

BNB ATP





Federal and State Updates:

Both the Federal and State government have been informing the public of their plans to replace ground vehicles with air vehicles and shared these developments publicly for nearly a decade. Yet, most are unaware of just how fast this groundwork is being laid.

MASSDOT AERONAUTICS RESPONSIBILITIES:

REGULATE AND PROMOTE:

 Regulate and promote air transportation in the Commonwealth.

MAINTAIN AND OVERSEE:

Maintain and oversee 35 of the State's 38 publicuse airports.

SUPPORT:

• Support economic development and job growth.

REDUCE:

• Reduce aviation's environmental impact.

EXPLORE:

- Explore and, when suitable, introduce advanced aviation systems, including:
 - Drones equipped with sensors to help ensure air safety by better monitoring airspace in the Commonwealth (under the Drone Operations Program)
 - Electric charging stations, which can charge electric aircraft, cars, and buses.

Advanced Aviation Technologies Group:



Advanced Aviation Technologies Group:

MassDot's Advanced Aviation
Technologies Group also runs the
Commonwealth UAS Integration
Program (CUIP) to expand the
operational use of uncrewed aircraft
systems (UAS, or "drones") for
transportation use cases across
MassDOT, the MBTA, and other state
agencies.



Commonwealth UAS Integration Program (CUIP):

The CUIP team is working to enable complex drone operations, including long-distance beyond visual line of sight (BVLOS) operations and drone delivery to remote communities, and is developing sensor systems to detect and track both crewed aircraft and drones.





UAV:The Future of Aviation



Package Delivery

The future of package delivery is approaching sooner than most realize. Several companies (Walgreens, Dunkin' Donuts, Walmart, etc.) have made partnerships with drone delivery companies like Wings (based in Houston) during the pandemic with great success. The applications of drone package delivery extend far beyond medication and coffee delivery.



Everyday Integration

Most Americans have witnessed the integration of drones into every day life via drone photography of properties (commonly used in real estate), to their use in the war in Ukraine. Hundreds of drones have been used in light shows in China with stunning, and more environmentally friendly, results than fireworks which create pollution.

Public Transit

The Department of Transportation, MBTA, and FAA have all been working toward and laying their respective groundwork to integrate flying vehicles into public transit. The FAA recently approved a flying vehicle. UAV operators will soon be highly sought out for these jobs.







IN PARTNERSHIP WITH GREEN AVIATION GLOBAL

BNB ATP

URBAN AIR MOBILITY

Coming soon to Massachusetts!

ABOUT US:



Ensuring AAM integrates with Environmental Sustainability.

Green Aviation Global (GAG) is "Paving the way for a more sustainable future through green UAV technology."



THE PLAN:

Project F.A.T.I.M.A.

FATIMA stands for Future Aviation Technology Integration Management Agency. Read more on our website by scanning the OR code above.



STEP 1:

Feasibility Study

GAG (in partnership with BNBATP) is conducting a feasibility study on UAM across Massachusetts. This is a crucial and mandatory step required by the FAA for all UAV/UAS operations.

WHAT IS URBAN AIR MOBILITY?

UAM is a subset of Advanced Air Mobility (AAM), an initiative by the FAA, National Aeronautics and Space Administration (NASA), industry. AAM initiative aims to develop an air transportation system that moves people and cargo between local, regional, intraregional, and urban locations not previously served or underserved by aviation using innovative aircraft, technologies, and operations. While AAM supports a wide range of passenger, cargo, and other operations within and between urban and rural environments, UAM focuses on flight operations in and around urban areas.

HOW WILL UAM BE IMPLEMENTED?



The study will analyze the viability by determining whether the project or venture is likely to succeed and troubleshoot problems before implementation.



A necessary and crucial step required by the FAA (including meeting FAA safety standards) for all UAV/UAS operations.



UAM has already been successfully implemented in several cities across the US already such as Dallas, TX.





This month a flying taxi company in Vermont, Beta Technologies, was granted \$169M for a production facility. This facility is the first in the NE region, which means that the FAA goal for urban air mobility is on track for public operation by 2025.

The FAA granted
ALEF, who is
designing and
developing the
world's first real
flying car, their
airworthiness
certificate.
The company
expects its first
delivery by projected
for the end of 2025.

