

VOTE ON HARRIS NOMINATION

The PRESIDING OFFICER. The question is, Will the Senate advise and consent to the Harris nomination?

Mr. SCHUMER. Mr. President, I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second?

There appears to be a sufficient second.

The clerk will call the roll.

Mr. DURBIN. I announce that the Senator from Oregon (Mr. MERKLEY), and the Senator from Maryland (Mr. VAN HOLLEN) are necessarily absent.

Mr. THUNE. The following Senators are necessarily absent: the Senator from Missouri (Mr. BLUNT), the Senator from Texas (Mr. CORNYN), the Senator from Texas (Mr. CRUZ), and the Senator from Alaska (Ms. MURKOWSKI).

The yeas and nays resulted—yeas 48, nays 46, as follows:

[Rollcall Vote No. 209 Ex.]

YEAS—48

Baldwin	Heinrich	Peters
Bennet	Hickenlooper	Reed
Blumenthal	Hirono	Rosen
Booker	Kaine	Sanders
Brown	Kelly	Schatz
Cantwell	King	Schumer
Cardin	Klobuchar	Shaheen
Carper	Leahy	Sinema
Casey	Lujan	Smith
Coons	Manchin	Stabenow
Cortez Masto	Markey	Tester
Duckworth	Menendez	Warner
Durbin	Murphy	Warnock
Feinstein	Murray	Warren
Gillibrand	Ossoff	Whitehouse
Hassan	Padilla	Wyden

NAYS—46

Barrasso	Hagerty	Romney
Blackburn	Hawley	Rounds
Boozman	Hoeven	Rubio
Braun	Hyde-Smith	Sasse
Burr	Inhofe	Scott (FL)
Capito	Johnson	Scott (SC)
Cassidy	Kennedy	Shelby
Collins	Lankford	Sullivan
Cotton	Lee	Thune
Cramer	Lummis	Tillis
Crapo	Marshall	Toomey
Daines	McConnell	Tuberville
Ernst	Moran	Wicker
Fischer	Paul	Young
Graham	Portman	
Grassley	Risch	

NOT VOTING—6

Blunt	Cruz	Murkowski
Cornyn	Merkley	Van Hollen

The nomination was confirmed.

THE PRESIDING OFFICER (Mr. CASEY). Under the previous order, the motion to reconsider is considered made and laid upon the table, and the President will be immediately notified of the Senate's action.

LEGISLATIVE SESSION

MORNING BUSINESS

Mr. SCHUMER. Mr. President, I ask unanimous consent that the Senate proceed to legislative session for a period of morning business, with Senators permitted to speak therein for up to 10 minutes each.

The PRESIDING OFFICER. Without objection, it is so ordered.

GUATEMALAN ATTORNEY GENERAL MARIA CONSUELO PORRAS

Mr. LEAHY. Mr. President, many hoped that President Giammattei would reject the corruption and impunity that his predecessors institutionalized. The reappointment of Attorney General Porras, who according to the State Department has “repeatedly obstructed and undermined anti-corruption investigations,” shows that it is business as usual.

Democracy cannot survive without an independent judiciary, which Attorney General Porras has sought to dismantle by persecuting prosecutors and judges who have stood up for the principle that no one is above the law. As long as this continues, Guatemala's government is not a serious anti-corruption partner of the United States.

BETA TECHNOLOGIES

Mr. LEAHY. Mr. President, a person wandering up Church Street or jogging down on the shores of Lake Champlain on a crisp, snowy day in Burlington, VT, this past winter could have glanced up at the sky and seen an angular, white aircraft gliding through the air. It is called the *Alia* and is an electric aircraft modeled after an Arctic tern that has been designed and manufactured by Beta Technologies.

At their headquarters, located beside the Burlington International Airport in South Burlington, Beta Technologies has been “quietly” revolutionizing the aviation industry by designing an environmentally friendly, rechargeable, and, yes, quiet, electric aircraft that can vertically take off and land without a runway. It is incredible technology that has game-changing applications for the domestic shipping industry, private transportation, and the military. Their research, production, and testing has been supported by dozens of private investors, several public companies, and funding appropriated by the Appropriations Committee to the Air Force's AFWERX Agility Prime program. The Agility Prime program was launched in 2020 in an effort to encourage private commercial development of the electric vertical takeoff and landing—eVTOL—aircraft industry.

