Basler turbine aircraft creating a northern buzz

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If you've spent any time in aviation, you know a legend when you see one. With more than 60 years of incredible service, from frozen pole to frozen pole and everywhere in between, the legendary DC-3 has been reborn as the new Basler Turbo 67 aircraft.

Respected and loved by pilots around the world, the DC-3 had long been considered one of the best aircraft ever made, thanks to its amazing ability to land on short, rough runways, carry a substantial payload and forgive the beatings that many air carriers gave it.

Today, it's been re-imagined to create the BT-67 – the ultimate aircraft recycling project. Using DC-3 airframes, Basler Turbo Conversions, based in Oshkosh, Wis., lengthens and remanufactures the aircraft to the point of being brand new, or equivalent to new. Outfitted with powerful Pratt and Whitney turbine engines, impressive avionics and five-bladed propellers, the Basler is now equipped and ready to carry on the legend of the DC-3 for generations to come.

"The DC-3 was a beautiful, stable and virtually indestructible airframe going to waste. We realized that by turbinizing and modernizing the airplane, it would go on for many years," said a quote on the company's website from founder, Warren Basler.

Many pilots rejoiced at Basler's vision and, now that the BT-67 is in use, mining companies, who often face daunting challenges in supplying camps located in remote areas, are getting excited, too.
"Mining companies love the Basler," said Greg Bourdignon, vice-president of operations for Cargo North, a full-service air carrier based in Red Lake, Pickle Lake and Nakina but serving a large area including the three Canadian provinces of Manitoba, Ontario and Quebec.

"The Basler is STOL (short take off and landing)…it can go into soft gravel strips, ice strips, even abandoned runways," he said. Bourdignon should know, since his company just took delivery of its second Basler with options for a third.

"It takes awhile to get a Basler since they only produce two per year, so we had to wait a bit," he notes, adding that Cargo North chose to go with the Basler based on its low operating costs, high reliability and tremendous payload capability.

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"In the past, we missed out on some opportunities because we didn't have an aircraft like the Basler but, now, we're well-positioned to service mining companies and First Nations communities in Canada's north," Bourdignon said.

In particular, Cargo North is looking forward to the anticipated economic boom from the "ring of fire" mineral discoveries involving chromite and nickel. Named after the famous country western song by Johnny Cash, the ring of fire is located in northern Ontario and may prove to be the world's largest deposit of rare, high-grade chromite. With a potential of generating $120 billion, Ontario's ring of fire is considered the economic equivalent of Alberta's gigantic Athabasca oil sands.

The discovery of chromite actually first began as a search for diamonds by DeBeers. In an ironic twist, there are now approximately 30,000 claims in the ring of fire for chromite, copper, zinc, nickel, platinum, vanadium and gold but none for diamonds. With thousands of future jobs and billions at stake, the only problem in developing the ring of fire is the remote area in which companies have to explore, operate and process in and that's where the Basler comes in. "It's the perfect aircraft to get supplies into these remote camps to help open up the ring of fire," said Bourdignon.

Right now, Cargo North's two Baslers are certified to carry more than 10,000 pounds of freight or fuel each but Bourdignon says they hope to be certified to carry up to 18 passengers by the summer of 2014.
In addition to its new aircraft, Cargo North has deployed an award-winning technology to carry a bulk fuel tank called the BATT.

As the world's first collapsible, double-walled, baffled aviation tank, the BATT took a number of months to develop and was first deployed in 2010 for use by South America's Columbian law enforcement.
Invented and manufactured by SEI Industries Ltd., a Canadian company based in Delta, B.C., the BATT tank is made from two main components: a heavy duty, abrasion-resistant outer tank (with a built-in strapping system that also serves as secondary containment) and a baffled inner tank.

When it comes to delivering bulk fuel, Bourdignon says the BATT allows "the aircraft to carry its maximum capacity which we can't do with drums or metal tanks."

For the past few decades, drums and metal tanks have been the most common way to fly in bulk fuel, but these options are not without a number of disadvantages. Drums can leak, be difficult to move, and are ill-fitting with aircraft interiors, while metal tanks are installations that rob the aircraft of any cargo flexibility. Using either of these two methods, once fuel is offloaded, the aircraft is then forced to depart with empty drums or an empty metal tank. Understandably, this doubles the actual cost of fuel delivery simply because the aircraft cannot be utilized for any other cargo on the return flight out.

With the BATT, once fuel is offloaded, the collapsible tank can be put away to allow other cargo to be loaded. "It's quite unique," says Bourdignon. "We can load up with fuel, fly in, off-load and then roll it up and store it at the front. Then, we carry different freight out."

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Another advantage, said Bourdignon, is the ability to run the Basler aircraft 24 hours a day. “Freight has to be delivered during day time but fuel doesn’t care if it’s a day or night delivery.”

“With the removable BATT, we can fly freight during the day and then install the BATT inside the fuselage to fly fuel at night,” he said. “In total, it only takes 30 minutes to install the BATT, fill it and be ready to fly.” Since Cargo North pilots do all the off-loading of the fuel, night deliveries have turned out to be an efficient way to service camps and a great way to utilize the aircraft to its fullest. “Compared to moving drums of fuel, our pilots also love the BATT” he added. “It’s far more convenient…just hook up a pump to load or off-load. It’s the modern way of hauling fuel and far better for the environment.”

Currently, Cargo North is certified to carry diesel and Jet A fuel in its BATTs but, in the near future, the company will be the first in Canada to deploy the BATT-Gas which is specifically designed to carry gasoline. The BATT-Gas is in the final stages of receiving Transport Canada certification.

Bourdignon said the BATT has opened up a whole new market for Cargo North. “Because of the BATT’s soft sides and customized design inside the Basler, we’re able to deliver partial loads of fuel with freight stacked behind it. This means we can deliver things like sofas and mattresses that would have had to wait for months to be scheduled on an aircraft.”

“We pride ourselves on being on-time and reliable and this means we can service our customers even better,” he added. “We see our customers as friends and we like to treat them that way.”