinle area of the Navajo Nation.

San Juan Wood for Life is a pilot project between the San Juan National Forest, Chinle Chapter of the Navajo Nation, National Forest Foundation and Weston Backcountry.

The project provides tribes with a sustainable source of firewood from forest thinning projects.

In February, about six truckloads of ponderosa pine – at least 84 cords of firewood – are being delivered to the Chinle Chapter House as weather allows. The wood will be processed into firewood and delivered to elderly and other vulnerable populations in the area free of charge.

“The wood has arrived and is being split for delivery to homes,” said Colin Tsosie, program coordinator for the Chinle Chapter House. Households that need firewood will receive one cord each.

He said there is a big demand for firewood in Chinle and wood stoves are a primary source of heat for residents, including the elderly.

“I don’t know if you’ve been to Chinle, but there are not a lot of forests around for firewood,” Tsosie said. "It's been cold here, the goal of the project is to help the community with firewood at no cost."

Residents typically drive 45 minutes or longer gather firewood, he said. The labor and rising cost of wood and fuel makes it a challenge, especially for the elderly, he said. A truckload of firewood has been selling for $280.

The Chinle Youth Program and AmeriCorps volunteers are helping to split and deliver the wood. Sign up for the firewood is available at the Chinle Chapter House.

Dolores District Ranger Derek Padilla said firewood for the San Juan Wood for Life is from forest thinning projects in the Glade and Lake Canyon areas in the northwest part of the district.

Local demand has not been high for the firewood available in that remote area, he said. The firewood-sharing program to help out neighbors is seen as a good use for it.

“It helps us address forest health needs, while also helping communities that need firewood,” he said. “My hope is that it will develop into a multiyear program."

The reduction of fuel loading in the Glade helps minimize beetle kill, reduces the chance for large, destructive wildfires, and provides a product for the timber industry, according to the U.S. Forest Service.

A challenge for forest thinning projects is that the market for smaller timber is scarce. Padilla said. The larger mills are not taking it, but it makes good firewood.

The Chinle Chapter has participated in the Wood For Life program with Arizona’s Coconino and Kaibab National Forests in the past and was chosen for the San Juan pilot program because of existing distribution networks and infrastructure.

The Wood for Life program was developed in 2018 as a collaboration between the Kaibab and Coconino National Forests, the Navajo Nation and Hopi Tribe and the National Forest Foundation. The partnership now includes more than 60 organizations. Since its inception, more than 7,000 cords of wood have been provided to local tribal governments and nonprofits, which process and distribute it to community members throughout the Southwest.

“The expansion of Wood for Life to the San Juan National Forest will allow the program to benefit more local communities and reach more communities,” said National Forest Foundation program manager Sasha Stortz in a news release. “We’re thrilled for this significant moment of growth and really appreciate all the partners who have come together to make it happen.”

READ MORE: https://bit.ly/33Nj4MQ
Former Navajo president receives lifetime achievement award

By FELICIA FONSECA

TWIN ARROWS, Ariz. (AP) — Peterson Zah has never claimed to be an extraordinary Navajo, just a Navajo with extraordinary experiences.

Those who gathered Tuesday to honor the former Navajo chairman and president at a tribal casino east of Flagstaff disagreed. They said Zah has worked tirelessly to promote the Navajo culture and language, inspire youth, strengthen tribal sovereignty, provide more economic security for the tribe and ensure that Native Americans everywhere had certain religious freedoms and were included as part of federal environmental laws.

"The extraordinary experiences that you have had came about because you continually push yourself to learn, to grow and to do literally whatever it takes to promote the Navajo people and the Navajo Nation," said Zah's longtime friend, Eric Eberhard, who worked in the tribe's Department of Justice.

Zah was the first president elected on the Navajo Nation in 1990 after the tribe restructured its government under three branches to prevent power from being concentrated in the chairman's office. He later served as the Native American liaison to the Arizona State University president, a position he held for 15 years.

Concerned about the state of politics on the Navajo Nation, Zah turned his attention to finding ways to help Navajos return to basic cultural teachings of harmony, peace and respect for themselves and others.

Zah, 84, told The Associated Press that as long as people live in peace and respect each other's differences, they can maintain beauty and make the world better for future generations. He struggled to name the thing he's most proud of.

