

PROFESSIONAL PILOT



APRIL 2014



University of North Carolina operates a Daher-Socata TBM 850, a TBM 700C2 and 4 Beechcraft Baron 58s. They fly school officials, athletic directors, coaches and medical professionals involved in the UNC Health Care System. (L-R) Dir of UNC Air Ops Gordon Kramon, TBM and Baron Sr Capt Jim Hotelling, Dir of Mx David Eastwood and Air Transportation Coordinator Lotta Peltola-Nelms. Aircraft and staff are based at RDU (Raleigh-Durham NC).

Workhorse Aircraft



UNC flies TBM 850, TBM 700C2 and 4 Baron 58s



Providing leadership for UNC's flight department are Nadine O'Malley, associated director for administration and finance for the NC Area Health Education Centers, and Gordon Kramon, director of air operations.

Carolina Blue keeps 6 planes busy transporting school officials, professors, athletic directors, coaches and health care professionals within NC and neighboring states.

By Mike Potts
Contributing Editor

One of the best known college logos in the country today belongs to the University of North Carolina (UNC). The distinctive "Carolina blue" UNC logo appears on clothing, banners and flags, license plates, glasses and cups and all manner of collectibles.

It is also displayed prominently on 6 aircraft that the university operates to support a statewide medical outreach program and to provide transportation for key school officials traveling to conduct the university's business.

With 17 campuses located across the state, UNC is an extensive operation from the Atlantic coast on the east side to the Appalachian Mountains in the west, serving more than 220,000 students. The school graduates about 30,000 annually from more than 200 academic degree programs.

In 2013 *US News & World Report* magazine ranked UNC Chapel Hill (the university's flagship campus) 5th among the nation's top public colleges and universities. This achievement shows the high academic credentials that UNC has. Chartered in

1789, UNC is one of the oldest public universities in the country.

Today UNC-Chapel Hill is a coeducational public research university which includes the UNC-Chapel Hill School of Medicine and its associated UNC Health Care System (HCS). HCS exists to further the teaching mission of the university and to provide state-of-the-art patient care, creating a key interface between the academics of biomedical research and the day-to-day delivery of health care services.

Also maintaining a world-class collegiate athletics department, the university's teams have won more than 40 National Collegiate Athletic Association (NCAA) championships in 6 different sports, including men's and women's basketball, men's and women's soccer, men's lacrosse and women's field hockey. Recruiting the top-level athletes necessary to consistently field teams with championship potential requires extensive travel by UNC coaches and the university's flight department plays an important role.

UNC's flight department got its start in 1968 when a doctor in Chapel Hill recognized that much of rural North Carolina needed better access to medical care and that aircraft could carry

doctors to meet with groups of patients, vastly improving the efficient use of the doctors' time.

Originally air operation was established under the auspices of the North Carolina Area Health Education Centers, or AHEC, which was part of a then newly-created Federal AHEC program under the US Department of Health and Human Services. A nonprofit foundation called UNC Medical Air Operations, or Medical Air for short, was established to own the aircraft.

Today the flight dept still operates on essentially the same model, although its role has expanded to include a wider array of medical educational services as well as additional functions for the university including recruiting and executive transport, using a fleet of 6 aircraft including 2 Daher-Socata single-engine turboprops, a TBM850 and a TBM700C2, and 4 Beechcraft Baron 58s.

The flight department for UNC is based at RDU (Raleigh-Durham NC) in a purpose-built 16,000 sq ft facility that includes a 10,890 sq ft maintenance and storage hangar, plus offices and additional maintenance space. UNC Flight Ops relocated to RDU about 3 years ago from its original location at IGX (Chapel Hill NC).



Dir of Maintenance David Eastwood started with the UNC flight department as a part-time maintenance technician in 1987 and worked his way up to the senior leadership role he holds today.

Flight activity averages 5 to 7 trips daily, typically carrying 1 to 3 passengers. Most operations are in day-light, transporting faculty and resident physicians to clinics around the state. Occasional night flights enable faculty members to conduct evening continuing education classes.

During the 2012-2013 academic year UNC Air Operations carried 1912 passengers to more than 98 destinations, including the state's 9 AHEC centers and various community hospitals, health departments and universities.

"This service makes it possible for our faculty to reach very remote sites in the state on a daily basis, while still maintaining a full slate of professional activities," says Nadine O'Malley, UNC's associate director for administration and finance, who has administrative responsibility for the flight department. "Without our flight department, there's no way we could offer these services with our current level of staffing."



