

Defense experts warn about climate change costs

By DAVID CHOI
Stars and Stripes

Leaders from defense institutes worldwide converged in Seoul, South Korea, last week to raise the alarm on military threats posed by “irreversible and abrupt climate change.”

Global temperatures are expected to reach or surpass a warming threshold of 2.7 degrees Fahrenheit in the next 20 years, United Nations climate change experts reported in August, “unless there are immediate, rapid and large-scale reductions in greenhouse emissions.”

Without action, the planet is in store for increasing heat waves, longer warm seasons and continued sea-level rise, contributing to coastal flooding and erosion, according to the report.

Panelists from the United States, France, Switzerland, Netherlands, India and Bangladesh gave their assessment of

these threats during a three-day seminar hosted by South Korea’s Ministry of Defense.

Tom Middendorp, Netherlands’ former chief of defense and chairman of the International Military Council on Climate and Security, warned Wednesday that nations had “a responsibility to prepare” for the implications of climate change.

“I cannot remember any other conflict in my military experience where we had this level of scientific foresight,” he said during the virtual portion of the seminar. “We know what’s coming to us.”

The Netherlands, according to Middendorp, appropriates a significant amount of its defense budget for “protection against the sea,” because much of its population lives below sea level.

“As sea level rises, it’s a big issue in a country like the Netherlands,” he said.

Severe heat patterns are also already having a direct impact on military equipment, according to Shafqat Munir, head of the Bangladesh Center for Terrorism Research.

Troops stationed in Mali as part of a United Nations’ peacekeeping force have been unable to use communication devices until the evening, when the temperature drops, Munir told the panelists.

“Excessive heat is going to render military equipment useless,” Munir said. “We’re already seeing some of that in action.”

The U.S. military recently described climate change as a top national security issue and incorporated it into its wargame simulations. A Defense Department assessment in 2019 found 79 installations impacted by climate change.

“Today, no nation can find lasting security without addressing the climate crisis,” Defense Sec-

retary Lloyd Austin said during a climate change seminar in April. “We face all kinds of threats in our line of work, but few of them truly deserve to be called existential. The climate crisis does.”

Climate change’s biggest impact on national defense is the way it “undermines and destabilizes societies,” said Sharon Burke, a former U.S. assistant secretary of defense for operational energy. She told the panel that while the military is unable to fight climate change through conventional means, it “may well result in military missions” ranging from humanitarian, disaster relief and combat.

“If the nations of this world are unable to cut greenhouse gas emissions ... if we fail, then militaries should be planning for profound insecurity and more military missions later in this century, or possibly sooner, if we hit certain tipping points,” Burke said.

Army-funded researchers build ‘shrimp-scale’ robot

By CHAD GARLAND
Stars and Stripes

The small, well-armored mantis shrimp can fire off a shell-cracking jab faster than a speeding bullet, and researchers have now managed to mimic that feat with a tiny robot.

Army-funded roboticists, engineers and biologists from Harvard and Duke universities recently published their findings on how the prawn-like pugilists can send out their club-like appendages in milliseconds with a force that can take off a crab’s arm with one strike, the Army Research Laboratory said in a statement.

A robotic model developed as part of the research accelerates at the equivalent of a car reaching 58 mph in 4 milliseconds, according

to a video by Harvard’s John A. Paulson School of Engineering and Applied Sciences.

“Actuator architecture like this offers impressive capabilities to small and lightweight mechanisms that need to deliver impulsive forces for the Army,” said Dr. Dean Culver, program manager at the lab, which is part of Army Combat Capabilities Development Command, as quoted in the statement.

The 1.5-gram, “shrimp-scale robot” isn’t as fast as the shrimp, but pound-for-pound it’s faster than any similar device at that scale, according to Harvard.

The research is the latest in a spate of military-funded studies into the extremely violent mantis shrimp, which is not really a

shrimp but a type of crustacean known as a stomatopod. They’re so unique, scientists have called them “shrimp from Mars.” They gained notoriety online about a decade ago when they were praised in an homage on the web comic *The Oatmeal*.

Capable of seeing some 100,000 colors — 10 times what humans can — they’re the only animal known to see circular polarizing light. That type of light is read by sensors in optical CD and DVD readers and satellite communications, but the sea creatures do it better, Air Force-funded research found over a decade ago.

The military has researched using their vision as a basis for developing undersea navigation without GPS.

Around 200 million years ago, the mantis shrimp developed special raptorial appendages, or “raps,” the University of California Museum of Paleontology in Berkeley says in an online exhibit. Some species are “spears” with sharp raps that stab soft prey through the heart. Others are “smashers” with club-like raps that crush shells and have been known to break aquarium glass and human fingers.

Military-funded researchers at the University of California Riverside have published a study into how their clubs’ shells withstood the force. That team has researched the animal’s shells for over a decade for ideas to help improve the design of things like football helmets and body armor.

Marines stage departing display for Australians

BY SETH ROBSON
Stars and Stripes

Marines preparing to head home from Australia showed off their gear and thanked Darwin residents Friday as their six months of field training Down Under comes to an end.

Thousands attended a community event at Robertson Barracks, the Marines' home away from home in Australia's Northern Territory, according to an email Friday from a spokesman for Marine Corps Rotational Force – Darwin.