"It's hard for me to prioritize in that order," he said after the award ceremony. "It's something I enjoy doing all my life. People have passion, we're born with that, plus a purpose in life."

Zah has fiercely advocated against Navajo lawmakers raiding the money over the years. He and his wife are still active in politics, and Navajo leaders routinely turn to Zah for advice.

Charles Wilkinson, a longtime friend and lawyer, said Zah was at one time known as the Native American Robert Kennedy “because he had charisma and he had ideas and he was getting things done.” That included an effort to ensure Native Americans could use peyote as a religious sacrament.

Karletta Chief recalled Zah's work pushing to clean up the hundreds of abandoned uranium mine sites on the reservation, and ensuring that tribes were part of the Clean Water Act, the Clean Air Act and other federal laws that are vital to her work as a hydrologist.

"All that really inspired me in my journey because I grew up in a community impacted by coal in Black Mesa," said Chief, an associate professor at the University of Arizona.

READ MORE: https://bit.ly/3C9tTpq
**World Water Day - March 22**

World Water Day is an international United Nations holiday, observed every year on March 22. Clean and safe water is something that is still not accessible to many people around the globe, and even in some parts of the United States! World Water Day brings awareness to this issue and to how important it is to make freshwater accessible to everyone, for drinking and sanitation purposes. There are currently 2.2 billion people living with no access to clean and safe water, which means this is a global water crisis that we need to take action against.

**History of World Water Day**

A proposal for World Water Day to become an official observance was first introduced in Agenda 21 of the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992. In December of the same year, the United Nations General Assembly adopted a resolution that declared March 22 as World Water Day, to be observed every year.

The first World Water Day was celebrated on March 22, 1993. The day is observed by all UN member states, as well as people and international organizations dedicated to the cause of making freshwater accessible for everyone.

The logo and main symbol for World Water Day is a water drop shape in the UN’s color blue.

READ MORE: https://www.calendarr.com/united-states/world-water-day/

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**World Backup Day - March 31**

- Has your computer ever crashed when you were working on something important, causing you to lose all of your important documents? Has your phone ever stopped working, leaving you without all your precious photos and videos? Well, World Backup Day on March 31st is here to remind you how important it is to regularly back up all of your files and documents in order to keep them safe. Even though technology has become more reliable, phones, computers, and hard-drives are still not foolproof, and in a few seconds, you can lose all your data beyond recovery. On March 31st, stop procrastinating and sit down with all your devices to backup your files and photos. It is now easier and quicker to do than ever!

**History of World Backup Day**

- World Backup Day was started in 2011, by digital consultant Ismail Jadun. Jadun saw a post on Reddit, where a user wrote about losing their hard drive and wishing someone had reminded them about how important it is to backup your data.

- Jadun thought it would be a good idea to have a global day to remind everyone to sit down and back up all the files and documents they don’t want to lose. He chose March 31st as the date to observe World Backup Day because it is the day before April Fool’s, and only a fool would forget to backup their data. At the same time, April Fool’s is a day of pranks, and losing all of your files can sometimes feel like the universe is playing a prank on you. So, you can avoid that by backing up all your devices on World Backup Day!

- The day quickly spread amongst internet users and many social media platforms, as Jadun encourages all participants to take a pledge on March 31st and share it with their followers every year. The pledge goes “I solemnly swear to backup my important documents and precious memories on World Backup Day, March 31st.”

- Backing up your data is extremely important for safety reasons too. Data that is not backed up and protected is more at risk of being hacked or stolen by viruses.

**How to Backup Your Files and Documents**

- Luckily, with technological advancements, backing up your data couldn’t be easier nowadays. Most devices offer ways to backup and protect your files at the tip of your finger. Apple, Google, Microsoft, Samsung, and other companies have their own backup services, such as the iCloud or Google Drive, or Windows’s Backup and Restore. Usually, all you have to do is access your devices’ settings, and find the option to backup all of your data. And voila! In a few minutes, all of your precious information is safe and sound.

- World Backup Day raises awareness about just how much data is lost every year due to the 60 million computers that crash annually, or the 200,000 smartphones that are lost or stolen, among many other factors that put our files at risk. The advice is to always have three copies of the data you want to keep safe: two on physical storage (such as a phone, computer, USB flash drive, or hard-drive) and one in the Cloud.

