

Congressional Schedule. The House is in recess. The Senate is in session through early next week. (*More below*.)

U.S. Economic Outlook

Weekly numbers and long-term outlook. 787,000 people applied for unemployment benefits for the first-time last week, a drop in the numbers from the previous week. Another 345,440 people claimed Pandemic Unemployment Assistance, the program for self-employed or gig workers, for the first time, which is also a decrease from last week. A total of 23.1 million people are claiming some kind of unemployment benefits. Some retail sectors have shown growth, including exercise equipment, outdoor gear (including patio heaters and furniture for both home and restaurant use), and cars. As we move into winter and the expected resurge in cases (and corresponding impact on businesses), some retail sectors are preparing for shortages in goods. For example, if you've noticed certain specialty foods or drinks missing from the shelves, it's likely because priority is being given to the more popular brands (like regular Coke versus caffeine-free Diet Coke) because of limited ingredients, packaging, or production capacity. Some companies are still catching up from this spring, and any change in production or demand could set them back again.

Coronavirus government operations update

National perspective. As of Friday afternoon, the number of confirmed cases in the U.S. is at least 8,421,000 with at least 223,000 deaths. On Wednesday, the Centers for Disease Control and Prevention issued new guidance on what is considered a "close contact" in terms of potentially catching and spreading the coronavirus. The new guidelines say that anyone who has spent a total of 15 minutes over 24 hours within six feet of an infected person is considered a close contact. And numbers continue to rise in the Midwest and South, with 31 states now classified in the red zone (more than 100 confirmed infections per 100,000 people). While the weather is still temperate in most parts of the country, cooler weather is expected to keep people indoors in the coming months, meaning unless people take precautions, this rise will likely continue. On Thursday there was some good news: independent advisers to the Food and Drug Administration met to discuss how to assess the first results from the experimental vaccine trials happening right now. Those first results could happen within the next month, and this groundwork will help inform deliberations on whether to recommend any of those vaccines for public use.

Washington metro area. Overall coronavirus cases in <u>D.C.</u>, <u>Maryland</u>, and <u>Virginia topped 326,000 by Friday afternoon</u>, with at least 8,000 deaths.

Pentagon. The Pentagon remains in Phase Two (Bravo), which means a maximum of 80-percent of staff allowed on-site, though the actual number of staff on site tends to be much lower. Additional precautions are being put into place, including frequent testing for personnel working in mission essential roles, ensuring greater distance between work stations, discontinuing or significantly limiting use of the conference rooms, and staggered times of arrival for shifts. Of note, the Joint Chiefs have completed their self-isolation and are back at work.

NASA. All of NASA's facilities are at Stage 3 of its pandemic response plan. (Stage 3 means mandatory telework except for those needed for critical work for missions.)

The White House. Out of an abundance of caution, several members of the executive branch are self-isolating after being in contact with others who tested positive for the coronavirus. David Hale, the undersecretary of State for political affairs, CIA Director Gina Haspel, and national security adviser Robert O'Brien met with a foreign official from Lebanon, Major Gen. Abbas Ibrahim, who tested positive for the virus after their meeting. O'Brien has already had the virus. And Secretary of Energy Dan Brouillette is also taking precautions after two members of his security detail tested positive for the virus.

Congress. Access to the congressional office buildings and capitol complex continues to be limited, open only to Members, Congressional staff, and credentialed press. Sen. Chris Murphy called for a mandatory mask requirement to be adopted for the Senate, along with free tests for all Capitol complex staff, including Capitol Police and facilities staff. It is unclear how Sen. Murphy planned to pay for the PPE and thousands of tests which can average \$150 per test, per person.

Congressional activities

The House is in recess, though it is still possible for lawmakers to return for votes (or cast their vote by proxy), if necessary. The Senate is in session through at least Monday, Oct. 26.

SCOTUS confirmation process. As expected, the Republican-led Senate Judiciary Committee voted 12-0 to advance Amy Coney Barrett's nomination to the Supreme Court on Thursday morning. Democratic Senators protested the vote by boycotting the committee meeting in an effort to deny a quorum for a vote. The full Senate will hold a final vote on the nomination on Monday, Oct. 26. Sen. Lisa Murkowski of Alaska, along with Sen. Susan Collins of Maine, have signaled they will not support a vote for Barrett prior to the election. However, it appears the Republican majority has the votes and Barrett will be confirmed to the U.S. Supreme Court as early as next week. Barrett will be the first mother with school-aged children to join the court. Former Democratic Majority Leader, Harry Reid of Nevada, noted in an interview on CNN he does not regret changing the rules to eliminate the need for 60 votes to end debate over judicial nominations, paving the way for this nomination to go forward.