I am proud of the innovative work that Beta Technologies does in Vermont. The company employs a workforce of over 350 employees and is growing, employing veterans, pilots, engineers, and technicians. The company is enriching the engineering and technology community of Vermont. I am excited about the potential for Beta's aircrafts and look forward to supporting their work in the future.

On April 16, 2022, The New York Times published an article on the innovative work of Beta Technologies, and I ask unanimous consent that it be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the New York Times, Apr. 16, 2022]

THE BATTERY THAT FLIES

(By Ben Ryder Howe)

KITTY HAWK.—The invention of the jet engine. And on a frozen Vermont morning, circling above Lake Champlain, the *Alia*.

In the mind of Christopher Caputo, a pilot, each moment signals a paradigm shift in aviation. “You're looking at history,” Mr. Caputo said recently, speaking from the cockpit of a plane trailing the *Alia* at close distance. It had an exotic, almost whimsical shape, like an Alexander Calder sculpture, and it banked and climbed in near silence.

It is, essentially, a flying battery. And it represented a long-held aviation goal: an aircraft with no need for jet fuel and therefore no carbon emissions, a plane that could take off and land without a runway and quietly hop from recharging station to recharging station, like a large drone.

The *Alia* was made by Beta Technologies, where Mr. Caputo is a flight instructor. A five-year-old start-up that is unusual in many respects, the company is the brainchild of Martine Rothblatt, the founder of Sirius XM and pharmaceutical company United Therapeutics, and Kyle Clark, a Harvard-trained engineer and former professional hockey player. It has a unique mission, focused on cargo rather than passengers. And despite raising a formidable treasure chest in capital, it is based in Burlington, Vt., population 45,000, roughly 2,500 miles from Silicon Valley.

A battery-powered aircraft with no internal combustion has been a goal of engineers ever since the Wright brothers. Larry Page, the Google co-founder, has been funding electric plane start-ups for over a decade. Electric motors have the virtue of being smaller, allowing more of them to be fitted on a plane and making it easier to design systems with vertical lift. However, batteries are heavy, planes need to be light, and for most of the last century, the e-plane was thought to be beyond reach.

That changed with the extraordinary gains in aviation technology realized since the 1990s. Late last year, curious about the potential of so-called green aviation, I flew in a Pipistrel Alpha Electro, a sleek new Slovenian two-seater designed for flight training. The Electro looks and flies like an ordinary light aircraft, but absent the roar of internal combustion, its single propeller makes a sound like beating wings. “Whoa!” I exclaimed when its high-torque engine caused it to practically leap off the runway.

However, the Electro's power supply lasts only about an hour. After ours nearly ran out, I wondered how many people would enjoy flying in an electric plane. That take off is fun. But then you do start to worry about the landing.

Despite the excitement about e-planes, the Federal Aviation Administration has never certified electric propulsion as safe for commercial use. Companies expect that to change in the coming years, but only gradually, as safety concerns are worked out. As that process occurs, new forms of aviation are likely to appear, planes never seen before outside of testing grounds. Those planes will have limitations as to how far and fast they can fly, but they will do things other planes can't, like hover and take off from “runways in the sky.”

They will also, perhaps most importantly for an industry dependent on fossil fuels, cut down on commercial aviation's enormous contribution to climate change, currently calculated as 3 to 4 percent of greenhouse gases globally.

“It's gross,” Mr. Clark said. “If we don't, the consequences are that we'll destroy the planet.”

In 2013, Ms. Rothblatt became interested in battery-powered aircraft. United Therapeutics makes human organs, including a kidney grown inside a pig that was attached to a person last fall, the first time such a procedure has been done. Ms. Rothblatt wanted an electric heli-plane “to deliver the organs we are manufacturing in a green way,” she said, and fly them a considerable distance—say, between two mid-Atlantic cities.