Capt. Thomas deVries said the Marines and Australian Defence Force brought out Humvees, 7-ton trucks, armored personnel carriers, M777 howitzers, a High Mobility Artillery Rocket System, a sniper display, military working dogs and a robot dog.

They also showed off AH-1Z Viper, UH-1Y Venoms and Tiger helicopters, an MV-22B Osprey tilt-rotor and RQ-21 Blackjack drones.

Marines were thanking the community for their support and talking about the gear,

deVries said.

They spent the summer in field exercises that began with humanitarian and disaster response operations and ended in August with an island-seizing drill, deVries said.

The Marines finished the two-week Exercise Koolendong, their last field training event, on Aug. 31 at Bradshaw Field Training Area, he said.

The event involved more than 1,000 Marines working with 1,000 Australian soldiers in a task force commanded by Australian Army Brigadier Ash Collingburn, deVries said.

The rotational force was part of a combined task force for the first time, he said.

"It was definitely the largest exercise that has taken place for us this rotation," deVries said.

During Koolendong, the task force simulated the destruction of an enemy anti-ship missile positioned on a fictional island, he said.

Marines will head home to bases in the United States and on Okinawa over the next six weeks, deVries said.

Air Force site to make 3D printing of jets available

BY CHAD GARLAND
Stars and Stripes

A redesigned Air Force website will soon let users bring detailed models of A-10 "Warthogs," F-16 Fighting Falcons and other U.S. military jets into their own homes in both virtual and physical forms.

A handful of computer-rendered military aircraft models will be available for viewing in augmented reality on smartphones or mobile devices. Users will also be able to download files from the site to use in 3D printing.

The expected rollout of the new feature comes amid the military's intensifying use of computer modeling for virtual reality, augmented reality and 3D printing in areas such as pilot training and equipment maintenance. For example, some replacement parts and specialty tools have been 3D-printed.

The capabilities are slated to debut Oct. 1 on a new version of the Air Force website www.af.mil, Master Sgt. Dan DeCook of the Air Force public web team said in a webinar. It will be rolled out to the service's other sites over the weeks that follow.

"This is a huge thing," DeCook said. "It's much more complicated than other parts of the site."

The 3D graphics to be hosted on the af.mil site will be good enough for public affairs uses but not for printing replacement parts or the like, one official said in the webinar published online this week.

While the site is expected to launch with 10 models, the library will continue to expand, officials said.

"Eventually, we'll have all of our aircraft available," DeCook said.

Part of the complexity, he said, is that the detailed computer renderings, which can be viewed from any angle, take up more memory than other media elements.

The augmented reality option, which will let viewers see the aircraft as if it were right in front of them, will work only on mobile devices, said Elexus Parra, host of the webinar.

On most 3D models, the computer program will allow for a variety of scales to be entered based on the printer's size and capabilities.

Marine Corps removes all firefighting foam with PFOS from Okinawa bases

BY MATTHEW M. BURKE
AND MARI HIGA
Stars and Stripes

CAMP FOSTER — The Marine Corps on Okinawa this month replaced its supply of aircraft firefighting foam known to contain harmful contaminants PFOS and PFOA with a more environmentally friendly version, according to a Marine spokesman.

Most of the potentially toxic aqueous firefighting foam was at Marine Corps Air Station Futenma in Ginowan, but also at other camps and installations around the island prefecture, according to an email Thursday from Marine Corps Installations Pacific spokesman Lt. Col. Matthew Hilton.

Supplies of that foam were shipped elsewhere in Japan to be incinerated, Hilton said.

"This action significantly reduces the environmental risk posed by PFOS and PFOA on Okinawa and is another concrete demonstration of MCIPAC's transparency and its strong commitment to environmental stewardship," Hilton's statement reads.

PFOS and PFOA are human-made organic compounds. Studies involving lab animals show exposure to PFOA increases the risk of certain tumors of the liver, testicles, breasts and pancreas, according to the American Cancer Society. Studies involving humans and PFOA are so far inconclusive.

Hilton's statement said the Marines' new foam meets Department of Defense requirements and "still provides the same life-saving benefits in the event of a fire."

Americans in Germany commemorate 9/11

By DAVID EDGE,
PHILLIP WALTER WELLMAN
AND KARIN ZEITVOGEL
Stars and Stripes

RAMSTEIN AIR BASE — American service members, veterans and civilians in Germany marked 20 years since 9/11 on Friday and vowed to carry on the memory of the thousands killed that day and in the wars that followed.

At ceremonies at Ramstein Air Base, Daenner Kaserne in Kaiserslautern and Clay Kaserne in Wiesbaden, scores of people remembered those who died when hijacked planes crashed into the Twin Towers in New York, the Pentagon in Arlington, Va., and a field near Shanksville, Pa.

They also paid homage to the emergency workers who rushed in to try to save lives and to the troops who gave theirs while fighting the anti-terrorism campaigns that followed the attacks.

Standing in front of an enormous Amer-

ican flag and hundreds of firefighters' helmets and other equipment arranged in a triangle in a field at Ramstein Air Base, Maj. Gen. Randall Reed, commander of the Third Air Force, spoke of one of his abiding memories from 20 years ago.

