

WSND-FM 88.9
Voice of the Fighting Irish, Inc.
Quarterly issues/Programming Report for 3rd Quarter/2023

Issue: Politics

Program Name: Associated Press News, read by Notre Dame students and WSND community announcers

Aired Monday-Friday at 7:30am, 8:30am, 12:30pm, 4:30pm and 5:30pm

07/05/23 - JENIN REFUGEE CAMP, West Bank (AP) — Israel has withdrawn its troops from a militant stronghold in the West Bank but warned that its most intense military operation in the occupied territory in nearly two decades was not a one-off. The pullout Wednesday morning ended an intense two-day operation that killed 12 Palestinians and an Israeli soldier. Residents of the Jenin refugee camp found widespread damage after daybreak. The army claimed to have inflicted heavy damage on militant groups in Jenin, but it remained unclear whether there would be any lasting effect after nearly a year and a half of heavy fighting in the West Bank.

07/14/23 - WASHINGTON (AP) — The House has approved a sweeping annual defense bill that provides a 5.2% pay raise for service members. What started as an overwhelming bipartisan bill quickly strayed from traditional military policy with political add-ons from Republicans to block abortion coverage and diversity initiatives that divided the chamber. The final vote was 219-210 with Democrats overwhelmingly opposed. Debate grew heated during a late-night floor debate. Efforts to halt funding for Ukraine in the war against Russia were turned back. The abortion issue has been championed by Sen. Tommy Tuberville, R-Ala., who is singularly stalling Senate confirmation of military officers, including the new Commandant of the Marine Corps.

07/21/23 - RAIGAD, India (AP) — Rescue efforts have resumed after an overnight halt in India's western Maharashtra state where a landslide triggered by torrential rains killed at least 16 people, with many others feared trapped under piles of debris. Scores of rescuers and trained trekkers have been deployed to help save people trapped by the landslide, which occurred late Wednesday night. The state's deputy chief minister Devendra Fadnavis tweeted that harsh weather conditions have hampered rescue efforts and authorities have sent in medical teams to help the injured. Search operations were suspended on Thursday night owing to heavy rainfall plus the threat of further landslides in the dark, said a statement by the National Disaster Response Force.

Issue: Politics

Program Name: PBS Newshour

Aired Monday-Friday, 7-8pm

07/03/23 - Monday on the NewsHour, Israeli forces strike a militant stronghold in the West Bank, the first such attack in nearly 20 years. An exonerated member of the Central Park Five discusses his historic primary win for New York City Council. Plus, the fight over abortion access

comes to a head in Ohio as advocates run up against a deadline for a ballot measure that would protect reproductive rights.

07/18/23 - Tuesday on the NewsHour, Donald Trump is told he's the focus of a special counsel investigation into efforts to overturn the 2020 election, compounding his legal troubles. The slow pace of Ukraine's counteroffensive against Russia prompts questions about military strategy. Plus, despite owning rights to much of the Colorado River, Indigenous tribes are largely cut off from accessing its water.

07/31/23 - Monday on the NewsHour, former President Trump spends millions of campaign dollars on legal fees in the many cases against him even as he dominates the Republican primary. Then, states across the U.S. debate how to use billions in opioid settlement money from major drug companies. Plus, an executive order creates new military protocols for investigating sexual assault in the armed forces.

Issue: The Environment

Program Name: StarDate

Aired daily at noon and 5pm Monday-Friday on WSND-FM

07/07/23 - Venus has the most volcanic surface of any world in the solar system. Two-thirds of it is paved by volcanic plains, which hold more than 1600 major volcanoes -- and more than 85 thousand in all. But it's not clear whether any of them is active today. There's evidence of recent eruptions, but there hasn't been a smoking gun -- uh, volcano -- until this year.

It's hard to see eruptions on Venus -- or anything else, for that matter -- because clouds blanket the entire planet. The only way to see the surface is with radar, which peeks through the clouds. The best radar look to date came from the Magellan spacecraft, which orbited Venus in the 1990s.

