WIZARD WISDOM NEWSLETTER

here to inform, entertain and have fun revolving around the Aviation World

INNOTECH-EXECAIRE MAKES ITSELF HEARD ON HYGIENE

SOURCE: BUSINESS AIR NEWS

Canadian corporate aviation firm Innotech-Execaire Aviation Group notes that, while the effects of the COVID-19 pandemic on air travel have been far reaching, there is an increased interest in private aviation as an alternative to commercial travel, as availability of scheduled flights continues to fluctuate.

The company says that flying privately does reduce the traveller's potential contact with COVID-19, mostly due to operator sanitisation protocols and the fact that travellers don't have to navigate their way through airport terminals where risk increases at every touchpoint. In addition, business aircraft offer another layer of protection – new air that is continuously drawn in from outside through engine intakes to refresh the cabin during flight. This air is then circulated and expelled rather than filtered and recycled.

According to Innotech, when it comes to aircraft sanitisation and disinfection protocols, for travellers to reap the benefits, operators must follow sustained and robust cleaning protocols before, during and after flights.

Zarikos concludes: "The operator's priority is everyone's safety. Both passengers and crew must follow the guidelines. And keeping abreast of any changes made by health and industry authorities is essential. If you're in doubt, contact your operator and ask for information about their sanitisation and disinfecting protocols."

THE TRUE OF THE COVID-19 CRISIS FOR AVIATION: ITS PEOPLE

SOURCE: EOIN COATES - INTERNATIONAL AIRPORT NEWS

While the financial damage to the industry and the lack of any significant air connectivity are evident to all, we sometimes miss the cost to the human face of the aviation industry – its workers.

In a recent survey of aviation workers, we have estimated that 58.5 per cent of airport-based workers are out of work, either on furlough or have lost their jobs entirely. The European Transport Workers' Federation (ETF) brings together workers across all sectors of the industry – namely cabin crew, pilots, ground staff and workers in the air traffic management (ATM) sector. All of them have been affected and have seen their working hours reduced, jobs furloughed and, for many, their entire livelihoods disappear.

Additionally, we know that 191,000 European aviation workers have lost their jobs, but, due to the nature of seasonal work, and prevalence of temporary and other atypical forms of work in aviation, we will never know the total amount of job losses – which will be well above a quarter of a million people.

There is also the question of the Single European Sky. At the moment, Air Navigation Service Providers (ANSPs) and ATM workers are overwhelmed, focusing on how to survive, with little capacity to engage in a strategic discussion on the future of the sector. Still, the European Commission (EC) has decided that this is the right time to push through the Single European Sky reform – an ATM reform that has been on hold for seven years. Their proposal focuses predominantly on efforts to implement further cost-reduction, raising concerns for the safety and efficiency of the whole aviation industry.

But we cannot do this alone. The European Commission needs to step up to the mark and do their part to help save our industry and its people. While they have supported the industry broadly, they have done little to protect the most vulnerable. If things continue in this way, there will be no one left to create the 'resilient' future that we all desire.

AVIATION SECTOR WORKERS BE VACCINATED ON PRIORITY AFTER HEALTH WORKERS: MOCA TO MOHFW

SOURCE: LIVE MINT – DEEPAK PATEL

ICAO has launched a new eLibrary in January 2021 that provides users with free access to read-only versions of ICAO publications that include tools for citation, sharing, bookmarks, highlighting text, and comments. All of these benefits improve reading experiences and the ability to reference important information; users can return to their bookmarked documents and color code their comments to be able to easily find the content they require across several publications. To benefit from these features users only have to set up an account, and all of the personalizations and reading features will become available. Over the next year additional publications will be added to the eLibrary platform, and subscribers will be notified as updates become available.

United First Major Airline to Move on Electric Planes Starting with Uber-Like Service to Airports

Source: Edward Russel - Skift

United Airlines has new plans for the urban mobility market offering so-called "last mile" rides between its hub airports and urban destinations with new, low-emission electric vertical takeoff and landing — or eVTOL — aircraft. This means that if you work at Wall Street, instead of hailing a cab to the airport in back-to-back traffic, you can call a small aircraft to take you there, completely avoiding traffic.