"It was the picture of a New York City firefighter, standing amidst the rubble of Ground Zero, lifting the American flag out of the rubble and passing it to a hand waiting above," he told the crowd of around 100 airmen, first responders and civilians.

"That hand waiting above was an American soldier, who said five words: 'I've got it from here.'"

The U.S. military took that flag from the first responders and "carried it forward," he said, taking it to Afghanistan, where they gave hope to the oppressed, inspired children to pursue an education and helped their parents provide better lives for them.

But throughout America's longest war, "we knew that flag that went forward

would come home," he said, alluding to the end of U.S. involvement in the war in Afghanistan, where around 2,200 American troops and hundreds of thousands of civilians lost their lives over the past 20 years.

President Joe Biden earlier this year set Sept. 11 as the deadline for U.S. troops to leave Afghanistan. They completed their pullout weeks ago amid chaotic scenes in Kabul as Afghans scrambled to be evacuated and a suicide bomber killed 13 U.S. troops and scores of Afghans.

But the flag came home, Reed said, "a piece carried by each of the 122,000 people who fled Afghanistan."

More than 30,000 of those Afghan evacuees were given temporary shelter at Ramstein before moving on to new lives in the United States.

They are "part of a new generation who will carry the flag and say as Afghan-Americans, 'We'll take it from here,'" Reed said.

Bush warns of extremism at home in appeal to US

Associated Press

SHANKSVILLE, Pa. — Warning that the nation was falling into division and extremism, former President George W. Bush appealed Saturday for a return to the spirit of cooperation that emerged — almost instantaneously — after the 9/11 attacks 20 years ago.

Delivering the keynote address at the national memorial to the victims of Flight 93, who forced down their airplane hijacked by al-Qaida terrorists before it could be used as a weapon against the nation's capital, Bush warned of "violence that gathers within."

"There is little cultural overlap between violent extremists abroad and violent extremists at home," he said. "But in their disdain for pluralism, in their disregard for human life, in their determination to defile national symbols, they are children of the same foul spirit. And it is our continuing duty to confront them."

Bush's warning came barely eight months after the violent insurrection at the U.S. Capitol by supporters of then-President Donald Trump attempting to overturn the results of the 2020 election. It marked some of Bush's sharpest criticism of that attack and appeared to be an implicit criticism of Trump's brand of politics.

Bush lamented that "so much of our politics has become a naked appeal to anger, fear and resentment."

He admitted he had no easy solutions. Instead, he channeled the heroism of the Flight 93 victims, and the determined spirit of a wounded nation to emerge from the tragedy stronger.

"On America's day of trial and grief, I saw millions of people instinctively grab for a neighbor's hand and rally to the cause of one another," Bush said. "That is the America I know."

Al-Qaida chief appears in 9/11 video amid rumors he is dead

Associated Press

BEIRUT — Al-Qaida leader Ayman al-Zawahri appeared in a new video marking the 20th anniversary of the Sept. 11, attacks, months after rumors spread that he was dead.

The SITE Intelligence Group that monitors jihadi websites said the video was released Saturday. In it, al-Zawahri said that "Jerusalem Will Never be Judaized," and praised al-Qaida attacks including one that targeted Russian troops in Syria in January.

SITE said al-Zawahri also noted the U.S. military's withdrawal from Afghanistan after 20 years of war.

It added that his comments do not necessarily indicate a recent recording, as the withdrawal agreement with the Taliban was signed in February 2020.

Al-Zawahri made no mention of the Taliban's takeover of Afghanistan and the capital Kabul last month, SITE added. But he did mention a Jan. 1 attack that targeted Russian troops on the edge of the northern Syrian city of

Raqqa.

Rumors have spread since late 2020 that al-Zawahri had died from illness. Since then, no video or proof of life surfaced, until Saturday.

"He could still be dead, though if so, it would have been at some point in or after Jan 2021," tweeted Rita Katz, SITE's director.

Al-Zawahri's speech was recorded in a 61-minute, 37-second video produced by the group's as-Sahab Media Foundation.

In recent years, al-Qaida has faced competition in jihadi circles from its rival, the Islamic State group. ISIS rose to prominence by seizing large swaths of Iraq and Syria in 2014, declaring a "caliphate" and extending affiliates to multiple countries across the region.

ISIS' physical "caliphate" was crushed in Iraq and Syria, though its militants are still active and carrying out attacks. Abu Bakr al-Baghdadi, the shadowy leader of ISIS was killed by U.S. special forces in a raid in northwestern Syria in October 2019.

Federal worker groups differ on vaccine edict

The Washington Post

WASHINGTON — The reaction of federal employee organizations to President Joe Biden's new vaccine mandate demonstrates it is not a simple yea or nay proposition.

A key element in his far-reaching, aggressive assault against COVID-19 is a requirement for "all executive branch federal employees to be vaccinated," he said Thursday, repeating "all" for emphasis. "And I've signed another executive order that will require federal contractors to do the same."

Biden has the authority to order jabs for the 2.1 million civilian feds, noting, despite his repetition, "exceptions only as required by law." But should he, and how should he, are issues raised by employee groups, whose reactions range from welcoming to flat-out opposing the mandate.

While the largest federal union, the American Federation of Government Employees, has "strongly encouraged" vaccinations for its members, it doesn't want Biden's executive order mandate to override collective bargaining prerogatives.