- How to Take Part in World Backup Day

**How to Take Part in World Backup Day**

- Celebrate this day as it is intended: take time to sit down and back up all of your devices. Also, set a reminder to do it more regularly and not only on one day of the year. Backing up your data not only gives you peace of mind but the opportunity to look back on all your previous years of saved photos and memories to look at and reminisce about.

READ MORE AT: https://www.calendarr.com/united-states/world-backup-day/

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**New Horizons for dedicated DCD staff**

Rachelle Silver-Tagaban worked at DCD for over 10 years as a Rural Addressing/GIS Technician. She was responsible for assisting clients from the Navajo Nation seeking Physical Address Verifications (PAVs) and other mapping tasks for the Addressing Authority office. Over the years, she has completed over 14,000 PAVs for Navajo Nation clients.

DCD held a small reception to honor and thank Rachelle for all the work she did for the division. James Adakai, DCD Deputy Director, said, “DCD was glad to have Rachelle at the Rural Addressing Program, and we’re grateful for her contributions to DCD and Navajo Nation. Rachelle has been a great asset to DCD and we wish her great success in her next step of her career.”

**Good luck and thank you for all your help Rachelle!!**
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(OUF) Open Until Filled
(S) Sensitive Position (subject to background check)

Closing Dates may change due to temporary reduction in non-essential Navajo Nation government services.

For the most up-to-date personnel info, please visit DPM's website at http://www.dpm.navajo-nsn.gov/jobs.html
Community Land Use Planning on the Navajo Nation

Navajo Nation Local Governance Act (LGA)—Title 26
The LGA provides opportunities and grants Chapters authority over local issues relating to:
- Conserving natural resources
- Preserving Navajo heritage and culture
- Land Use Planning

Natural Resources to protect:
- Geology/soils and minerals
- Groundwater and surface water
- Grassland, shrubs, trees, etc.
- Wildlife
- Threatened/endangered species
- Air quality

Cultural Resources to protect:
- Anasazi cultural sites
- Historic preservation of sacred sites
- Graves protection/burial sites
- Traditionally sensitive areas
- Culturally significant areas
- Tourist sites/agriculture

The average American creates about 4.4 pounds of trash per day.
- That is about 1,600 pounds of trash created per person per year!
- According to the 2010 Census, 173,667 people live on the Navajo Nation.
- That is about 764,000 pounds of trash that is created on the Navajo Nation per day!

The Navajo Nation should pursue Solid Waste Management policies and practices that advance the values of environmental protection, materials conservation, and long-term sustainability. It is important to include Solid Waste Management in Community Infrastructure Plan.

The Navajo Nation Solid Waste Act (NNSWA) states:
- Section 201 prohibits the disposal of solid waste “...in a manner that will harm the environment, endanger the public health, safety and welfare, or create a public nuisance.” It is understood this prohibition includes open dumping, open burning, and dumping trash into a waterway. Section 204 explicitly prohibits open dumping. Subchapter 503 defines civil and criminal penalties for violations of designated parts of the NNSWA.

1. avoid/say no
2. make less/use less
3. use more than once
4. convert into something else
5. compost/decompose
6. make zero waste

DIVISION OF COMMUNITY DEVELOPMENT | www.nndcd.org | (928) 871-7182
Arizona 110th Anniversary of Statehood (1912): February 14, 2022

RELEASE NUMBER CB22-SFS.20

FEBRUARY 14, 2022

From the Guide to 2010 State and Local Census Geography - Arizona - History:

The United States acquired most of the area of Arizona from Mexico in 1848. The United States acquired additional area, comprising the southern part of Arizona, from Mexico in 1853 as part of the Gadsden Purchase. Arizona Territory was organized from the western part of New Mexico Territory on February 24, 1863. Part of Arizona Territory north and west of the Colorado River was added to the state of Nevada in 1866, resulting in generally the same boundary as the present state of Arizona.


Data for the legally established state of Arizona are available beginning with the 1920 census.