At the time, though, batteries were still too heavy. The longest an electric helicopter had flown was 15 minutes. One group of engineers told her it would take three years of design and development, too long, in her mind, to wait.

“Every single person told me it was impossible,” Ms. Rothblatt said.

A GRAND VISION

Kyle Clark flew alone for the first time in 1997 on a plane from Burlington to Erie, Pa. Mr. Clark, then 16, had just been selected by the U.S.A. Hockey national team. “I was the worst player on the ice,” he said, “so I decided to fight all the opposing players.” As a result, “the team named me captain.”

At 6 feet 7 inches, a self-described physical “freak,” Mr. Clark would go on to a brief professional hockey career as an extremely low-scoring right wing and enforcer. (His LinkedIn page shows him brawling, helmetless, as a member of the Washington Capitals organization.)

After a stint in Finland’s professional hockey league, he left the sport and received an undergraduate degree in materials science at Harvard, where he wrote a thesis on a plane piloted like a motorcycle and fueled by alternative energy. It was named the engineering department’s paper of the year.

He then found himself considering a career on Wall Street, doing something he didn’t want to do away from where he wanted to be: back in Vermont.

“There’s a brain drain” among engineers from his home state, he said. “People go away to college and come back when they’re 40, because they realize San Francisco or Boston isn’t the cat’s meow.” Returning to Burlington in his mid-20s, Mr. Clark became director of engineering at a company that designed power converters for Tesla.

In 2017 he attended a conference where Ms. Rothblatt made her pitch for an e-helicopter. “There were like 30 people in the room, none of whom excited me,” Ms. Rothblatt recalled. “Then Kyle stood up and said, ‘I’m an electronics and power systems person, and I’m confident we can achieve your specification with a demonstration flight within one to two years.’ Other people were shaking their head. He was probably the youngest guy in the room. So I came up to him during break and said, ‘Where’s your company located?’ And he said, ‘I live in Vermont.’”

A few weeks later, after a second meeting, Mr. Clark drew a watercolor of his design and sent it to Ms. Rothblatt. Within hours, \$1.5 million in seed capital for Beta Technologies had been wired to his bank account.

“He drew a nice design,” Ms. Rothblatt said.

A prototype with four tilting propellers was assembled in eight months, with Mr. Clark piloting the vehicle himself. Built in Burlington, the plane had to be flown over Lake Champlain, away from population centers.

“It was so fun to fly it that we found an excuse to every chance we could,” Mr. Clark told an audience at M.I.T. in 2019. Ultimately, though, it turned out to have too complex a design and Mr. Clark threw it out. He created a streamlined prototype modeled after the Arctic tern, a small, slow bird capa-

ble of flying uncanny distances without landing.

Since then, Beta’s work force has grown to over 350 from 30. The company’s headquarters have expanded to several buildings wrapping around the runway at Burlington International Airport, with plans for an additional 40-acre campus.

The board is stocked with players in finance and tech, including Dean Kamen, the inventor of the Segway, and John Abele, founder of Boston Scientific. It has \$400 million of funding from the government and institutions, including Amazon. But it is not alone in trying to bring something like this—what’s known as a vehicle with “electric vertical takeoff and landing” or eVTOL—to market.

Propelled by advances in batteries, control systems and high performance motors, more than a dozen well-financed competitors have their own prototypes, nearly all focused on what the industry calls “urban air mobility,” or flying taxis or privately owned flying vehicles. That no major breakthrough has reached consumers in significant numbers yet gives skeptics ammunition, but does not tamp down the optimism within the industry, especially not at Beta. Beta is alone in focusing on cargo, and is hoping to win F.A.A. approval in 2024. If it succeeds, it believes it will do more than make aviation history.

In the company’s grand vision, electric cargo planes replace fleets of exhaust-spewing short-haul box trucks currently congesting America’s roads.