Shortly before Biden spoke, the second largest federal labor organization, the National Treasury Employees Union, urged employee vaccinations, but did so in an indecisive statement reflecting a divide among its members. Acknowledging Biden's "legal right" to issue the order, NTEU President

Tony Reardon said his "members, like American society at large, will have differing reactions to the new policy. Some employees will disagree. Others will welcome the additional security that comes with knowing that all of their co-workers are vaccinated."

The Senior Executives Association, which represents top-level civil servants, "fully supports President Biden's action," said its president, Bob Corsi. The Professional Managers Association, representing Internal Revenue Service supervisors, welcomed the vaccine mandate as "clear, consistent guidance to all employees."

For any vaccine-hesitant employees, PMA executive director Chad Hooper said they "should defer to the expertise of our peers across government. As we would expect our colleagues at the CDC and FDA to trust our tax expertise, so too we expect the IRS workforce to trust their medical expertise."

That's logic the Federal Law Enforcement Officers Association does not embrace.

Saying "vaccination should be promoted through education and encouragement — not coercion," FLEOA President Larry Cosme said the "government should trust its employees to make their own medical decision under consultation with their doctor, not mandated by their employer."

Newsom, GOP rivals seek votes in Calif. recall's final weekend

Associated Press

OAKLAND, Calif. — Democratic allies of California Gov. Gavin Newsom continued to express confidence Saturday in his chances of beating back a recall but warned his supporters not to let up on urging people to vote as they seek a decisive win, while Republicans said the contest is far from settled.

"We don't need to just win by a little, we need to win by a lot. We need to send a message: Hands off our democracy, hands off our California," said April Verrett, president of the SEIU Local 2015, as she rallied union members who have been among Newsom's biggest supporters.

Newsom joined the Oakland rally as his Republican rivals made their cases up and down the state and both major parties sent volunteers out to knock on doors and urge their supporters to vote. The race concludes Tuesday, and more than a third of voters have already mailed in their ballot or voted early in person.

A recent poll from the Public Policy Institute of California shows Newsom likely to survive, and Democrats are making a stronger showing in early voting. But the GOP is expecting a larger turnout on Election Day, given many Republicans are skeptical of voting by mail.

"Anyone who is counting the recall out at this point is not really in touch with what's actually going on with this movement," said Republican Assemblyman Kevin Kiley, who is running to unseat Newsom and is favored by some of the recall's original supporters.

The ballot includes two questions: Should Newsom be recalled from office and, if so, who should replace him? If a majority of voters want him gone, he would be replaced by whoever gets the most votes among the 46 candidates on the replacement ballot.

Newsom has encouraged his supporters to vote "no" on the first question and skip the second one all together, something Republican rival Kevin Faulconer criticized as he cast his own ballot in San Diego, where he previously served as mayor.

"It's very important that folks get out and vote. The fact that the Governor doesn't want people to vote on question two, that is voter disenfranchisement," he said, according to CBS News 8 in San Diego.

Iran nuclear site cameras to get new memory cards

Associated Press

TEHRAN, Iran — Iran agreed Sunday to allow international inspectors to install new memory cards into surveillance cameras at its sensitive nuclear sites and to continue filming there, averting a diplomatic showdown this week.

The announcement by Mohammad Eslami of the Atomic Energy Organization of Iran after a meeting with the director-general of the International Atomic Energy Agency, Rafael Grossi, in Tehran leaves the watchdog in the same position it has faced since February, however.

Tehran holds all recordings at its sites as negotiations over the U.S. and Iran returning to the 2015 nuclear deal remain stalled. Meanwhile, Iran is now enriching small amounts of uranium to its closest-ever levels to weapons-grade purity as its stockpile continues to grow.

"Today [we] were able to have a very constructive result, which has to do with the continuity of the operation of the agency's equipment here," Grossi said. It "is indispensable for us to provide the necessary guarantee and information to the ... world that everything is in order."

AMERICAN ROUNDUP

Court: Catholic school wrongfully fired gay sub

NC CHARLOTTE — A gay substitute teacher was wrongfully fired by a Roman Catholic school in North Carolina after he announced in 2014 on social media that he was going to marry his longtime partner, a federal judge has ruled.

U.S. District Judge Max Cogburn ruled that Charlotte Catholic High School and the Roman Catholic Archdiocese of Charlotte violated Lonnie Billard's federal protections against sex discrimination under Title VII of the Civil Rights Act. Cogburn granted summary judgment to Billard and said a trial must still be held to determine appropriate relief for him.

"After all this time, I have a sense of relief and a sense of vindication. I wish I could have remained teaching all this time," Billard said in a statement released Friday by the American Civil Liberties Union, which represented him in court. "Today's decision validates that I did nothing wrong by being a gay man."

Suspect arrested, officer on leave after shooting

MD TOWSON — Towson University has placed a veteran campus police officer on paid leave after a triple shooting on campus, the university announced.

Baltimore County Police announced in a news release that a 19-year-old had been arrested in the case. The suspect's identity was not released.

After an initial review, the officer was suspended pending a full investigation into whether "established procedures" were performed during an unsanc-

tioned gathering on campus that attracted hundreds of people and where three people, including one student, were shot, the university said in a news release.