Pandemic relief. It's anybody's guess whether or not there will be another pandemic relief package, but it's clear that time is running out to pass something before the election. Negotiations have been ongoing throughout this week, and for many, many weeks prior, but this week has been a bit of a repeat of the week prior. House Speaker Nancy Pelosi is holding firm on some provisions, President Trump continues to say he wants a bigger bill, and Senate Majority Leader Mitch McConnell says the Senate won't pass a larger bill. Larry Kudlow said that negotiators are "running out of time, at least between now and the election," and that it was possible a bill might be passed instead in the lame duck session. But in a conversation with Senate Republicans, McConnell said that he warned the Trump administration not to reach a deal with Pelosi before the election. He has continuously said that Senate Republicans would not support a package with as much funding as the White House and House Democrats are discussing.

Next year's budget. In spite of the fact that this year's budget work isn't complete yet, there is already some idea of what might happen with the <u>federal budget next year</u>. Budget caps that have been in place for the last decade go away in FY2022, which means there are no pre-set limits on federal spending. If the Democrats take control of the Senate and keep control of the House, it's likely that there will be a serious discussion on the appropriate balance between defense spending and domestic priorities. Rep. Pramila Jayapal (D-WA), a Budget Committee member and co-chair of the Congressional Progressive Caucus, said this week, "This will be a top priority of the progressive caucus — to really get some meaningful budget cuts in Pentagon spending this next cycle. It shouldn't be considered patriotic to just sign up for more money for defense contractors." Democrats are also looking at using the budget reconciliation process (which allows a simple majority to pass legislation in

the Senate) for priorities including an infrastructure bill and potentially health care. It is important to note that the Democrats took control of the House in 2018 by electing mostly moderates to the lower chamber. For example, the New Democrat Coalition, the largest caucus within the Democratic Party, is made up of centrists who support a pro-economic growth, pro-innovation, and fiscally responsible agenda. In 2020, if Democrats pick up even more seats – as expected – these seats will likely be held by more progressive Members, possibly tipping the scale more toward a progressive agenda within the chamber and the party.

House leadership changes. In an interview early in the week with *Politico*, House Minority Leader Kevin McCarthy sounded upbeat about his chances of staying in the leadership position even if the GOP loses seats on Nov. 3. "If you think we lose seats, it's based upon my job as minority leader, I don't think that's the case," McCarthy said. "Let's sit back and say, just like anybody running for office, 'What did you promise you would do?' and 'What did you achieve?"" By the end of the week, other House Republicans had pushed back, criticizing McCarthy for focusing on his own leadership position instead of helping vulnerable Republicans over the finish line. *The Hill* talked to one Republican lawmaker who said, "Everybody is in the middle of the race for their lives, and he's worried about gathering votes to be minority leader. I think that's telling." Other members of the caucus came to McCarthy's defense, noting that he has been successful at fundraising for candidates.

House Space Force Caucus. On Tuesday, the House launched their own Space Force Caucus (the Senate version was announced in September). Reps. Doug Lamborn (R-CO) and Kendra Horn (D-OK) are co-chairing the group, with Brian Babin (R-TX), Jason Crow (D-CO), Michael Waltz (R-FL), and Charlie Crist (D-FL) making up the rest of the founding members. In a statement, Horn said, "Maintaining superiority in space is essential to protecting our national security and U.S. interests around the world. I look forward to working with the Air Force and Space Force leadership and my co-chairs to advocate for the importance of space priorities and the needs of our Space Force professionals." Lamborn said, "This caucus will serve as the chief advocate for our nation's exciting new service, and work closely with the Department of the Air Force and the Space Force to provide opportunities for members and their staff to learn about the vital role the U.S. Space Force plays in maintaining American space power."

FY2021 NDAA. While staffers have been meeting to work out differences in the House and Senate NDAA bills, the official conference process has not yet begun. It looks like that will change next week, with the formal conference process for the NDAA tentatively scheduled to begin. Conferees haven't been named yet, but the chairs and ranking members are planning to meet for the first time on Monday. "We are tentatively scheduling the first meeting on that level. But we are having discussions and moving forward," HASC Chairman Adam Smith told reporters this week, noting that they haven't been moving aggressively. "Like I said, not as quickly as I would like. I think it's a risk to leave as much of it as has been left after the election. But we're moving forward." Smith also committed to getting the bill done this year. "We're going to pass the bill this year because that's our responsibility and that's what we're supposed to do and that's what I'm committed to doing."