On Wednesday, United unveiled a partnership with Palo Alto, California-based air mobility company Archer to develop an eVTOL for these last mile missions. The proposed aircraft, which Archer plans to unveil later this year, would carry four passengers up to 60 miles at speeds up to 150 miles per hour to major airports. United and its regional affiliate Mesa Airlines have committed to purchasing up to 200 of these electric planes in a deal valued at $1 billion with the aim to debut them by 2024.

The eVTOL partnership with Archer is just the latest green initiative from United. In December, the airline unveiled plans to go "100 percent green" by 2050 with an investment in carbon sequestration technology. This followed previous investments in biofuels that, according to Kirby, face challenges finding scalable feedstock supplies.

And the investment in Archer's eVTOL project could be a segway to the bigger dream of large battery-powered passenger aircraft. While an all-electric Airbus A320 is likely decades away, small electric planes like eVTOLs could be a proving ground for technology that could be scaled to larger aircraft.

United claims that the Archer eVTOLs would produce 47 percent fewer emissions than a personal vehicle driving from Hollywood to LAX. "Through our all-electric aircraft, we are striving to curb carbon emissions, decrease traffic, and create the transportation networks of the future," Archer co-founder and CEO Adam Goldstein said in a statement.

ICAO and WCO issue joint on vaccine supply chain priorities, new customs and security guidelines

Source: ICAO

ICAO and the World Customs Organization (WCO) have published a joint statement calling on governments to demonstrate maximum flexibility with respect to border clearance and air transport supply chain operations essential to the effective distribution of COVID-19 vaccines and related medical supplies.

In a separate but related development, the two agencies have also developed new guidelines to help countries achieve better alignment of their customs and security procedures. This joint statement urges the rapid establishment of the infrastructure needed to support end-to-end vaccine storage and logistics for public supplies.

ICAO and the WCO are furthermore encouraging countries to designate required aviation staff as 'key workers' providing an essential service, in alignment with the WHO's Roadmap for Prioritizing Uses of COVID-19 Vaccines.

"To better expedite air cargo operations, and distribution of the COVID-19 vaccines, governments are being urged to bring these matters to the immediate attention of their national health and transport authorities, customs authorities, local governments, and any other concerned parties" ICAO Secretary General Dr. Fang Liu said.

"Since the 2010 incident where air cargo was attempted to be used as a delivery mechanism for explosive devices, the WCO and ICAO have been partnering to secure and protect the air cargo and mail supply chain, in addition to other objectives relating to the unfettered movement of people, goods, and conveyances across international borders," Dr. Liu noted.

As the aviation industry recovers from one crisis, it is looking to the next: climate change

Source: Katherine Walla – Atlantic Council

At the Atlantic Council 2021 Global Energy Forum event on decarbonizing aviation, there was discussion about the future of sustainable aviation. The speakers included Marc Hamy, vice president of corporate affairs, sustainability, and environment at Airbus; Scott Kirby, CEO of United Airlines; Jennifer Holmgren, CEO of LanzaTech; and Jeremy Baines, president of sustainable aviation fuel-producer Neste US. The moderator was Thomas Hicks, founding principal and managing director of Mabus Group.

Here are the key takeaways from the discussion.

Decarbonizing solutions abound, but there's no magic bullet

- Carbon-less aviation is possible and we can achieve it in this lifetime, but there is no magic bullet solution
- They estimated that they could improve sustainability using GPS technology to fly and use carbon sequestration as one of many solutions.
- Hydrogen could constitute "a very large part of the energy production of transport in the near future and I think we cannot miss this opportunity," and that hydrogen may one day replace oil.
- Hydrogen-powered planes and low-cost carbon capture may still be "a while off," but fuel solutions are already reducing emissions by about 80 percent today and the fuel "works without changing any infrastructure."

Sustainable aviation fuel

- To make sustainable aviation fuel, LanzaTech uses and converts gases such as industrial waste gases, carbon monoxide, hydrogen, carbon dioxide, gasified municipal solid waste, and gasified biomass, which is in great supply.
- The supply and demand for SAF's are expected to increase
- Currently, the fuel is only approved for 50 percent blends or less, but they would like to explore if they can reach 100 percent, which they think is possible.