Students and teachers' 9/11 images displayed

KY BOWLING GREEN — Images captured by students and teachers from Western Kentucky University's photojournalism program in the aftermath of the 9/11 World Trade Center attack will be displayed this month in Bowling Green, the school said.

Ridley and Hull Wealth Management Group of Stifel and the WKU School of Media are having an open house at the Pushin Building. The exhibit of 28 images will be open to the public this month, the school said in a news release.

The students headed to the site of the World Trade Center attack soon after the towers fell 20 years ago. By the end of the week, two faculty members had joined them.

Together they discovered stories of the people who had worked in the buildings, their families and friends and the people who were trying to rescue them.

State troopers accused in fake vaccine cards resign

VT WATERBURY — Three Vermont state troopers who are accused of being involved in a scheme to create fraudulent COVID-19 vaccination cards have resigned, state police said.

Troopers Shawn Sommers and Raymond Witkowski resigned after a fellow trooper told supervisors about the alleged scheme. Trooper David Pfindel

resigned following further investigation, according to a state police news release.

The three ex-troopers are suspected of having varying roles in the making of fraudulent vaccination cards, according to the release.

Sommers and Witkowski both joined the Vermont State Police in July 2016. Pfindel was hired in January 2014, police said.

Algae bloom reaches danger level at reservoir

CA LOS BANOS — A bloom of toxic blue-green algae in a Central California reservoir has reached the danger level, the state Department of Water Resource said.

Lab results from tests showed an increase in toxin levels at San Luis Reservoir in Merced County, the department said.

Boating is allowed but people and pets should avoid physical contact with the water and algal scum. Fish and shellfish from the lake should also be avoided.

Toxic blue-green algae is also known as cyanobacteria. It can cause eye irritation, allergic skin rash, mouth ulcers, vomiting, diarrhea and cold- and flu-like symptoms.

Pandemic a factor in village relocation efforts

AK BETHEL — The COVID-19 pandemic has affected the pace of moving residents from Newtok, an Alaska community threatened by erosion, to another village, officials said. Money also has been an issue.

Nine homes in the new village of Mertarvik that were started last year remain unfinished, and no one has moved from Newtok to Mertarvik since 2019, KYUK

Public Media reported. Newtok had an estimated 220 residents last year.

Patrick LeMay, who is leading the building effort in Mertarvik, said shortages for materials have persisted.

Many of the workers building homes in Mertarvik are Newtok residents. LeMay said three workers from Newtok contracted COVID-19 in August. Many remaining laborers chose to stop working due to concerns over an outbreak, KYUK reported.

Carl said Newtok lost over 100 feet of its coast since April.

Police may be exempt from vaccine mandate

OR PORTLAND — Portland city officials because of new guidance may need to exempt the police bureau from an order that all employees be fully vaccinated against COVID-19 or risk losing their jobs.

The city attorney's office said the order requiring police to be vaccinated is now legally dubious because of new guidance from the Oregon Health Authority, Oregon Public Broadcasting reported.

Under Oregon law, local municipalities can only issue vaccine mandates for police officers if a federal or state rule requires it. The city believed Gov. Kate Brown's vaccination mandate issued last month for state health care workers covered officers because they receive some medical training.

But the new guidance said law enforcement was "probably not" subject to the governor's orders as providing medical care was "likely not a fundamental part of their job."

— From wire reports



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Brewers' Burnes, Hader combine on no-no

Associated Press

In a sometimes sticky season, Corbin Burnes got a grip on history.

Milwaukee's ace combined with reliever Josh Hader to pitch baseball's record ninth no-hitter this season, breaking a mark set when pitchers began throwing overhand in 1884 as the Brewers beat the Indians 3-0 on Saturday night in Cleveland.

Months after Major League Baseball clamped down on pitchers' use of illicit foreign substances following a rash of early no-hitters, Burnes cemented 2021 as the Season of the No-No with just the second no-hitter in Brewers history.

"It was a masterpiece," Milwaukee manager Craig Counsell said.

Burnes (10-4) struck out 14 with a career-high 115 pitches over eight innings, taking a perfect game into the seventh while overpowering the Indians, who were no-hit for a record third time in 2021. All of those came with starter Zach Plesac on the

mound.

This time, Cleveland was stymied by Burnes — who has become a Cy Young contender as the Brewers run away with the NL Central — and Hader, one of the game's top closers.

"Anyone would want to keep pitching in that situation, but if there was anyone I would want out there for the ninth, it would be Josh Hader," Burnes said. "There were no nerves with him. It was more like a done deal when he came in."

The right-handed Burnes was in control from the start, striking out 11 of his first 14 hitters and retiring the first 18 in order. After walking Myles Straw to start the seventh, the 26-year-old got through the eighth thanks to a diving catch by center fielder Lorenzo Cain on Owen Miller's liner.

"I was definitely on my horse, ready to go get that one," Cain said. "You need a little bit of everything to go right in a no-hitter."

The Progressive Field crowd boomed as Hader came on in the

ninth. He overpowered Oscar Mercado, striking him out to start the inning. Then, first baseman Jace Peterson went in to foul territory to make a lunging catch for the second out.

Hader ended the no-hitter by getting Straw to flail at a pitch in the dirt for his 31st save. The Brewers stormed the field to share hugs and high-fives with a signature victory in their run-away season.