Next appropriations steps. With the Senate focused on confirming a new Supreme Court justice, it's likely there won't be any formal work done on FY2021 spending bills until after the election. A reminder — the House already marked up and passed nearly all of its appropriations bills in two bundles, <u>H.R. 7608</u> and <u>H.R. 7617</u>.

For those tracking the FY2021 requested program funding numbers, <u>here</u> is where the Congress is in approving funds for the programs you and we care most about. (Let us know what funding lines of interest to you we are missing from this list, and we will add them!)

FY2021 Intelligence Authorization. We still expect the House to move its intelligence bill to the floor as a standalone measure sometime this fall, but at this point, it may also be possible that this bill will be negotiated as part of the NDAA conference process. As a reminder, the Senate version of the FY2021 intelligence authorization act was attached on the floor as an addendum to the NDAA

NASA Authorization. The House Science Committee has not scheduled a time for consideration of the <u>NASA authorization bill</u> (the Senate Commerce Committee marked up and reported out <u>its version of the bill</u> in November 2019). As the committee does not intend to hold a remote mark up for the bill, we do not believe there is much likelihood that this bill will see any more movement during this Congress.

Personnel changes

Robby Wehagen is now acting deputy director of national intelligence for legislative affairs. Prior to the move, he was director of congressional and legislative affairs at FEMA.

Karina Drees, CEO of Mojave Air and Space Port, is <u>planning to leave at the end</u> of her five-year contract. She said this week that she will stay until the board selects a replacement.

The Senate Commerce Committee announced this week that it will <u>hold a confirmation hearing</u> on Nov. 10 for Greg Autry to be the space agency's chief financial officer. The White House nominated Autry, an assistant professor at the University of Southern California's Marshall School of Business who was a member of Trump's NASA transition team, in July.

National security update

Are Trump's tweets official policy? There has been some discussion of whether or not the president's social media posts are considered to be official policy statements. Back on Oct. 6, Trump tweeted: "I have fully authorized the total Declassification of any & all documents pertaining to the single greatest political CRIME in American History, the Russia Hoax. Likewise, the Hillary Clinton Email Scandal. No redactions!" and "All Russia Hoax Scandal information was Declassified by me long ago." BuzzFeed News then asked a federal judge to order the government to declassify and release special counsel Robert Mueller's unredacted report, which Buzzfeed had asked for last year as part of a Freedom of Information Act request. The emergency motion cited Trump's tweets noting that he has declassified all the information related to the investigations into Russia's interference in the 2016 presidential election. U.S. District Judge Reggie Walton directed the Justice Department to give the court the "official position regarding the declassification and release to the public of information related to the Russia investigation." On Tuesday, White House Chief of Staff Mark Meadows submitted a letter to the court saying that: "The President indicated to me that his statements on Twitter were not self-executing declassification orders and do not require the declassification or release of any particular documents. The President's statements do not require altering any redactions or any record at issue in these or any other cases." On Wednesday, the judge ruled that the letter from Meadows is, in effect, a retraction of the tweets and won't trigger the release of the unredacted documents. "It is unfortunate that we are in this situation because, obviously, when there's ever a reference to declassification of classified information those words spoken should be artfully spoken, so there's no ambiguity as to what the intent was and, obviously, that's not what occurred here," Walton said.

5G. Last week, we told you about reported pressure from the White House to create a national 5G network. This week, there were <u>strong statements from DoD</u> that no national network was being planned, with a Pentagon spokesperson saying, "No, DOD does not intend to own and operate a national 5G network." However, there are also additional reports that the White House is specifically looking to award a <u>no-bid contract to Rivada</u>

<u>Networks</u>, a company with veteran GOP strategist Karl Rove on the payroll as a lobbyist and backed by supporters of President Trump. Rove, speaking on behalf of the company, said the company would not accept a no-bid contract if one was offered. Still, several lawmakers on both sides of the aisle have expressed concern and have noted that any proposal to create a nationalized 5G network would need congressional review first.