Air Transportation Coordinator Lotta Peltola-Nelms handles scheduling for the UNC flight dept. She is a native of Finland and came to the US to learn to fly.

Gordon Kramon brings experience as director of UNC's flight department

Today the flight department is led by Gordon Kramon, a 10,000-hr ATP rated pilot for whom directing a flight department represents a 2nd career. Kramon's 1st career was in his family's clothing manufacturing business in New York City, which he joined after graduation from Lehigh University in 1977. By then he was already an instrument-rated pilot.

Kramon traces his love of aviation to a family vacation in the Caribbean when he was 14. He remembers sitting in the front seat of a chartered Piper Aztec on a trip to Virgin Gorda. He says he decided then and there that he wanted to be a pilot.

He began taking flying lessons in 1972 at Westair at HPN (White Plains NY) while still in high school, supported by his father who thought the skill would be of value. His father had used airline aviation to give the business a competitive advantage. "My father used to say 'I can fly to Chicago and be back with the order while my competitors are still on the train,'" Kramon recalls.

In 1982 Kramon bought a Cessna 310 and upgraded to a 340 in 1989. With the clothing business in decline toward the end of the decade, he traded for a Beechcraft Bonanza F33A but found the lack of deicing capability too limiting and soon swapped the Bonanza for a Beechcraft Baron.

A growing trend toward ever more casual clothing eventually prompted Kramon to close the business. In 2009 he was living in Chapel Hill NC and looking for something new to do. That's when he learned that UNC was looking for an aviation director—a person with a strong business management background who was also a pilot, ideally was familiar with Beech Barons and perhaps even was acquainted with Chapel Hill. "It was like the job description had been tailor made for my background," he said. UNC agreed and hired him.

Kramon joined the flight dept as director in 2009 when it had 6 Beechcraft Barons, including a B55, an E55, and 4 58s, including 5 pre-1985 models with old style controls and a 2001 model. It was a fleet mix that he quickly came to believe carried an increased element of risk because there was so little commonality. "One Baron had the fuel pumps where all the others had the landing



Jim Hotelling flies both the TBMs and Barons for UNC and is one of the department's most senior captains. He has been with UNC Air Operations since 1991.

light switches. Every airplane was different, and that wasn't good."

He also concluded that the flight department had enough capacity to expand its mission, and he actively began soliciting opportunities to provide senior level executive travel with the goal of increasing the department's value to the university. The success of this effort, however, also began to display the shortcomings of his fleet.

Kramon says it was a trip carrying UNC's chancellor to Montreal in late 2009 that drove the point home. "I took him in a Baron because that's all we had, and we bounced along at 7000 feet all the way to Montreal and back. It was obvious we needed something with more speed and the ability to get above the weather."

Under Kramon the university has modernized its fleet with TBM TPs

Before long, Kramon was authorized to replace one of the Barons with a turbine-powered aircraft. The department demonstrated all of the available candidates: Pilatus, Piper and TBM



Mx Tech Paul Cotrufo is also a commercial, multiengine and instrument-rated pilot who flies the Barons on test flights after maintenance is performed and also for maintenance-related positioning trips.



Arthur Johnson is UNC's newest pilot. He previously flew for the North Carolina Dept of Transportation, and is currently assigned to fly UNC's Barons.

single-engine turboprops as well as Cessna's Mustang light jet. "We needed speed and we needed efficiency but we didn't need a big cabin," he says. In 2011 the department acquired its 1st Daher-Socata TBM. The aircraft quickly proved to be so popular that a 2nd TBM joined the fleet in 2012.

Meanwhile, Kramon was also pushing hard to upgrade his fleet of aging Barons. By 2013 all but the 2001 model were gone, replaced by 3 newer Barons, an 04, an 05 and an 09. With the new aircraft came matching avionics as well. All of the department's aircraft are equipped with WAAS enabled Garmin 530s, except the newest of the Barons which was a Garmin G1000 panel. All have satellite weather and active traffic avoidance systems and all are certified for flight into known icing.

Because UNC's airplanes are owned by a nonprofit foundation, the process for acquiring them differs considerably from the way most flight departments buy aircraft.

"We don't buy new airplanes," Kramon explains. "Instead, we acquire airplanes that are a few years old, using a process called a 'bargain sale donation.' We look for wealthy people who have written off their airplanes.



Maintenance Technician Jeremy Greene learned about aviation maintenance in the Air Force where he was an F15 crew chief.

"For example," he says, "I find someone who will sell me a \$2.3 million TBM for \$1.8 million, and I give them a bargain sale tax credit for the difference. The donor gets a tax deduction, plus he or she doesn't have to recoup as much on the sale because they've saved it on taxes. The donor is better off and so are we. It's a total win/win situation."