Two researchers recently pored over thousands of pairs of Magellan images snapped months or years apart. They were looking for changes in the volcanoes -- signs of recent activity. And they found a change on the flank of Maat Mons, the planet's biggest volcano. It's three miles high, and the opening at its peak is 20 miles across.

An image from early 1991 showed a circular, mile-wide pit on the side of Maat Mons. Eight months later, the feature was twice as wide, had a jagged shape, and appeared to be filled with lava. Computer models found that the only reasonable explanation was a volcanic eruption -- the most direct evidence of an active volcano on Venus.

Venus is the "evening star" now. It's shining at its brightest -- a beautiful and possibly active planet.

07/14/23 - The globular star cluster Messier 4 has a couple of claims to fame. It's the closest globular to Earth -- about 7,000 light-years away. And it's home to the first circumbinary planet ever seen -- a planet that orbits both stars in a binary system. The planet was first reported 30 years ago this month.

Such planets are rare -- astronomers have discovered only about 15 of them.

It's probably hard to make such a planet, and for it to hang around. The gravity of the stars in a binary should keep the planet-building materials close to them stirred up, preventing the birth of planets. And their gravity could easily kick a planet that does form out of the system.

The one in M4 is especially hard to explain. It orbits two dead stars -- a neutron star and a white dwarf. The neutron star is the corpse of a supernova -- a star that blasted itself to bits. The white dwarf died in a gentler process, but one that isn't very kind to planets. So the planet either survived a double cataclysm, or it was born later, from the debris of the stellar deaths. Either way, it's ancient: perhaps 12 billion years old -- almost as old as M4 itself.

Messier 4 stands due south as the sky gets dark now. It's close to the right of Antares, the bright orange star at the heart of the scorpion. Through binoculars, it looks like a fuzzy star. But it's really the combined glow of a hundred thousand stars -- and at least one planet.

07/28/23 - Pull out your binoculars and make sure you have a clear western horizon after sunset the next few nights. You'll need them to see an amazing close encounter between the planet Mercury and the star Regulus, the heart of the lion. This evening, they'll pass just one-tenth of a degree from each other — less than the width of a pencil held at arm's length.

Regulus has frequent encounters with solar system bodies because it's almost on top of the ecliptic, which is the Sun's path across the sky.

The Moon and planets stay close to the ecliptic as well, so they periodically pass close to Regulus. Just this month, the list of close visitors has included Mars, Venus, and the Moon. Mercury is the least frequent caller. It's the closest planet to the Sun, so it never appears far from the Sun in our sky. That means Mercury has to wait for Regulus to come to it, shortly before sunrise or shortly after sunset.

Mercury has been creeping up on Regulus for a few nights. And it will remain close for a few more nights as it pulls away.

Look for Mercury and Regulus beginning about a half-hour after sunset, almost due west. They're so low in the sky that any trees or buildings along your horizon will hide them from view. Mercury is the brighter of the two targets. The view is better from the southern United States because the ecliptic stands at a slightly more favorable angle — a better view of a beautiful encounter.

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Aired Monday-Friday at 7:30am, 8:30am, 12:30pm, 4:30pm and 5:30pm

08/02/23 - TOKYO (AP) — A powerful typhoon has slammed Okinawa and other islands in southwestern Japan Wednesday with high winds injuring more than 30 people, three seriously, as it moved west making its way toward mainland China for now. The Japan Meteorological Agency said the typhoon may change course and head back to Japan later this week. Typhoon Khanun, which means jackfruit in Thai, was heading west at speeds of 15 kph (9 mph), packing surface winds of up to 166 kph (100 mph). It was at sea southwest of Okinawa's main island, the Japan Meteorological Agency said. A man found underneath a collapsed garage was later pronounced dead. Officials are investigating if the collapse was due to the typhoon.

08/16/23 - SANTA FE, N.M. (AP) — Prosecutors have received a second expert analysis of the revolver fired in the fatal shooting of a cinematographer by Alec Baldwin on the set of a Western film in New Mexico, as they weigh whether to refile charges against the actor. Baldwin has said the gun fired accidentally after he followed instructions to point it toward cinematographer Halyna Hutchins, who was behind the camera. Baldwin says he pulled back the hammer — but not the trigger — and the gun fired. The new analysis from an Arizona-based expert in ballistics and forensic testing of the reconstructed firearms says the trigger had to have been pulled or depressed. The report was released publicly Tuesday.