New START negotiations breakthrough, maybe. There was progress this week on New START with a proposal to extend the treaty for one year, with a freeze on the number of nuclear warheads on each side. On Tuesday, the Russian Foreign Ministry gave a statement saying their government "proposes extending New START for one year, and at the same time, it stands ready, together with the U.S., to assume a political obligation on freezing a number of the nuclear warheads possessed by the parties for this period." It added that if Washington agrees, then "the time bought by extending New START can be used for conducting comprehensive bilateral negotiations on future control over nuclear missile weapons." The U.S. responded by saying, "We appreciate the Russian Federation's willingness to make progress on the issue of nuclear arms control. The United States is prepared to meet immediately to finalize a verifiable agreement. We expect Russia to empower its diplomats to do the same."

Space Force milestones. In a ceremony on Wednesday, Space Force stood up its first field command at Peterson Air Force Base in Colorado Springs. Lt. Gen. Stephen Whiting assumed command of the Space Operations Center (SpOC), which will be responsible for organizing, training and equipping space forces assigned to combatant commands that conduct military operations around the world. With the one-year anniversary of the Space Force coming up, the service is planning "a lot of announcements" including what members of the Space Force will be called. This week, HASC Chairman Adam Smith said that Space Force leaders have not contacted him directly to push back on the "Starfleet amendment" to use Navy ranks for the new service, a fact which he supported saying, "That tells me their priorities are in the right place."

Border wall funding. The Supreme Court will rule during this term on whether <u>diverting DoD funds to pay for a border wall</u> is unconstitutional. In February 2019, President Trump ordered about \$ billion in military construction and other DoD funds repurposed to build portions of a wall on the Southern border. In July of last year, the justices allowed construction of the wall to proceed after staying a lower court injunction. It's standard procedure for the justices to grant a review after issuing a stay, so the move is an expected one.

Events this week. Last week, Politico talked about the candidates foreign policies (*get the notes <u>here</u>*) and the Aspen Institute discussed the president's foreign policy (*read our notes <u>here</u>*). On Tuesday, the Atlantic Council talked about international partnerships and allies (*our notes are <u>here</u>*). And CSIS hosted a two-day event talking about nuclear policy (*see our notes from the first day <u>here</u>*, *and the second day <u>here</u>).*

Civil and commercial update

ISS crew returns to Earth. On Wednesday, NASA astronaut and Navy SEAL Chris Cassidy returned to Earth after 196 days on the International Space Station. Cassidy, along with cosmonauts Ivan Vagner and Anatoly Ivanishin, landed in their Souyz spacecraft at 10:54 p.m. EDT in Kazakhstan.

NASA and Dept. of Energy MOU. On Tuesday, NASA and the Department of Energy announced that the two organizations have signed a memorandum of understanding to expand the existing cooperation between the two agencies as well as making the cooperation more formal. The MOU calls for an executive committee, jointly chaired by NASA's deputy administrator and the deputy secretary of energy, and three joint working groups to discuss lunar surface infrastructure, space nuclear power and propulsion, and space science and innovation. The working groups would specifically consider activities including developing infrastructure for a future lunar

base, power systems for that lunar base, nuclear propulsion systems for Mars, and support for space situational awareness, space weather, and planetary defense.

Space situational awareness legislation. This week, Sen. Roger Wicker (R-MS) introduced the Space Preservation and Conjunction Emergency (SPACE) Act which would formally authorize the Department of Commerce to provide space situational awareness data to satellite operators. The legislation calls for the creation of a Bureau of Space Commerce headed by an Assistant Secretary reporting directly to the Secretary of Commerce, authorizes the bureau to manage SSA data, provides immunity from lawsuits for any cause of action arising from the provision or receipt of the data, information or service, and authorizes \$15 million in FY21 to run the new office. The Trump administration's Space Policy Directive-3 called for these actions, and the Commerce budget request for FY2021 asked for \$15 million to set up and run the office. (We should note that the House version of the FY2021 Commerce-Justice-Science appropriations bill declines to elevate the office and denied the funding increase, and the Senate Appropriations Committee has not yet marked up its FY2021 funding bills.)

Musk lobbies the FCC for spectrum policy. Elon Musk spoke directly to Ajit Pai, the FCC chairman, this week to ask that the agency to not repurpose the 12 GHz airwaves for wireless 5G. In the call, Musk said that expanding that spectrum for 5G use would "cast a pall of regulatory uncertainty over all operators using the 12 GHz band," and would "would deter the hundreds of millions of dollars being invested by companies already serving or about to serve consumers in this band." SpaceX has discussed this issue with the FCC before, but Musk himself has rarely taken point on those conversations.