"I had to fight pretty hard (with Counsell) for the eighth to come back out, so I knew I had no shot for the ninth," Burnes said.

Juan Nieves pitched the Brewers' previous no-hitter on April 15, 1987, at Baltimore.

Burnes dropped his ERA to 2.25 and has more than doubled his career high for strikeouts with 210 in 152 innings. He's been vying with Philadelphia's Zack Wheeler and the Dodgers' Max Scherzer for the NL Cy Young Award. This gem, no doubt, will have some sway with voters.

"Corbin felt good after the

eighth, but knowing you're putting in Josh Hader to finish it played a part in the decision," Counsell said.

The Brewers improved to a franchise-record 33 games over .500 while slimming their magic number to clinch the division to eight.

Arizona rookie Tyler Gilbert had thrown the majors' most recent no-hitter on Aug. 14, and the Chicago Cubs threw the only previous combined effort on June 24. The other no-hitters this season were thrown by San Diego's Joe Musgrove (April 9), Carlos Rodón of the Chicago White Sox (April 14), Cincinnati's Wade Miley (May 7), Detroit's Spencer Turnbull (May 18) and the Yankees' Corey Kluber (May 19).

Most of those gems were thrown before MLB cracked down on the use of sticky foreign substances by pitchers in late June.

"I don't think anyone's going to be upset about putting a no-hitter in the books," Burnes said.

Judge smacks pair of HRs in Yankees win over Mets

Associated Press

NEW YORK — Aaron Judge tied it with his second homer of the game in the eighth inning, Mets infielder Javier Báez gave away the lead with an error a few at-bats later and the Yankees beat their crosstown rivals 8-7 Saturday at Citi Field.

The Yankees snapped a seven-game skid and ended a run of 11 losses in 13 games since a 13-game winning streak pushed them to the AL wild-card lead. They dropped into a tie with Toronto for the second wild card. The Mets remained five games behind NL East-leading Atlanta after the Braves lost to the Marlins.

Giants 15, Cubs 4: Tommy La Stella and Brandon Belt hit three-run homers and San Francisco won at Chicago for its sixth straight victory.

Dodgers 5, Padres 4: Mookie Betts hit a tiebreaking, three-run homer with two outs in the fifth inning and host Los Angeles held off San Diego.

Red Sox 9, White Sox 8 (10): Travis Shaw hit a tiebreaking single in the 10th inning after belting a three-run homer in the third and Boston won at Chicago.

Rangers 8, Athletics 6: Jonah Heim hit a two-run home run with two outs in the eighth to cap a five-run rally, lifting Texas to a win at Oakland.

Blue Jays 11-11, Orioles 10-2: Bo Bichette and Alejandro Kirk hit a pair of two-run homers in an 11-run seventh and Toronto completed a doubleheader sweep at Baltimore.

In the opener, George Springer hit a two-out, two-run homer in the seventh.

Rays 7, Tigers 2: Joey Wendle tripled and homered, 30-year-old Dietrich Enns won for the first time in the major leagues and Tampa Bay won at Detroit.

Cardinals 6, Reds 4: Nolan Arenado hit a two-run homer in the eighth and had three RBIs, and Paul DeJong had a solo shot to help host St. Louis beat Cincinnati.

Phillies 6, Rockies 1: Zack Wheeler

steadied the slumping Phillies with eight strikeouts and Bryce Harper homered to lead host Philadelphia past Colorado.

Pirates 10, Nationals 7: Bryan Reynolds hit his 23rd home run of the season and drove in three runs in Pittsburgh's victory over visiting Washington.

Twins 9, Royals 2: Jorge Polanco hit two of Minnesota's five home runs and Michael Pineda pitched five strong innings in his return to the rotation in a win over visiting Kansas City.

Marlins 6, Braves 4: Bryan De La Cruz and Jesús Sánchez hit back-to-back home runs in the eighth inning against Richard Rodríguez in Miami's victory at Atlanta.

Angels 4, Astros 2: Luis Rengifo homered with three RBIs to lead Los Angeles to a win at Houston.

Diamondbacks 7, Mariners 3: Daulton Varsho homered and drove in four runs as Arizona won at Seattle to snap a six-game losing streak and deal a blow to the Mariners' wild-card hopes.

Oregon makes statement for Pac-12 at Ohio State

Associated Press

No. 12 Oregon rolled into No. 3 Ohio State without its best player available and walked out with a victory that has the potential to define a season for both the Ducks and the Pac-12.

The consensus best team in the Pac-12 beat the consensus best team in the Big Ten on Saturday for the league's first nonconference victory against a top-five team since Stanford beat Notre Dame in 2015.

Make no mistake, this was much bigger than that.

Since 2015, the Pac-12 has made the College Football Playoff just once and far too often has come out on the short end of these types of marquee games. It has turned the conference into a punching bag for the rest of major college football.

The last two weeks, UCLA pushed around LSU and then Oregon beat the big, bad Buckeyes in the Horseshoe, while pass-rushing demon and potential top-five NFL draft pick Kayvon Thibodeaux (foot injury) watched from the sideline along with star linebacker Justin Flowe.

With new Commissioner George Kliavkoff at Ohio Stadium, hanging around with alliance buddy and Big Ten Commissioner Kevin Warren, the Pac-12 got a chance to puff out its chest.