Revamped fleet expands services for UNC Medical Air

With his newly updated fleet, Kramon was well positioned to offer expanded services to the university. The Barons rarely leave the state but the 320-kt speed of the TBMs make them excellent midrange transports and Kramon now frequently carries NC coaches on recruiting trips, seeking out top level high school athletes to join the university's teams. Hall of fame UNC women's basketball coach Sylvia Hatchell is a regular passenger on UNC's TBMs.

University officials also periodically need to travel to Washington DC and the UNC flight dept has complied with the complex steps necessary to operate into DCA (National, Washington DC). Kramon described the procedure, which includes creating a dedicated DCA Access Standard Security Program (DASSP) manual that establishes the department's RDU terminal as an authorized gateway for DCA-bound flights, having background checks on all authorized pilots and having the department's TBMs checked and cleared. The departure terminal must also meet requirements for secured access to the ramp. It took 2 years, he says, to comply with all the requirements.

Pilots and other dept personnel of UNC flight ops

UNC flight ops is staffed by 5 full-time pilots including Kramon, a part-time pilot, a maintenance director and 2 mechanics, 2 schedulers and a financial manager. All are employees of the university and the jobs include generous pension and healthcare benefits.

Pilots typically work a 5 day week, and an occasional weekend. Overnight trips are infrequent, with Kramon taking most of them himself. Almost all operations are conducted single-pilot. Every pilot is equipped with an iPad mini, loaded with flight

planning software from ForeFlight, Jeppesen mobile flightdeck and FltPlan.com.

Both TBMs are currently averaging about 500 hrs annually and the 4 Barons about 300 hrs each. UNC pilots take recurrent training annually in both the Baron and the TBM, usually at SIMCOM which has a TBM simulator.

Minimum flight time requirement for a new pilot is 3000 hrs and an ATP. The hardest thing, Kramon says, is finding candidates with lots of single-pilot experience. It's also important to find pilots with the right personality, since the job requires considerable interaction with passengers and the department does not use flight attendants.

Flight scheduling under Lotta Nelms

Lotta Peltola Nelms is the department's air transportation coordinator, performing the scheduling function in conjunction with assistant coordinator Carolyn Mann. Nelms is a native of Finland. Her father and grandfather were pilots in the Finnish Air Force and she grew up around airplanes.

Too short to qualify for the Air Force at home, she came to the US in 1998 to learn to fly, earning her licenses at North American Institute of Aviation at Myrtle Beach SC. Upon graduation she became an instructor at the school. In 2001 she took a job at Ram Air Freight at RDU, hauling checks in piston singles and twins. She rose through the ranks at Ram Air and became director of ops there, with responsibility for 55 aircraft, remaining there until the company closed in 2012.

Around the same time UNC's scheduler was retiring. Nelms had done scheduling work at Ram Air, and was soon hired at UNC. She takes incoming flight requests from doctors, clinics, and administrators, and develops a schedule based on aircraft availability. She also schedules the flightcrews and makes sure duty times and other requirements are met.

Part of her duties include coordinating facility requirements, including inspections for the building's fire extinguishing system. Kramon says Nelms' background as an ATP-rated pilot makes her especially valuable as a scheduler and general trouble shooter. "She understands our operation in ways a non-pilot simply couldn't," he says.

TPs that tackle tough jobs

Beefy turboprops excel in shortfield ops, carrying heavy loads and operating at low costs. Govt and civil activities use TP for maritime surveillance, border patrol, S&R, ISR, firefighting and other missions.

AC208B Combat Caravan



Bombardier Q400 NextGen



King Air 350ER in ISR mode



Pilatus PC12 Spectre



Piaggio Multirole Patrol Aircraft



Viking Twin Otter Guardian 400



Quest Kodiak



Daher-Socata TBM 850



By Don Van Dyke
ATP/Helo/CFII, F28, Bell 222
Pro Pilot Canadian Technical Editor

For this compendium we selected 8 TP's that have proven their mettle and earn the respect of their pilots and mx providers by flying in and out of

unprepared fields, carrying needed supplies or serving isolated communities where they deliver foodstuffs or medicines. They are the ubiquitous Beech King Air in ISR mode, the Bombardier Dash 8 Q400 Nextgen as a firefighter, Cessna's ever-popular Caravan as a military supply plane and

paradrop aircraft, Daher-Socata's TBM carrying officers serving in the French Army, the Piaggio P.180 Avanti II as a marine surveillance aircraft, the Pilatus PC12 Spectre for reconnaissance missions, the Quest Kodiak as a rough field outpost supply aircraft and the Viking

Beechcraft King Air 350iER

303 ktas, 2340 nm, FL350 \$8.5 million

Technical Specifications

This is the extended range variant of King Air 350.