With a limit of 250 nautical miles per battery charge, the vehicles would land atop solar-powered charging stations made out of shipping containers, some equipped with showers, bunks and kitchenettes. (The cabinetry is Vermont maple.) Beta also makes a stand-alone charger that “our group is placing at airports all over the country,” said Mr. Clark.

A plane like Beta’s could be a catalyst for “decentralizing” the hub and spoke system, the company hopes, taking dependence on shipping centers like Louisville and Memphis out of the equation and rebuilding the supply chain.

“If you think about a path between two cities where there’s no direct air service,” Blain Newton, Beta’s chief operations officer said, “the only way is by taking one connection, two connections.” Alia can change that—especially by increasing access to less populated parts of the country, such as northern Vermont.

The ambitions are lofty. Bolstering Mr. Newton’s claims, however, UPS has already bought 10 Alias to be delivered in 2024 and signaled its intent to buy 140 more, which it plans to use as “micro-feeders” for time-sensitive deliveries such as medicine.

Amazon has invested heavily in Beta through its Climate Pledge Fund. Both the Air Force and the Army have signed contracts with the company worth a combined \$43 million. And Blade, the commuter helicopter service, perhaps sensing that urban air mobility is not so far off, has reserved the right to buy five Alias, at a price of \$4 million to \$5 million apiece.

“THE DNA OF VERMONT”

Beta’s headquarters at the Burlington Airport—close enough to be seen from the Terminal B waiting area—still has the youthful informality of a start-up. On a December morning in the hangar, Naughty by Nature’s “Feel Me Flow” somehow penetrated the din of whirring propellers and industrial tools. The heavily tattooed Mr. Clark, whose idea of formal wear seems to be rotating his baseball cap forward, pinballed around the hangar, grabbing stray machinery and vaulting

up staircases with the agility of a professional athlete.

Before he joined Beta, Mr. Newton worked in health care. At his job interview, Mr. Clark took him for a helicopter ride.

“He gave me the controls and said: ‘Your aircraft. Figure it out,’” Mr. Newton recalled, chuckling. “I’d never flown before. I ended up taking a 65 percent pay cut to work for him.”

On their way back, with Mr. Clark back at the controls, the helicopter flew over Burlington, a city built largely around the University of Vermont and companies known for their progressive bona fides, like Seventh Generation and Ben & Jerry’s. The city is famously left-leaning: Senator Bernie Sanders served four terms as its mayor. It also hosts a number of renewable energy startups.

“Clean energy is built into the DNA of Vermont,” said Russ Scully, a Burlington entrepreneur who raised capital for Beta. Burlington is closer to becoming net zero than almost any municipality in the country; in the Beta parking lot, many cars have charging cables inserted.

Another local resource: One hundred miles north, near Montreal, is one of the largest aerospace clusters outside Toulouse and Seattle, led by Bombardier, the Canadian business jet-maker, and CAE, the world’s premier manufacturer of flight simulators.

For Blake Opsahl, a network planner who left Amazon to join Beta, doing so was a no-brainer. “My husband grew up here and we’ve always wanted to come back,” said Mr. Opsahl, who described an affinity between Beta engineers and Vermonters as “passionate tinkers.”

Mr. Newton said: “I don’t want to throw any of our competitors under the bus, but some folks out West are paying huge salaries to attract people, and we’re capturing a lot of high-end aerospace talent for the lifestyle. They said, No, I want to be part of this thing here.”

Mr. Clark said he was offered opportunities to move the company elsewhere but declined. It has now become one of Burlington’s marquee employers, contributing to a population swelling with high-earning remote workers who left larger cities and brought with them a worsening housing crisis. Burlington may be the kind of small city that Beta aims to serve, but as its success has shown, it is also the kind of city where sudden growth can bring challenges to livability.

In high school, Mr. Clark began building planes with spare parts from the machine shop his father ran at the University of Vermont. His mother, an artist, burned one in the backyard to prevent him from flying it.

Like Mr. Newton, many recruits were treated to hair-raising airplane rides. The company has a fleet of aircraft that the communications director, Jake Goldman, calls an “amusement park for aviation fanatics,” including a World War II biplane and the experimental Pipistrel. (“I did not puke,” Mr. Goldman said of his inaugural ride in an aerobatic plane, “but it was touch and go for a while.”)