08/21/23 - ATHENS, Greece (AP) — Major wildfires are burning in Greece and on Spain's Canary Island of Tenerife off the northwest coast of Africa. Hot, dry and windy conditions are hampering the efforts of hundreds of firefighters battling the blazes, two of which have been burning for several days. In Greece, the body of a man was recovered from an area where two villages were being evacuated after a wildfire broke out Monday morning, while a major blaze was burning for the third day in the northeast of the country near the border with Turkey and several others broke out around the country. In Spain's Tenerife, a fire that police said was set deliberately last Tuesday continued to burn out of control.

Issue: Politics

Program Name: PBS Newshour

Aired Monday-Friday, 7-8pm

08/11/23 - Friday on the NewsHour, the Hawaiian wildfire death toll rises as Maui begins the long and arduous recovery process. The attorney general appoints a special counsel to investigate the FBI case against Hunter Biden as Trump's attorneys spar with the Justice Department. Plus, the Supreme Court blocks Purdue Pharma's bankruptcy plan that would shield the owners from future lawsuits.

08/15/23 - Tuesday on the NewsHour, former President Trump and 18 others are indicted in Georgia for attempts to overturn the results of the 2020 election. President Biden takes his economic message on the road as questions linger about his re-election campaign. Plus, life in Afghanistan remains dire amid firm Taliban control two years after the fall of the American-backed government.

08/28/23 - Monday on the NewsHour, a federal judge sets a trial date in the case accusing former President Trump of election interference, setting up a major legal battle before the next election. Russia's influence in Africa begins to shift following the death of mercenary leader Yevgeny Prigozhin. Plus, 60 years after the March on Washington, we delve into where issues of race and activism stand today.

Issue: The Environment

Program Name: StarDate

Aired daily at noon and 5pm Monday-Friday on WSND-FM

08/08/23 - The Moon, the planet Jupiter, and the star Aldebaran form a long, skinny triangle in the eastern sky at first light tomorrow. Jupiter looks like a brilliant star, to the upper right of the Moon. Fainter Aldebaran is the same distance to the lower left of the Moon.

The three bodies are at different distances from Earth. That means we see them as they looked at different times: a little more than a second ago for the Moon, 40 minutes for Jupiter, and 65 years for Aldebaran.

That's how long it takes the light to reach Earth from our perspective. But from the perspective of the light itself, there's no difference at all.

Light travels in "packets," known as photons. They move at the speed of light — 186,000 miles per second. Albert Einstein's theory of special relativity says that, as measured by an outside observer, time doesn't pass for anything moving at lightspeed. From a photon's perspective, it's born, it races through space, and it dies in the same instant.

Relativity says that clocks tick at different rates for objects that are moving at different velocities. But an object needs to move at a big fraction of the speed of light for the effect to become noticeable. And at the speed of light, the clock wouldn't tick at all.

So, on our clocks, a photon that leaves Aldebaran tonight will travel 65 years to reach Earth. But for the photon itself, when it hits the eye of a skywatcher in 2088, no time will have passed at all.

08/20/23 - One of the most famous of all skywatching directions is this: Arc to Arcturus, then spike to Spica. In other words, follow the arc formed by the handle of the Big Dipper until you come to the bright yellow-orange star Arcturus, which is high in the west at sunset now. From there, follow a straight line to Spica, the leading light of Virgo.

Tonight, there's another way to find Spica: Look for the crescent Moon, low in the west-southwest at nightfall. Spica is close to the left of the Moon.

The best measurements put Spica at a distance of 250 light-years. That means the light we see from Spica tonight began its high-speed trip across the galaxy in 1773 — three years before the United States declared independence. That would make Spica a good "semi-quincentennial" star — marking America's 250th birthday, in 2026.