Events this week. Last week, the Hudson Institute discussed the future of spectrum policy (*find our notes <u>here</u>*). On Wednesday, the ASCENDxSummit talked about space traffic management and STEM (*read our summary here*).

2020 Election update

There are 11 days left until Election Day (We can see the finish line!). More states opened up early voting this week, and records for the number of people voting have been shattered across the country. For example, in Florida at least 350,000 people voted on the first day of early voting compared to 291,000 people in 2016. FiveThirtyEight is projecting that total turnout in the presidential race will be 154 million (with the most likely number being somewhere between 144 million and 165 million). To compare with 2016, 137 million people voted in the election that year. Already at least 47 million people have voted (as of Thursday afternoon), which is 99% of the total early vote in 2016, and while one reason that number is larger than usual is people changing their voting behavior (i.e. voting before instead of on Election Day), experts are saying that this pace is a sign of higher than usual voter enthusiasm, meaning there is likely to be a higher turnout overall. Two interesting graphics to follow if you like tracking data: The Elect Project and this one from The Washington Post.

Debates: The final presidential debate was held on Thursday in Nashville. The week leading up to the debate saw as much drama as the debate itself, with President Trump accusing the moderator of being biased and the debate itself as being unfair after the topics were announced by moderator Kristen Welker, who is a correspondent for NBC News. The original debate rules noted that the moderator alone would choose the topics and the questions for each debate. Welker chose climate change, the coronavirus pandemic, race, national security, leadership and, American families for the debate topics, and the Commission on Presidential Debates noted that topics could change based on late-breaking news. The Trump campaign protested that the third debate was intended to focus on foreign policy. The Commission also announced that the microphones for each candidate would be muted when the other candidate spoke during two-minute opening remarks at the start of each 15-minute debate segment. That was the only time the mics were muted, and the moderator was

responsible for making sure that each candidate spoke for about the same amount of time, giving time taken up by interruptions from an opponent back to the other candidate. The debate itself included far fewer fireworks and much more policy, with both candidates mostly sticking to the rules and discussing substance. President Donald Trump again downplayed the coronavirus pandemic, saying it will "go away," and said without evidence that a vaccine will be ready within weeks, drawing pushback from Democratic nominee Joe Biden, who said the country is headed toward a "dark winter" and that the president has no plan to deal with the virus. The candidates' answers raised questions about the future of the oil industry, with Trump accusing Biden of intending to "destroy" it and Biden conceding that his administration would oversee a transition toward renewable energy and away from oil, a sector that is already facing a major downturn. The debate skimmed economic issues, mostly in relation to lockdowns brought on by the coronavirus pandemic. Trump said that if Biden is elected, "the stock market will crash," while Biden said that his plan would be to "shut down the virus, not the country."

Polls. There were a whole slew of polls this week as the clock ticks down to Election Day. FiveThirtyEight has some good reminders for staying sane with all the election news, and this piece of advice on polling is a solid one: "On any given day, it will be possible to take the two or three best polls for Biden and tell a story of his holding or expanding his lead, or the two or three best polls for Trump and make a claim that the race is tightening." The Washington Post has another good explanation and a set of graphs that show the numbers this year compare to numbers from 2016. The gist is that 2016 had three big factors: the challenges with state polls, third party candidates that gained enough votes to affect the margin, and a lot of undecided voters that broke for Trump in the final weeks of the campaign. We've already mentioned that the pollster this year have made changes to account for the problems in 2016, but the other two issues are different, too. There's not a third-party candidate (unless you consider Sen. Sander's voters who have refused to support Biden) that will pull votes away from Biden, and there just aren't as many undecided voters. Plus, given that so many people have already cast votes, the numbers appear to be trending in favor of Biden. Having said that, there are still 11 days and we all know that in 2020, pretty much anything can happen, at any time.

Presidential. State polls continue to show a lead for Biden. On Wednesday, a USA Today/Suffolk University poll showed Biden leading Trump by six points in Pennsylvania, while a RealClearPolitics average shows Biden up by 3.5 points and Quinnipiac shows Biden up by eight in the battleground state. Former President Barack Obama headlined a drive-in rally for Biden on Wednesday in Philadelphia. Iowa also shows an incredibly close race, with registered voters giving Trump a one point lead, though Biden has a lead of three to five points when likely voters are surveyed, depending on turnout. Quinnipiac shows a tied race in Texas, another sign that Texas is in play. But, again, it all comes down to the electoral college and not the popular vote.