BNBATP becomes first all minority aviation training program in the state of MA to order an ALEF flying car. Another groundbreaking moment for this equity focused aviation training program.

Electric aircraft developer Beta Technologies has entered a partnership with Shoreline Aviation Inc. to install the state's first public access charging station for electric aircraft.

Archer has received \$215 million in terms of commitments from top organizations such as Stellantis, Boeing (NYSE:BA), and United Airlines (NASDAQ:UAL), among others.

REMOTE ID RULE

Beginning September 16, 2023, all drones requiring registration must operate in accordance with <u>the Remote ID rule</u> per the FAA

GET YOUR TRUST CERTIFICATE

You will also need your TRUST Certificate. TRUST stands for "The Recreational UAS Safety Test", and is what you need to complete if you want to fly any UAV (drone) recreationally in the United States. Get your TRUST certificate by scanning the QR code below.

STAY INFORMED



Stay informed on Aviation Industry developments by subscribing to our Aviation Magazine

WATCH HISTORY



Watch videos of the historic Black N Brown Aviation Training Program on our Youtube Channel by scanning the QR code.

GET YOUR TRUST



Learn more about TRUST and get your certificate on the BNBATP website by scanning the QR code.





BNBATP





MEET THE TRAINING DEPT.

Our Training Department currently consists of aviation experts with over 100 years of experience. Led by Captain Joe Crawford, former FAA examiner, with over 50 years of experience, 40,000+ total hours flown, 15,000+ hours multi engine, 4,000+ hours jet among many other industry experts.

ADVANCING EQUITY

TARGETED RECRUITMENT

Black and Brown people are severely underrepresented in the aviation, tech, and green industries. By focusing our efforts on recruiting and training low-income Black and Brown individuals we are bridging this gap. By improving socioeconomic mobility for these communities with stable, living wage, green, careers, we are doing the work to ensure that the future is green, and Black and Brown too.

WORKFORCE DEVELOPMENT

Specific outreach to minorities allows BNBATP to address multiple issues at once. By ensuring that minorities are being trained early on in the UAV industry, we can prevent the same racial demographics (less than 2% Black and less than 6% Brown) in commercial airline pilots, in the UAV industry. Giving a minority workforce a solid footing in this industry will effectively raise the average median income of these disadvantaged communities and bridge the gap in job skills, and access to careers in aviation.

COHORT UPDATES

Another 107 Cohort recently graduated with students earning their Part 107 Ratings. They are now officially a part of the largest Black and Brown aviation workforce in the country, and a top 3 expanding industry. Currently, BNBATP's winter cohort students are on track to graduate by March and do the same.



Drone package delivery will significantly reduce emissions caused by gasoline-fueled land vehicles because the majority of packages delivered (upwards of 86%) weigh less than 5 pounds. FAA 107 regulations state drones used for recreational or commercial purposes between 0.55 and 55 pounds must be registered. Therefore, drones will be used (per plans from the DOT) to replace the many vehicles on the road that are used for package delivery.

Presently, the majority vehicles both consume a nonrenewable energy resource and also create emissions that harm the environment. Environmentally friendly drones are often able to fly more efficient routes via air than land vehicles would be able to navigate via roads. Thereby decreasing the amount of energy needed to deliver the same packages.

REDUCED EMISSIONS



VS FOSSIL FUELS

Drone package delivery is inherently green because the vast majority of drones run via rechargeable lithium ion batteries. Therefore, not worsening pollution caused by using oil as an energy source.

The companies that produce these batteries have also been developing technology to allow higher number of recharges before the battery must be discarded for safety. The more times a battery is able to be reused, the less waste is produced. Many components of these batteries, even once past the maximum number of charging cycles, can be recycled.

RECHARGEABLE & REUSABLE

PUBLIC BENEFIT &

PUBLIC SAFETY



BNBATP has already began drone mapping and training students simultaneously. This research has a multitude of applications. This can be used to assess safe and efficient routes for package delivery, assess traffic patterns, as well as potential paths and formations for search and rescue (and other public service) operations. There are even applications for firefighting. BNBATP plans to give back to the community by ensuring that its graduates are able to assist first hand or train public servants like fire fighters or law enforcement on how to use drones to save lives and ensure public safety. The public benefit of having a drone pilot workforce is immeasurable.