It's not just airlines; the government can help too

- It is extremely important to have government incentives that enable the production of sustainable aviation fuel.
- Fuel producers and farmers who produce ethanol for aviation fuel should harness the opportunity to make their processing more sustainable—and get government credits for making sustainable choices such as using better agricultural practices and lower-carbon fertilizer.
- Put a price on carbon

Pioneering Technology To Unlock The Full Potential of Sustainable Aviation Fuel.

Source: Aviation Week Network

'Drop-in' solutions such as SAF and offsetting emissions are the only viable options available today for reducing the industry's carbon output at scale. Their accelerated use will play a critical role while the sector also looks ahead to the potential of emerging technologies, such as electric or hydrogen aircraft.

But while new fuels, offsets and future innovations take centre stage, the role that existing technologies can play in decarbonising aviation is often overlooked. "Technology is a critical element of all net-zero emission models, unlocking further potential for SAF to reduce emissions while also delivering engine efficiencies to reduce fuel consumption," says Mascolo.

In a pre-Covid paper, ICAO noted that CO2 emissions from international air travel could be reduced by as much as 63% by 2050 if conventional aviation fuel is replaced entirely by SAF. In short: SAF could be the most significant contribution to aviation's carbon neutral growth.

Despite the positive steps taken, SAF currently represents less than 1% of total jet fuel volume. To increase supply, industry needs to collaborate to rapidly scale up production and governments must encourage demand through policy mandates, both of which will help unlock learning curve effects and economies of scale which could help lower costs.

While industry and policymakers are taking steps to increase SAF supply and use, Mascolo says there is an opportunity "for organisations at every stage of the value chain to use technology to maximise emissions reductions from SAF."

Shell Aviation is building on existing relationships it has with companies such as engine manufacturer Rolls-Royce to unlock SAF's full potential. Since aviation's inception, Rolls-Royce and Shell have come together to overcome obstacles and enable progress. The first flight across the Atlantic in 1919 and Concorde's first commercial flight from London to Bahrain were both powered by Rolls-Royce engines and fuelled by Shell, with AeroShell providing Concorde's engines with high temperature protection.

AIR TRAFFIC CONTROLLERS SAY POTENTIAL CUTS AT NAV CANADA WOULD PUT LIVES AT RISK

Source: *Christopher Reynolds – Wings Magazine*

Air traffic controllers say Nav Canada is making layoffs even if it receives a possible bailout from Ottawa, jeopardizing passenger safety. More cuts would axe critically needed workers and make for a more hazardous airspace in corridors across the country, according to the Canadian Air Traffic Control Association.

About 60 jobs are at stake in seven control towers from Whitehorse to Windsor, Ont., as the non-profit body that runs the country's civil air navigation service reviews whether to pare down its payroll – already thinned by nearly 1,000 positions over the past year.

The permanent closure of seven control towers – pilots receive traffic information from a slimmed-down service, but they would have to make their own navigation decisions and largely fend for themselves during takeoff or landing. Control towers cannot be closed without a green light from the federal transport minister following a safety assessment by the department, Transport Canada said. The potential axing of 60 air traffic control jobs would come on top of nearly 50 more layoffs slated to take effect in June at flight service centres in Gander, NL, Moncton, NB, and Montreal.

Nav Canada saw profits and air traffic plummet over the past year as the pandemic battered the organization, prompting some 720 jobs lost among roughly 5,200 employees since March, plus another 180 announced in December. Despite the job cuts, Nav Canada's CEO acknowledged earlier this month that he received a bonus last year, part of $7 million in bonuses given to the non-profit's management team of hundreds. However, managers took "significant reductions" to their pay and pensions due to the pandemic, Bohn said

The Finance Department continues to negotiate with the aviation sector over a relief package, which it says will be contingent on companies protecting jobs, maintaining regional routes and offering refunds to passengers whose flights were cancelled. "We remain committed to supporting Canadians airlines and people who work in the air sector during this unprecedented and difficult time," Katherine Cuplinskas, press secretary to Finance Minister Chrystia Freeland, said in an email.