At least for a few hours.

It was not a banner day across the conference. No. 21 Utah had its nine-game winning streak against BYU snapped. Washington was crushed by Michigan. Cal let one get away at TCU. No. 14 USC looked awful in its conference opener to a Stanford team that nearly was shut out by Kansas State in its opener.

The Ducks' victory more than balanced out the bad news.

It was a masterpiece from Oregon's offense and coordinator Joe Moorhead. The Ducks sliced up the Buckeyes for 269 yards rushing and 7.1 yards per pop.

Ryan Day had not yet lost a regular-season game as Ohio State's coach. He now gets a taste of what that's like in Columbus. Talk radio will not be kind to Buckeyes defensive coordinator Kerry Coombs.

"Hard to express in words the magnitude of coming out here down a couple of guys due to injury and just playing gritty, gutsy football, executing at a high level," Cristobal said. "A tremendous job of preparation and

turning that into game reality by our players, by our coaching staff."

Peacock struts

The most notable thing about No. 8 Notre Dame against Toledo was where the game was available to be watched. Not NBC, like most Notre Dame home games. This one was available only on NBC's Peacock subscription streaming service.

Needless to say, a lot of casual college football fans, and probably some Notre Dame fans, too, were comfortable sitting this one out.

The Rockets, however, gave the Irish all they could handle and it felt reminiscent of when Appalachian State upset Michigan in 2007 on the newly launched Big Ten Network. There had to be more than a few folks wondering if there was a free trial available for Peacock somewhere.

The Rockets ultimately melted down in just about every way possible and Notre Dame survived for a second straight week.

The Fighting Irish defense has problems. The offensive line has been spotty. And who is playing quarterback for this team?

Around the country

Led by BYU, all the teams the Big 12 invited to the conference on Friday won on Saturday. No. 7 Cincinnati, UCF and Houston all blew out overmatched foes. ... The Cougars seemed to have found another fun quarterback in Jaren Hall to replace Zach Wilson ... For all Matt Campbell's success at Iowa State, and it's remarkable given the history of the program, the Cyclones just can't beat Iowa. Iowa becomes the sixth team since 2000 to open a season by beating two ranked teams, and the first since LSU in 2015. ... A week after Florida State was inspiring in a hopeful loss to Notre Dame, the Seminoles found a new bottom. The loss to Jacksonville State on the final play of the game was Florida State's first against an FCS team. ... Welcome to the SEC, Texas. The Longhorns got thumped by former Southwest Conference rival and future Southeastern Conference rival Arkansas. The Razorbacks ran for 333 yards, a dream performance for Sam Pittman, the former offensive line coach who has turned around the Hogs. ... The SEC West could get interesting behind Alabama. No. 5 Texas A&M's offense managed only 10 points in beating Colorado and quarterback Haynes King was injured.

Air Force tops Navy; Army holds on for win

Associated Press

ANNAPOLIS, Md. — No matter the result, this was going to be a special day to play football for Air Force or Navy.

Brad Roberts ran for two touchdowns and Haaziq Daniels added one, and Air Force held the Midshipmen to one first down before the fourth quarter in a 23-3 victory Saturday. The outcome always matters between these two teams — but this game was significant because the two service academies were playing on the 20th anniversary of the 9/11 terrorist attacks.

"For me, it kind of puts everything in perspective," Navy running back Chance Warren said. "I'm sitting here sour and very upset about a loss, but 20 years ago today, so many people lost loved ones. So it just kind of put it in perspective that ... I'm out here playing college football with some of my best friends, and brothers for life."

This was the earliest meeting in series history between these teams, scheduled with 9/11 in mind. The pregame pageantry felt even more meaningful than usual. The players took the field carrying American flags before the game. At halftime, the names of Navy and Air Force grads lost on 9/11 were put on the videoboard.

"I think in the big picture you come to the Air Force and Naval Academy to serve," Air Force coach Troy Calhoun said. "We'll never ever forget, not only those that perished and their families, but certainly just the remarkable, the way they answered the duty, in terms of our first responders."

Army 38, Western Kentucky 35: Christian Anderson rushed for a career-high 119 yards and passed for a touchdown and the host Black Knights survived a Hilltoppers rally.

Trailing 35-14 midway through the second quarter, WKU (1-1) closed the gap to seven points on Bailey Zappe's 14-yard pass to Jerreth Sterns with just under five minutes remaining in the game. But Army (2-0) recovered a WKU onside kick and Cole Talley kicked a 31-yard field goal, giving the Black Knights the cushion they needed after the Hilltoppers scored a touchdown with 21 seconds left.

Jakobi Buchanan ran for a pair of Army touchdowns. It was Army's first victory over WKU in four meetings since the teams' first meeting in 2013.

While WKU was dominant in the air, Army rushed for 339 yards and almost doubled the Hilltoppers in time of possession.

Qualifier to champ: Raducanu wins Open

Associated Press

NEW YORK — British teenager Emma Raducanu arrived in New York last month with a ranking of 150th, just one Grand Slam appearance to her name and a flight booked to head out of town after the U.S. Open's preliminary rounds in case she failed to win her way into the main tournament.