The company offers free flying lessons to all its 350 employees, and has more than 20 flight instructors on staff, including Nick Warren, formerly a Marine One pilot for President Barack Obama. The idea is that in order to promote “critical thinking in aviation” it helps to be airborne. “It’s very Vermont—instead of just analyzing things on a computer, you actually try them out,” said Lan Vu, a Beta electrical engineer who attended public high school with Mr. Clark.

Like many of her colleagues, Ms. Vu had worked previously for Mr. Clark, who recruited her. (“You know how good of a talker he is,” she said.)

She had no prior interest in flying, she said, but "that was one of the things Kyle made sure to talk about when he was pitching me."

"And I was like: 'Yeah, I don't have that kind of time. I have three kids,'" she said.

After changing her mind and getting her pilot's license through the employee program, however, Ms. Vu began competing in aerial acrobatic competitions. As an engineer, she said, flying helps her address safety concerns. "If I'm building this, would I fly it?" said Ms. Vu, who said she considered herself a conservative pilot, although, she admits, "I was kind of surprised how much I enjoyed flying upside down."

THE FUTURIST AND THE TEST PILOT

Is the world ready for wingless hovercraft levitating over cities and hotrodding through congested air corridors?

The consensus within the industry is that the F.A.A., which regulates half the world's aviation activity, is several years from certifying urban air mobility.

"It's a big burden of proof to bring new technology to the F.A.A.—appropriately so," Mr. Clark said. Currently the certification process for a new plane or helicopter takes two to three years on average. For an entirely new type of vehicle, it could be considerably longer. (One conventionally powered aircraft that can take off and land without a runway had its first flight in 2003. It remains uncertified.)

Ms. Rothblatt has built a career out of the long view. She is a celebrated futurist who has argued passionately for transhumanism, or the belief that human beings will eventually merge with machines and upload consciousness to a digital realm. And she has taken positions on issues such as xenotransplantation—the interchange of organs between species, including humans—considered audacious not long ago, though no longer.

Yet in certain ways she and Mr. Clark make for unlikely partners. Mr. Clark has a familiar demeanor for a test pilot: exuberant, risk-taking, hyper-confident.

Ms. Rothblatt, on the other hand, calls herself an exceedingly cautious person, both as a pilot and in general. "I'm an adventurous thinker, but I'm cautious in everything," she said. She brought up her life experience as an example. Aside from her accomplishments in medicine and aerospace, Ms. Rothblatt is known as a transgender pioneer; when she started Sirius XM and rose to prominence, she hadn't yet transitioned. "When I changed my sex, it was only after watching presentations by a dozen top surgeons and I was absolutely confident that it would be safe," she said.

The dichotomy between the futurist and the test pilot gets to a real issue facing any plane with a battery: Who will fly them?

According to Dan Patt, a technology analyst, vehicles like the one Beta is building are "very unlikely to make money unless they go unmanned." Aviation in general faces a pilot shortage, and labor comprises up to a third of operating costs at legacy airlines.

The question for Beta as a business, said Mr. Patt, who led the development of drones for the Defense Advanced Research Projects Agency, is: "What does it take for their model to be competitive with ground transportation?"

Beta says its vehicles are designed to be "optionally manned" in the future. Yet analysts such as Mr. Patt see unpiloted commercial aviation as even farther from winning F.A.A. approval than the electric plane itself, raising a dilemma:

"What's more important, going unmanned first, or do you build the vehicle first? Beta is clearly in the latter camp."

Nathan Diller, an Air Force colonel, is not a futurist, but his job is to find and support companies doing forward-thinking, futuristic things.

The military applications of a vehicle like the Alia—especially logistics—have gotten attention at the highest levels of the Air Force, which has backed Beta and some of its peers through an accelerator called Agility Prime.

Last month, for the first time, uniformed Air Force pilots flew an Alia, soaring above Lake Champlain in a plane powered only by a battery.