READ MORE AT: https://www.census.gov/newsroom/stories/arizona.html

Presidents’ Day: February 21, 2022

FEBRUARY 21, 2022

From the National Archives, George Washington's Birthday:

"Washington's Birthday was celebrated on February 22nd until well into the 20th Century. However, in 1968 Congress passed the Monday Holiday Law to ‘provide uniform annual observances of certain legal public holidays on Mondays.’ By creating more 3-day weekends, Congress hoped to ‘bring substantial benefits to both the spiritual and economic life of the Nation.’

"One of the provisions of this act changed the observance of Washington’s Birthday from February 22nd to the third Monday in February. Ironically, this guaranteed that the holiday would never be celebrated on Washington’s actual birthday, as the third Monday in February cannot fall any later than February 21.

"Contrary to popular belief, neither Congress nor the President has ever stipulated that the name of the holiday observed as Washington’s Birthday be changed to ‘President’s Day.’"

READ MORE AT: https://www.census.gov/newsroom/stories/presidents-day.html
Get free at-home COVID-19 tests

Every home in the U.S. is eligible to order 4 free at-home COVID-19 tests. The tests are completely free. Orders will usually ship in 7-12 days.

Order your tests now so you have them when you need them.

Order Free At-Home Tests

If you need a COVID-19 test now, please see other testing resources for free testing locations in your area.

ABOUT THE AT-HOME COVID-19 TESTS

The tests available for order:

- Are rapid antigen at-home tests, not PCR
- Can be taken anywhere
- Give results within 30 minutes (no lab drop-off required)
- Work whether or not you have COVID-19 symptoms
- Work whether or not you are up to date on your COVID-19 vaccines
- Are also referred to as self-tests or over-the-counter (OTC) tests
Give Your COVID-19 Vaccination Protection a Boost

Booster shots are now available for everyone 12+ and vaccinated

COVID-19 vaccines continue to work very well at preventing severe illness, hospitalization, and death. A booster shot is an extra dose that helps keep up your protection.

When to get your booster

Stay safer this winter. Get a booster as soon as you’re eligible.

- **Pfizer-BioNTech**
  (5 months after your 2nd dose)

- **Moderna**
  (5 months after your 2nd dose)

- **Johnson & Johnson’s Janssen**
  (2 months after your single dose)

Find free vaccines near you

- Visit vaccines.gov
- Text your ZIP code to 438829
- Call 1-800-232-0233
- Scan the QR code
Practice the 3 W’s
To reduce the risk of COVID-19 and its Variants

- Wear a mask
- Watch your distance
- Wash your hands

Be Safe and Be Vigilant
DIRECT RELIEF PROGRAM
GO TO HTTPS://BIT.LY/NHDIRECTRELIEF TO SIGN UP OR CALL 833-956-1554

If you are currently sick with COVID and are isolating, or have been exposed to a confirmed case of COVID and are currently quarantining, we can provide you with an Isolation Kit so you can stay home and help stop the spread of COVID.

Our Isolation Kits include:
- Food for Sick Family Members
- Food for Healthy Family Members
- Gatorade and Pedialyte
- Clean Drinking Water
- KN95, 3-ply, and Kid Masks
- Disinfectant Wipes
- A Thermometer
- A Humidifier
- Vitamins

*Due to a high volume of requests, it may take 72-96 hours to complete a delivery. Our team will attempt contact with you 3 times at the number you provide before moving on to the next help request.

*Please provide a reliable phone number.
*Direct Relief Program services are limited to residents of the Navajo and Hopi nations.

*Contents of each box may vary based on supply availability.

- ISOLATION KITS AVAILABLE -

NAVAJO & HOPI FAMILIES COVID-19 RELIEF FUND PRESENTS
MARCH MADNESS
WIN SUNS VS LAKERS TICKETS!
WIN $250!

For each vaccine shot you’ve had, you get one chance to win!

"You miss 100% of the shots you don’t take"
-Michael Jordan

Don’t miss your shot to win $250 or our Grand Prize of a fully-paid Phoenix Suns game experience! ($1,250 value)

TO ENTER TO WIN CALL 1-833-956-1554 OR SIGN UP AT BIT.LY/PROTECTCOMMUNITY

If you have already participated in our Vaccination Campaign, you will be automatically entered to win.
The DCD Newsletter, "Community Info", is produced monthly by the Division of Community Development and is a resource for division staff and chapters.

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Sylvia Jordan, Contributing Writer

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