And there she was in Arthur Ashe Stadium on Saturday, cradling the silver trophy to complete an unlikely — indeed, unprecedented — and surprisingly dominant journey from qualifier to major champion by beating Canadian teenager Leylah Fernandez 6-4, 6-3 in the final.

“You say, ‘I want to win a Grand Slam.’ But to have the belief I did, and actually executing, winning a Grand Slam,” Raducanu said, “I can’t believe it.”

Who could?

It’s all so improbable.

Until three months ago, she had never played in a professional tour-level event, in part because she took 18 months for a combination of reasons: the pandemic and her parents’ insistence that she complete her high school degree.

“My dad is definitely very tough to please,” the 18-year-old Raducanu said with a smile Saturday evening. “But I managed to today.”

She is the first female qualifier to reach a

Grand Slam final, let alone win one. She captured 10 matches in a row at Flushing Meadows — three in qualifying, seven in the main draw — and is the first woman to win the U.S. Open title without dropping a set since Serena Williams in 2014.

Raducanu, who was born in Toronto and moved to England with her family at age 2, also is the first British woman to win a Grand Slam singles trophy since Virginia Wade at Wimbledon in 1977.

There were more firsts, too, emblematic of what a rapid rise this was. For example: Raducanu is the youngest female Grand Slam champion since Maria Sharapova was 17 at Wimbledon in 2004.

This was the first major final between two teens since Williams, 17, beat Martina Hingis, 18, at the 1999 U.S. Open; the first between two unseeded women in the professional era, which began in 1968.

Fernandez, whose 19th birthday was Monday and who is ranked 73rd, was asked during a pre-match interview in the hallway that leads from the locker room to the court entrance what she expected Saturday’s greatest challenge to be.

“Honestly,” she responded, “I don’t know.”

Fair. Neither she nor Raducanu could have.

This was only Fernandez’s seventh major

tournament; she hadn’t made it past the third round before.

As tears welled in her eyes after the final, she told the Arthur Ashe Stadium crowd: “I hope to be back here in the finals and this time with a trophy — the right one.”

Both she and Raducanu displayed the poise and shot-making of veterans at the U.S. Open — not two relative newcomers whose previous head-to-head match came in the second round of the Wimbledon juniors event just three years ago.

Raducanu broke to go up 4-2 in the second set, held for 5-2 and twice was a point from winning the title in the next game. But under pressure from Fernandez, she let both of those opportunities slip away by putting groundstrokes into the net.

Then, while serving for the match at 5-3, Raducanu slid on the court chasing a ball to her backhand side, bloodying her left knee while losing a point to give Fernandez a break chance. Raducanu was ordered by chair umpire Marijana Veljovic to stop playing so a trainer could put a white bandage on the cut.

As if she’d been there before, Raducanu saved a pair of break points after the resumption, then converted on her third chance to close it out with a 108 mph ace. She dropped her racket, landed on her back and covered her face with both hands.

Pierce, Bosh and Russell (again) inducted into Hall

Associated Press

Nine teams passed on Paul Pierce in the 1998 NBA draft, and if you think he doesn’t remember each and every one of them, then you don’t know Paul Pierce.

The newly inducted basketball Hall of Famer called out by name — in order — the teams with the first nine picks that year and thanked them for allowing him to slip to the Boston Celtics.

“I appreciate that. Thank you for passing on me. It added fuel to my fire,” Pierce, who had been expected to go as high as No. 2 overall, said in his acceptance speech in Springfield, Mass., on Saturday night. “To this day I don’t understand how I slipped to No. 10. But you know

everything happened for a reason. Going to the Celtics, I’m grateful.”

Four months after the pandemic-delayed induction of the Class of 2020, including Kobe Bryant, the Hall community gathered to enshrine 16 more new members — its biggest class ever. Many in the crowd wore masks; three-time WNBA MVP Lauren Jackson wasn’t able to attend because she was back in Australia in lockdown.

Bill Russell, who was inducted as a player in 1975, was honored for his coaching career; he is the fifth person to be inducted as both a player and a coach. But to former President Barack Obama his greatest role was what he accomplished off the court during the civil rights

movement of the 1960s.

“Bill Russell, perhaps more than anyone else, knows what it takes to win, and what it takes to lead,” Obama said in a video. “As tall as Bill Russell stands, his example and his legacy rise far, far higher.”

Others joining the Hall were: Villanova coach Jay Wright, defensive Pistons star Ben Wallace, two-time NBA champion Chris Bosh, longtime Portland and Sacramento coach Rick Adelman, Washington and Sacramento All-Star Chris Webber and two-time Olympic gold medalist Yolanda Griffith.

WNBA President Val Ackerman, longtime coach Cotton Fitzsimmons and scouting pioneer Howard Garfinkel were inducted as contributors. Clar-

ence “Fats” Jenkins was picked by the Early African American Pioneers Committee, Croatia and Chicago Bulls star Toni Kukoc was tabbed by the International Committee, Bob Dandridge by the Veterans Committee and Pearl Moore from the Women’s Veterans Committee.

Russell, 87, was honored as the first Black coach in NBA history. Taking over the Celtics from Red Auerbach in 1966 and staying on as a player-coach for two more years, Russell guided Boston to NBA titles in 1968 and ’69.

Russell was present and wearing a Celtics mask at the ceremony, but his speech was presented as a prerecorded video.