US DOT ANNOUNCES NEARLY $2 BILLION GRANT PROGRAM FOR AIRPORTS

Source: *Dan Pimentel -FlyingMag*

The US Department of Transportation is making nearly $2 billion in federal grant funding available to help airports affected by COVID-19 under the FAA Airport Coronavirus Response Grant Program. The program is available to more than 3,000 commercial service, reliever, and publicly-owned general-aviation airports in the National Plan of Integrated Airport Systems.

Under this new Airport Coronavirus Response Grant Program, primary commercial service airports with more than 10,000 annual passenger enplanements will share $1.75 billion. These funds will be available to provide relief from rent while helping to keep jobs, pay operational expenses, and give rent relief to airport concessions along with paying for costs related to combating the spread of pathogens at the airport.

Non-primary commercial service and general aviation airports will share $45 million based on their airport categories, such as National, Regional, Local, and Basic. Of that $45 million, airports that participate in the FAA Contract Tower Program will divide $5 million equally.

The funds are coming directly from the US Treasury's General Fund to prevent, prepare for, and respond to the impact of the COVID-19 pandemic, with FAA's Office of Airports administering these grant funds to airports, with no local match contribution required.

One stipulation of the program's funds is that while they can technically be used for new airport development projects, any development-related costs must be associated with combating the spread of pathogens at the airport. Examples of eligible development would be replacing or upgrading a heating, ventilation, and air conditioning (HVAC) system; reconfiguring the terminal to accommodate increased social distancing, or reconfiguring terminal space or other facilities to accommodate health screening.

The deadline to apply for the program's grants is June 30, 2021. The FAA website has further information about the Airport Coronavirus Response Grant Program including the required Federal form SF 424, Application for Federal Assistance.

FLORIDA TO BENEFIT FROM EVTOL VERTIPORTS NETWORK FOLLOWING NEW PARTNERSHIP

Source: International Airport View

The infrastructure consulting firm, AECOM, and infrastructure operator, Ferrovial, have partnered to design a network of vertiports that will connect strategic locations in major cities across Florida in the U.S.

Vertiports are a key component in enabling innovation in electric aircraft that take off and land vertically (eVTOL) by providing the necessary infrastructure for landing, recharging and departure.

Ferrovial is partnering with Lilium in developing the Florida vertiport network. Lilium is an aviation company focused on creating an emissions-free, regional air mobility service. The Ferrovial and AECOM-designed vertiport infrastructure will help to enable a high-speed, environmentally friendly, affordable alternative transport system that will connect Florida's cities in new, sustainable and more convenient ways.

"We are very happy to continue our long-lasting partnership with AECOM and join forces again in our vision to develop sustainable infrastructure. AECOM's design capabilities in mobility solutions will help us to transform this revolutionary concept into a life-changing experience for the vertiports users." said Luis Alvargonzalez, Ferrovial Airports' Corporate Development Director.

The vertiport infrastructure emphasises sustainability and efficiency, taking advantage of sunlight and natural elements. Noise abatement materials and surfaces are a key feature of the airfield design in order to further reduce the already ultra-low noise emissions from the eVTOL jets. In addition, the terminal buildings at the vertiports will provide a user-friendly passenger experience by enabling touchless processes, quick journeys and a comfortable environment.

FBOs Plan Midwest, Southwest Expansions Despite Pandemic

Source: Dan Pimentel – FlyingMag

More air travelers who have the financial means are seeking out business aviation and charter operators for private flights during COVID-19. While certainly not affordable for everyone, this influx of new clients has FBOs across the country reporting brisk business, which many launching plans for expansion.

Back in March of 2020, Cutter Aviation president and CEO Will Cutter never could have imagined his company would be celebrating one of its best years yet. Travel was diminished and fears were heightened. However, his team pushed forward, and soon enough travelers found a new routine, opting for safer travel via charter planes and private jets.

Cutter Aviation now finds itself entering 2021 on the heels of a banner year with record-setting sales, a surge in private charter rentals, full occupancy at all of its hangars across all FBO locations throughout the Southwest, and a host of expansion projects on the horizon

Another company making forward progress during the pandemic is Carver Aero. The company recently announced it had been selected by the Council Bluffs Airport Authority to be the fixed-base operator for the Council Bluffs, Iowa, airport. Simultaneously, an agreement has been reached to acquire Advanced Air from Lisa LaMantia, the long-term owner and operator of the current FBO and flight school at the airfield.