Senate. One of the biggest stories of this final election push is just how many traditionally deep red states have competitive Senate races. One of those states is Kansas, where <u>Barbara Bollier</u> has a shot at winning the race to replace retiring Kansas Senator Pat Roberts. Bollier, who is currently a Kansas state senator, left the Republican party in 2018 to become a Democrat. The race continues to be close in Iowa as well, where Senator Joni Ernst and Democratic challenger Theresa Greenfield are tied in the polls.

Counting the votes. How votes are cast and counted depends on state rules and there are several cases in the courts right now having a real-time impact on voting. Republicans are challenging mail-in ballots in several states, including North Carolina. However, a <u>federal appeals court ruled that mailed ballots</u> received up to nine days after Election Day could be counted as long as they are postmarked by Nov. 3. Many states are also changing rules to make in-person voting easier, and there are challenges to those rule changes in several states. In Alabama, state officials banned curbside voting intended to accommodate disabled individuals and those at

risk from the COVID-19 virus. On Wednesday, the <u>U.S. Supreme Court sided with those state officials</u>, with three justices dissenting.

Potential Biden administration. It's not uncommon for presidents to staff their cabinet with one or two people from the other party. Generally speaking, it's a gesture of goodwill or a way to provide some stability from one administration to the next. Sometimes these picks are high profile, while some are posts that aren't considered ideological, where party loyalty matters less. There is <u>talk that the Biden transition team</u> is vetting a few Republicans who have been publicly supportive of Biden's campaign, including former Ohio Gov. John Kasich. Also, earlier this week, a proposal from the former vice president to appoint a commission to study whether to expand the Supreme Court <u>reportedly</u> landed on Capitol Hill with a shrug and a yawn. We at Velocity continue to track the latest rumors we are hearing about potential cabinet positions in a Biden administration. (*See our continuously updated list <u>here</u>.*)

Space in a Biden Administration. On Tuesday, about a dozen space officials met virtually to simulate how a National Space Council might operate during a Joe Biden administration, should the Democratic Party nominee win the 2020 presidential election. The American Foreign Policy Council convened what it characterized as a "closed-door" and "scenario-based simulation" to understand how the Biden administration would think through important space events. Invitations were sent to officials in the aerospace industry whom the Biden administration might call upon as advisers or to fill key leadership roles. The event was not organized at the behest of the Biden campaign.

Media roundup of election stories:

The Wall Street Journal: Hunter Biden's ex-business partner alleges father knew about venture

The Hill: Ratcliffe, Schiff battle over Biden emails, politicized intelligence Politico: Trump seeds the ground for possible loss with personal attacks

Associated Press: High court allows 3-day extension for Pennsylvania ballots

Axios: USA Today breaks tradition by endorsing Joe Biden *Politico*: Trump's cash woes mount as Biden laps him

The Hill: Trump, Biden dial up efforts to boost early voter turnout in Florida

The New York Times: Iran and Russia Seek to Influence Election in Final Days, U.S. Officials Warn

2020 Election tracking. Velocity has put together an election update – <u>available here</u> – with all sorts of fabulous details about the 2020 Senate, House, and Presidential races, complete with pundit predictions and polls. This is a living document, and we will keep it updated throughout the campaign season, and until the last race is called. Let us know if there are races not listed here that you would like us to track, and we will add them!

Podcasts we love

Of course, we love a Sesame Street podcast! The Sesame Street Podcast with Foley & Friends launched last week on Audible in order to give kids enrichment that *isn't* screen-based. The 15-minute episodes are led by 6-year-old Foley, "the sound-maker monster." She's joined by her sidekick, Mikee the Microphone, a microphone with googly eyes. Together they tell jokes, sing songs and host familiar guests from the neighborhood, like Elmo, Big Bird and Cookie Monster. There are 15 episodes, released Tuesdays and Thursdays, and you can listen <u>here</u>.

And now for some cool space news...