CABIN

Seats (standard/max).....9/11
Volume.....355 ft³
Sea-level cabin.....15,293 ft

WEIGHTS

BOW.....10,385 lbs
MTOW.....16,500 lbs
MLW.....15,675 lbs
Payload w/max fuel.....1023 lbs

PERFORMANCE

Cruise, long range/high speed.....238/303 ktas
Range, ferry (100 nm alternate).....2340 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....1h05/FL350
600 nm.....2h07/FL250
1000 nm.....3h36/FL330

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....4473/2728 ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-60A
Output/Flat rating.....1050 shp/ISA+10°C

AVIONICS

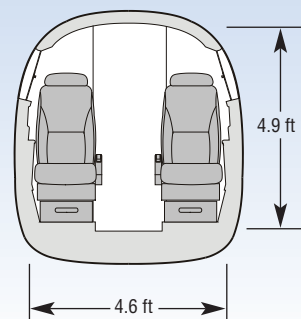
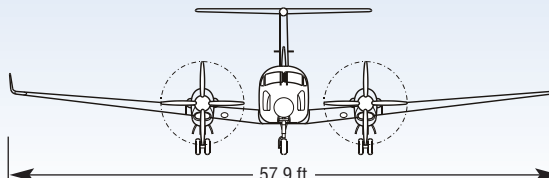
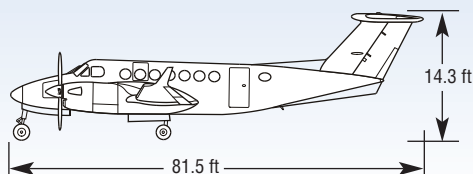
Manufacturer/Suite...Rockwell Collins Pro Line 21

Cabin. The square-oval fuselage design offers more head and shoulder room. Selected seats are reversible/removable.

Pressurization/ECS. A 10,380 ft cabin altitude is maintained at maximum cruising altitude of FL350. Dual-zone cabin climate controlled automatically with little input from pilot.

Ice/rain protection. Bleed air used to protect brakes, wing and horizontal stabilizer leading edges, and engine inlets.

Cockpit. Pro Line 21 avionics includes 3 8 x 10-in PFD/MFD/EICAS LCDs to complement complete digital CNS suite.



Bombardier Q400 Nextgen

349 ktas, 1125 nm, FL350 \$21 million

Technical Specifications

Q400 a/c features reduced costs for fuel and mx.

CABIN

Seats (business standard/max).....28/40
Volume.....2740 ft³
Sea-level cabin.....NA

WEIGHTS

BOW.....38,986 lbs
MTOW.....65,200 lbs
MLW.....62,000 lbs
Payload w/max fuel.....NA

PERFORMANCE

Cruise, long range/high speed.....349/360 ktas
Range (100 nm alternate).....1125 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....NA
600 nm.....NA
1000 nm.....NA

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....4819/4232 ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-150A
Output/Flat rating.....5071 shp/NA

AVIONICS

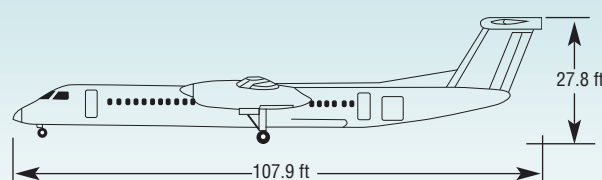
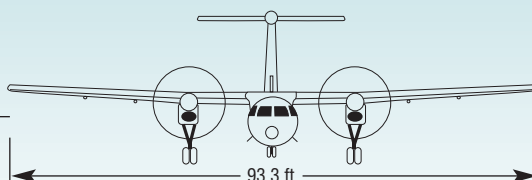
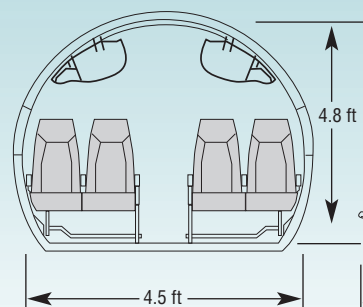
Manufacturer/Suite.....Thales Avionics

Cabin. Updated cabin, LED lighting, windows and overhead bins with active noise and vibration suppression.

Pressurization/ECS. Maximum cabin pressure is 5.5 psi.