Along with the FBO acquisition, Carver recently added to their charter aircraft fleet with the purchase of two additional Beechcraft King Air turboprops. Carver Aero initially will base a King Air 200 and King Air 350 in Council Bluffs to serve the eastern Nebraska and western Iowa markets, while a fleet that includes a King Air C90, 200, 350, a Pilatus PC-12, and a Cessna Citation 560 Ultra jet will be based in Davenport, Iowa, to serve the eastern Iowa and northern Illinois regions. Carver also manages, maintains, and pilots a Hawker 750 and two Hawker 400s for customers.

Gevo and Scandinavian Airlines System Amend Agreement to Increase Off-Take of Sustainable Aviation Fuel, valued at over $100 Million

Source: Yahoo! Finance

Gevo, Inc. announced that it and Scandinavian Airlines System (SAS) have signed an amendment to increase SAS's minimum purchase obligation to purchase SAF's to 5,000,000 gallons per year. Gevo and SAS signed the original fuel sales agreement in October 2019.

With the finalization of this this amendment to the Fuel Sales Agreement (the Amendment), Gevo expects to supply SAS with SAF beginning in 2024 from Gevo's Net-Zero 2 Project for use and distribution in low carbon fuel regions of the United States. The value of the Fuel Sales Agreement, as amended, is estimated at over $100 million over the entire term of the agreement inclusive of the related SAF and environmental credits.

"With this amendment, SAS has significantly increased the amount of SAF that it is willing to purchase from Gevo. This amendment is evidence of the strong and growing demand for Gevo's renewable hydrocarbon products. We expect to ink additional offtake agreements later this year," said Patrick R. Gruber, Chief Executive Officer of Gevo. "SAS have a vision and plan that they are executing, even in spite of the global pandemic. This additional volume will help Gevo grow its business and hopefully accelerate making real Gevo's Net-Zero 2 plant," added Mr. Gruber.

Gevo expects that each Net-Zero Project will have the capability to produce approximately 45MGPY of liquid hydrocarbons (jet fuel and renewable gasoline) and are also expected to produce at least 350,000,000 lbs/yr of high protein animal feed. To reduce and eliminate the fossil fuel resources used in the production facilities, each Net Zero Project is expected to have an anaerobic digestion wastewater treatment plant that is capable of generating enough biogas to run the plant and supply a combined heat and power unit, capable of meeting approximately 30% of the plant's electricity needs. The remaining 70% of electricity to run the plant is expected to come from wind power. Net-Zero 1 may also obtain renewable natural gas ("RNG") using manure from dairy or beef cows. These efforts should make this Net-Zero 1 self-sufficient and help ensure it will be off a fossil-based grid. Gevo also believes in transparency and is setting up sustainability tracking methods to work alongside our farmers.

Canadian Aviation Company Manufacturing Air Sanitizers to fight COVID-19
Source: Ross Anderson – CTV News

A company that has made a name for itself developing flight simulators is now helping to keep people safe in more ways than one. CAE, formerly known as Canadian Aviation Electronics, has partnered with PYURE to assemble air sanitizers to help reduce the spread of COVID-19.

The Montreal-based company expects to produce 55,000 units this year, which will be used in hospitals, doctors' and dentists' offices, among other companies and schools in the United States, according to a press release.

Pascal Grenier, vice-president of CAE's global affairs told CTV News that the manufacturing facilities previously used to build flight simulators have been retrofitted to produce air sanitizers. Unlike an air purifier, CAE's air sanitizer replicates the way sunlight sanitizes the outdoor environment. The technology's sanitization products and solutions don't only purify the air, they also clean it.

"The technology is at a very high level to recreate what happens every day outdoors in the sun and has the cleansing effect of the sun indoors," said PYURE chief executive officer, Jean Francois Huc.

In 2020, CAE was awarded a contract from the Canadian government to manufacture 10,000 ventilators for hospitals across the country, however the company's contract expired in January leaving 180 employees jobless. Since then, more than 100 employees have returned to work. "This is work we can actually do and at the same time, we can fight this virus and other viruses that may come afterward, so we are pretty excited," said Sophie Albert, a union representative for CAE.