Spica actually consists of two stars. They're quite close together — so close that you need a special type of telescope to see them as individual stars. One of the stars is moving into its "giant" phase — puffing up to many times its previous size. Millions of years from now, it should blast itself to bits as a supernova.

The other star isn't quite as massive as its companion, so it's still in the prime of life. It should end its life in a more gentle process. But no one is sure how the evolution and explosion of the heavier star will affect the companion, so its future is a bit cloudy.

08/30/23 - The full Moon has a case of the blues tonight — it's known as a Blue Moon.

There's a passel of blue moon definitions. The phrase "once in a blue moon" is applied to something that happens rarely. In the calendar, a Blue Moon can be the 13th full Moon in a year, or the third of four full Moons in a calendar season. Today, Blue Moon usually refers to a second full Moon in a calendar month. And that's what we get tonight.

There's a slight difference between the Moon's cycle of phases and the length of a month. A lunar cycle averages 29 and a half days. So in a month that has 30 days, a full Moon on the first of the month can be followed by another on the 30th. Months with 31 days can have full Moons on the 1st or 2nd, and again on the 30th or 31st.

The rarest of all blue moons are those that actually look blue. They happen when a big volcanic eruption or a major wildfire spews tiny bits of ash high into the sky. The ash scatters red light and allows bluer wavelengths to shine through — giving us a truly blue Moon.

And if you wonder where the modern definition of Blue Moon came from, we're partially to blame — or credit. Writer Deborah Byrd discovered the definition in a 1946 magazine article, and used it in a Star Date episode in January 1980. The article was mistaken, but Byrd found no evidence of that. The definition later was used in the board game Trivial Pursuit — ingraining the Blue Moon in popular culture.

Issue: Politics

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09/01/23 - GARY, Ind. (AP) — Police say a 5-year-old Chicago boy died from an apparent self-inflicted gunshot wound after he found a gun his uncle had brought inside a relative's Gary home. The boy's 32-year-old uncle who was visiting the home drove the boy to a hospital where he died Wednesday from his injuries. Police said in a statement they detained the man, who told officers he arrived at the home early Wednesday and, believing he was alone, "placed his handgun down and fell asleep." The man said he was awakened by a loud noise and saw the boy had been shot. He told officers he believed the child had accidentally shot himself. The man has not been charged while police continue investigating the shooting.

09/06/23 - CHICAGO (AP) — A lawsuit seeking class-action status accuses nine mobile home community management companies and a mobile home market data provider of conspiring to fix and inflate lot rental prices at more than 150 locations across the U.S. The lawsuit filed last week in federal court in Chicago claims the management companies bought up mobile home parks and used "competitively sensitive market data" provided by Grand Rapids, Michigan-based Datacomp Appraisal Systems Inc. to exchange pricing information and conspire to raise rents. It says lot rents rose by 9% per year between 2019 and 2021. Datacomp and its parent company did not immediately respond to requests for comment on the lawsuit.

09/25/23 - LOS ANGELES (AP) — A tentative deal has been reached to end Hollywood's writers strike after nearly five months. The Writers Guild of America reached the deal Sunday with an alliance of studios, streaming services and production companies. The guild's board and members must approve the agreement before the strike officially ends. Hollywood's actors remain on strike with no deal yet in the works. The writers walked off the job May 2 over issues including the size of staffs on shows, long-term payment for their work and the use of artificial intelligence in scripts. The terms of the new deal were not immediately announced.

Issue: Politics**Program Name: PBS Newshour****Aired Monday-Friday, 7-8pm**

09/05/23 - Tuesday on the NewsHour, Congress returns to Washington facing a deadline to keep the government funded and concerns about Senate leadership. The former leader of the far-right militia group the Proud Boys is sentenced for his role in the Jan. 6 attack. Plus, Saudi Arabia and Israel move closer to normalizing relations after decades of animosity, but many questions remain

09/14/23 - Thursday on the NewsHour, the flooding in Libya sparks renewed scrutiny of the nation's divided government, as the rising death toll forces officials to bury thousands in mass graves. Hunter Biden is indicted on federal gun charges weeks after a plea deal fell apart. Plus, facing the daunting prospect of trying to detect unexploded mines, Ukraine looks to advanced drones to protect its civilians.