"Touchdown declared! Sampling in progress." The best news in the solar system happened at 6:12 EDT on Tuesday, when touchdown was declared for the OSIRIS-REx spacecraft on the asteroid Bennu about 207 million miles from Earth. The spacecraft tagged the asteroid's surface and collected a sample from the asteroid

(and you really want to watch the video of the tag here). While landing a spacecraft on another surface is difficult at the best of times, the surface of Bennu turned out to be much rockier than expected, a fact discovered when OSIRIS-REx arrived at Bennu in December of 2018 and was able to get higher resolution images of the asteroid. OSIRIS-REx was designed to be navigated within an area on Bennu of nearly 2,000 square yards, roughly the size of a parking lot with 100 spaces. To perform the tag and sample collection today, it maneuvered to a safe spot on Bennu's rocky surface within a constraint of less than 100 square yards, an area of about five parking spaces. The sample should be no smaller than 2 oz. (60 grams). It will take about three years for the spacecraft to return home, with a scheduled arrival date of Sept. 24, 2023.

Upcoming conferences and other events of interest

- 10/26 to 10/28, 2020 AMS Washington Forum (live virtual format)
- 10/26 to 10/28, 2020 AAS von Braun Memorial Symposium (live virtual format) (more info here)
- 10/26, 2:30 to 4 pm, Dr. Will Roper appears at an "Ask Me Anything" segment on "Deep Tech & Skyshots: How New Government Partnerships Can Help Commercial Companies Fill the Gap Between Baby Steps and Giant Leaps" via YouTube.com
- 10/27 to 12/15, Space Symposium 365 sessions (full schedule and registration info here)
- 10/27, 1pm, Aerospace Corporation Space Agenda 2021 media briefing (registration here)
- 10/28, 1pm, Space: The Final Economic Frontier, hosted by Aerospace Corporation and Politico (more info here)
- 10/28 to 10/29, Global Satellite Servicing Forum, hosted by The Consortium for Execution of Rendezvous and Servicing Operations and Secure World Foundation (more info here)
- 10/29, 10am, Defense Budgets, Army Innovation and New Programs with former Assistant Army Secretary for Acquisition, Logistics and Technology Heidi Shyu, webinar hosted by the U.S. Chamber of Commerce (more info here)
- 10/29, 3pm, The Future of Mars Exploration, hosted by Scientific American (more info here)
- 10/29, 11 am, Opportunities and Challenges for New LEO Constellations, Sign up for the Webinar
- 11/3 election day
- 11/10 to 11/12, 6th Annual Commercial Spaceport Summit (live virtual format, more info here)
- 11/16 to 11/19, Ascend, hosted by AIAA (live virtual format, more info here)
- 11/17 to 11/20, Air and Industry Impact Week virtual event (more info here)
- 12/2 to 12/3, Space Resiliency Summit, Alexandria, VA (in-person event, more info here)
- 1/31/21 to 2/4/21, AAS/AIAA Space Flight Mechanics Meeting, Charlotte, NC (more info here)
- 1/10/21 to 1/14/21, American Meteorological Society 101st Annual Meeting (registration info here)
- 6/4/21, National Space Club's Goddard Memorial Dinner
- 8/22/21 to 8/26/21, 36th Space Symposium rescheduled from late October 2020

What we're reading

October 2020, *Aerospace Corporation:* The Physics of Space War: How Orbital Dynamics Constrain Space-to-Space Engagements

1984-2020: Aviation Week Network: A Timeline Of The International Space Station

Oct. 13, Aviation Week Network: DARPA-Funded Study Proposes Vision For Hypersonic Production Facility

Oct. 16, Air Force Magazine: X-37 Lessons Learned Could Help Space Force Define Future Capabilities

Oct. 16, Defense One: Milley Speaks Out — and Trump Stays Mum

Oct. 16, Military.com: 'No Clear Vision' Yet for Military Cargo Delivery via Space Rocket, General Says

Oct. 16, Roll Call: Duncan Hunter to serve prison sentence at West Texas camp

Oct. 16, *South China Morning Post*: China tests swarm of 'suicide drones' launched from a truck and helicopters

Oct. 16, Exchange Monitor: Next Y-12/Pantex Contract Won't Draw Protest, Will Happen on Time, NNSA Acquisition Boss Says