Colonel Diller sees this kind of transport as a national security issue, in part because of its potential to reduce fuel consumption, but what seems to intrigue him most is "the democratization of air travel."

He grew up flying experimental planes on an organic farm in West Texas, aware of the limits on where a plane can land and who can fly. Looking at a floating sculpture twirling above a lake, he sees a different future for aviation: "Everyone a pilot, everywhere a runway."

VOTE EXPLANATION

Mr. REED. Mr. President, I was unavoidably absent for rollcall vote No. 200, the confirmation of Executive Calendar No. 857, Evelyn Padin, of New Jersey, to be U.S. District Judge for the District of New Jersey. Had I been present, I would have voted yea.

I was unavoidably absent for rollcall vote No. 201, the confirmation of Executive Calendar No. 915, Charlotte N. Sweeney, of Colorado, to be U.S. District Judge for the District of Colorado. Had I been present, I would have voted yea.

I was unavoidably absent for rollcall vote No. 202, the motion to invoke cloture on Executive Calendar No. 806, Sandra L. Thompson, of Maryland, to be Director of the Federal Housing Finance Agency. Had I been present, I would have voted yea.

VOTE EXPLANATION

Mr. HAWLEY. Mr. President, had there been a recorded vote, I would have voted no on S. Res. 134, a resolution expressing the sense of the Senate that the President should work with the Government of the United Kingdom to conclude negotiations for a comprehensive free trade agreement between the United States and United Kingdom.

ARMS SALES NOTIFICATION

Mr. MENENDEZ. Mr. President, section 36(b) of the Arms Export Control Act requires that Congress receive prior notification of certain proposed arms sales as defined by that statute. Upon such notification, the Congress has 30 calendar days during which the sale may be reviewed. The provision stipulates that, in the Senate, the notification of proposed sales shall be sent to the chairman of the Senate Foreign Relations Committee.

In keeping with the committee's intention to see that relevant informa-

tion is available to the full Senate, I ask unanimous consent to have printed in the RECORD the notifications which have been received. If the cover letter references a classified annex, then such annex is available to all Senators in the office of the Foreign Relations Committee, room SD-423.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

DEFENSE SECURITY
COOPERATION AGENCY,
Arlington, VA.

HON. ROBERT MENENDEZ,
Chairman, Committee on Foreign Relations,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 21-33 concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of Egypt for defense articles and services estimated to cost \$691 million. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

JAMES A. HURSCH,
Director.

Enclosures.

TRANSMITTAL NO. 21-33

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) Prospective Purchaser: Government of Egypt.

(ii) Total Estimated Value:

Major Defense Equipment* \$662 million.

Other \$29 million.

Total \$691 million.

Funding Source: Foreign Military Financing (FMF).

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:

Major Defense Equipment (MDE):

Five thousand (5,000) TOW 2A, Radio Frequency (RF) Missiles, BGM-71E-4B-RF.

Seventy (70) TOW 2A, Radio Frequency (RF) Missiles, BGM-71E-4B-RF (Fly-to-Buy Lot Acceptance Missiles).

Non-MDE:

Also included is missile support equipment; technical manuals/publications; spare parts; tool and test equipment; training; U.S. Government technical and logistical support, contractor technical support, and other associated equipment and services; and other related elements of logistical and program support.

(iv) Military Department: Army (EG-B-VJO).

(v) Prior Related Cases, if any: EG-B-VCO.

(vi) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None known.

(vii) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached Annex.

(viii) Date Report Delivered to Congress: May 19, 2022.

*As defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Egypt—TOW 2A Radio Frequency (RF) Missiles and Support

The Government of Egypt has requested to buy five thousand (5,000) TOW 2A, Radio Frequency (RF) missiles, BGM-71E-4B-RF; and seventy (70) TOW 2A, Radio Frequency (RF) missiles, BGM-71E-4B-RF (Fly-to-Buy Lot Acceptance missiles). Also included is missile support equipment; technical manuals/publications; spare parts; tool and test