09/19/23 - Tuesday on the NewsHour, President Biden calls on world leaders to promote peace and stand with Ukraine against Russia's invasion. Then, we report from on the ground in Ukraine where U.S. support is bolstering the effort to retake land from Russian forces. Plus, the auto workers strike enters its fifth day as a union leader warns of more potential factory shutdowns if talks come to a halt.

Issue: The Environment**Program Name: StarDate****Aired daily at noon and 5pm Monday-Friday on WSND-FM**

09/01/23 - It looks like Roman calendar makers just ran out of gas. They named the first eight months of the year for gods and goddesses, or for emperors with godly ambitions. But after that, all they could come up with were numbers indicating a month's position in the year.

September, for example, means "seventh month." We know that Star Date listeners are pretty bright, so you've no doubt noticed that September is actually the ninth month of the year. But in the original Roman calendar, the year began in March, and lasted only 10 months. January and February were added later.

In other cultures, the calendar year began at different times. In Egypt, for example, it started in July, when Sirius returned to view in the morning sky.

Sirius is the brightest star in the night sky. Just as important to the Egyptians, it returned to view about the same time as the Nile's annual life-giving floods. Using Sirius as a marker, the Egyptians established the first known 365-day calendar. Later, they added leap days to keep the calendar in sync with the seasons.

Much later, the Romans were fussing with a calendar that was a mess. Its months didn't add up to a full year, so extra days or months were added at whim. So in 46 B.C., Julius Caesar ordered up a new calendar. Rome adopted the 365-and-a-quarter-day year — perhaps influenced by the Egyptian calendar. But it kept the Roman names for the months — including September.

09/15/23 - A recently discovered planet in a star system 130 light-years away is on the border — the dividing line between a planet and a brown dwarf.

HD 206893c is the third member of its system. The main member is a star that's bigger and heavier than the Sun. It has a distant companion known as a brown dwarf — an object that's more massive than a planet but not massive enough to shine as a star.

The planet was hinted at by Gaia, a space telescope that's observing more than a billion stars. A big telescope on the ground provided more details on the system, and even snapped the planet's picture.

HD 206893c is a little bigger than Jupiter, the giant of our own solar system — and almost 13 times as heavy. That puts it on a border line. Anything less massive is definitely a planet, while anything heavier is most likely a brown dwarf.

Yet the planet is much brighter than most big planets. That suggests that it's "fusing" a form of hydrogen in its core — something that usually happens in light-weight brown dwarfs. So studying this odd object may help scientists nail down the definitions of both planets and brown dwarfs — and the dividing line between them.

HD 206893 is low in the southeast at nightfall, and is bright enough to see through binoculars. It's in the constellation Capricornus, not far to the upper right of the planet Saturn, which looks like a bright golden star.

09/30/23 - "Hot Jupiters" aren't very friendly. Few of the giant planets have nearby companion planets. That could mean that the hot Jupiters have kicked other planets away.

Hot Jupiters were the first planets discovered in other star systems. They're big, heavy balls of gas, like Jupiter, the giant of our own solar system. But while Jupiter is far from the Sun, hot Jupiters are quite close in, so they're heated to hundreds or thousands of degrees.

Such planets can't form that close to a star — it's just too hot. They must have been born farther out, then moved inward. The question is whether that's a gentle process, allowing the Jupiter to co-exist with other planets, or a more violent one that boots the other planets out of its way. And so far, the "violent" scenario has been the most likely, because astronomers have found few close companion planets.

But in a recent study, about one in eight hot Jupiters did have a nearby companion. Those Jupiter-like worlds must have migrated inward in the gentler process, sparing their sibling worlds. And warm Jupiters — those that are a little farther out — were more hospitable: about two-thirds had close companions. So there may be more than one way for a Jupiter to fall toward its parent star.

Our own Jupiter teams up with the Moon the next few nights. It looks like a brilliant star. It's well to the lower left of the Moon tonight, but will huddle much closer tomorrow night.