- Oct. 17, *C4ISRNET*: 'Weaponized truth': How the US military plans to compete in the crowded information space
- Oct. 17, Fox News: Esper reminds public that only 1 active duty servicemember has died from coronavirus
- Oct. 18, The Hill: Women in military honored with new monument in Arlington
- Oct. 18, Air Force Magazine: Space Force Grappling With How to Define Readiness
- Oct. 18, Reuters: White House official went to Syria seeking Americans' release
- Oct. 19, Defense One: To Reboot Arms Control, Start with Small Steps
- Oct. 19, Space News: Blue Origin trying to convince the Air Force to continue to invest in New Glenn
- Oct. 19, Breaking Defense: Space Ops Command Seeks Industry Aid To 'Scale Up' Innovation
- Oct. 19, The Motley Fool: Virgin Orbit Is the Next Space Unicorn Stock
- Oct. 19, Space News: China's CASIC reveals five-year plan for reusable spaceplane, commercial space projects
- Oct. 19, Via Satellite: Space Force Official Suggests U.S. Developing Offensive Capabilities in Space
- Oct. 19, Associated Press: Top military leaders cleared to return to work at Pentagon
- Oct. 19, Politico: Biden would revamp fraying intel community
- Oct. 19, *Defense News*: <u>HASC Chair Adam Smith on a Democrat-led NatSec policy, modernization and a '500-ship Navy'</u>
- Oct. 19, Via Satellite: Space Force Official Suggests U.S. Developing Offensive Capabilities in Space
- Oct. 19, Air Force Magazine: Space Force Gets Ready to Train First Enlisted Recruits
- Oct. 19, The Wall Street Journal: Biden Will Make America Lead Again
- Oct. 20, Defense News: In space business, Lockheed sees problems and promise
- Oct. 20, First Coast News: Pentagon estimates cost of new nuclear missiles at \$95.8B
- Oct. 20, Breaking Defense: 'Advanced Manufacturing Olympics' To Shape New Air Force Strategy
- Oct. 20, Defense News: Ramstein Air Base to host new NATO space center
- Oct. 20, *The Washington Post*: Department of Justice charges Google with multiple violations of federal antitrust law today
- Oct. 20, Vox: Why everything from furniture to diet soda is so hard to buy right now
- Oct. 20, ZD Net: Microsoft launches Azure Space initiative; partners with SpaceX
- Oct. 20, Defense One: What We Don't Know About Military Innovation
- Oct. 20, Space News: Space Force should break the mold in recruiting and retaining talent
- Oct. 20, *The Washington Post:* Nearly 300,000 more people have died in U.S. than in a typical year because of coronavirus
- Oct. 20, *Defense One*: Is Lockheed Building the Air Force's Secret Fighter?
- Oct. 21, Via Satellite: Aspectum Joins Planet's Partner Network
- Oct. 21, Space News: Pentagon has not shown COVID stimulus helps small businesses, says HASC chairman
- Oct. 21, Breaking Defense: NORAD F-22s intercept Russian fighters, bombers near Alaska
- Oct. 21, Politico: O'Brien announces Navy ships and subs will be outfitted with Trump's favorite missile
- Oct. 21, The Hill: Military intelligence budget gets \$23B for fiscal 2020
- Oct. 21, Air Force Magazine: Russia, China Push STRATCOM to Reconsider Strategic Deterrence
- Oct. 21, *Task and Purpose*: The admiral in charge of America's nukes says he has pictures of the world's worst dictators with 'not today' on his office wall
- Oct. 21, *The Hill:* Congress holds the key to outpacing North Korea's nuclear capabilities
- Oct. 21, The Wall Street Journal: White House Nears New Rules on Artificial Intelligence
- Oct. 21, *The Hill*: Pelosi: Trump bank account in China a 'national security issue'
- Oct. 21, Air Force Magazine: Contentious Corona Debates Push Budget Decisions
- Oct. 21, WTOP: National Cherry Blossom Festival will go on without parade in 2021
- Oct. 21, Politico: White House leans on Pentagon to fulfill Trump's Afghanistan pledge
- Oct. 21, Space News: Space Force developing a digital strategy for designing and producing future satellites
- Oct. 21, Space News: NASA and Energy Department sign cooperative agreement
- Oct. 22, Politico: Judge rules sexual assault case against the military's No. 2 officer can proceed

- Oct. 22, Defense One: 'Stunning' Executive Order Enables Politicized Civil Service
- Oct. 22, Breaking Defense: Signaling China, White House Floats Putting Hypersonic Missiles On Destroyers
- Oct. 22, Associated Press: US urges countries to withdraw from UN nuke ban treaty
- Oct. 22, Breaking Defense: The Head of US Intelligence Has Ceased to Be an Honest Broker
- Oct. 22, Politico: Trump executive order strips protections for key federal workers, drawing backlash
- Oct. 22, Politico: Judge rules sexual assault case against the military's No. 2 officer can proceed
- Oct. 22, Breaking Defense: Signaling China, White House Floats Putting Hypersonic Missiles On Destroyers

####