Ice/rain protection. Conventional boots protect wing and horizontal stabilizer leading edges, and engine inlets.

Cockpit. Avionics suite includes 5-LCD PFD / MFD / EICAS displays to complement complete digital CNS suite and optional CAT IIIA with HGS, RNP 0.3, WAAS/LPV, steep approach and datalink.



Cessna Grand Caravan EX

195 kts, 865 nm, FL276 \$2.5 million

Technical Specifications

EX model offers enhanced performance compared to the venerable Grand Caravan.

CABIN

Seats (standard/max).....9/14
Volume.....254 ft³
Sea-level cabin.....NA

WEIGHTS

BOW.....5305 lbs
MTOW.....8807 lbs
MLW.....8509 lbs
Payload w/max fuel.....1291 lbs

PERFORMANCE

Cruise, long range/high speed.....238/303 kts
Range, ferry (100 nm alternate).....2340 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....1h37/FL100
600 nm.....3h09/FL100
1000 nm.....NA

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....2160/NA ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-140
Output/Flat rating.....867 shp/NA

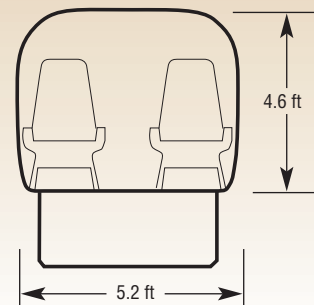
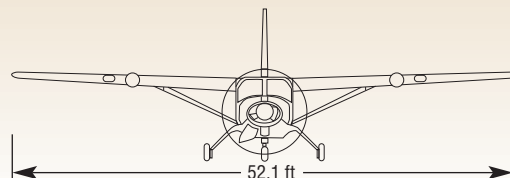
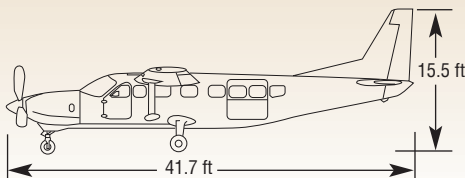
AVIONICS

Manufacturer/Suite.....Garmin G1000

Cabin. Cabin can accommodate handling of large, bulky items. Additional cargo volume is available with optional cargo pod. Pressurization/ECS. Aircraft is not pressurized. Cabin climate maintained by the pilot.

Ice/rain protection. Aircraft has limited ice protection and is not certificated for flight into icing conditions.

Cockpit. G1000 features 3 PFD/MFD/ EICAS LCDs complementing CNS suite. Also equipped with an IR port to accommodate data entry via handheld Garmin PDAs.



Daher-Socata TBM 850

320 kts, 1452 nm, FL310 900: \$3.7 million

Technical Specifications

At press time TBM 900 was unveiled as successor to the TBM 850. TBM 900 has winglets and offers longer range (1730 nm) and faster cruising speed (330 kts). TBM 850 production will cease.

CABIN

Seats (standard/max).....5/6
Volume.....123 ft³
Sea-level cabin.....14,390 ft

WEIGHTS

BOW.....4780 lbs
MTOW.....7394 lbs
MLW.....7024 lbs
Payload w/max fuel.....633 lbs

PERFORMANCE

Cruise, long range/high speed.....255/320 kts
Range, ferry (100 nm alternate).....1452 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....1h01/FL260
600 nm.....1h59/FL280
1000 nm.....3h15/FL280

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....2840/2430 ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-66D
Output/Flat rating850 shp/ISA+49°C

AVIONICS

Manufacturer/Suite.....Garmin G1000

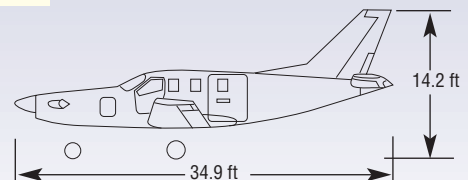
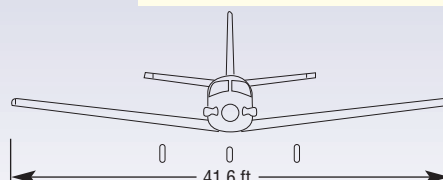
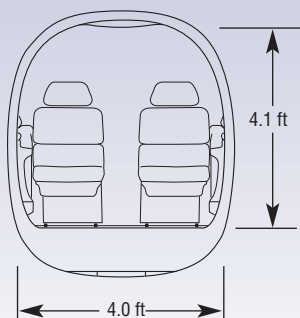
Cabin. Cabin can accommodate a wide range of configurations.

Pressurization/ECS. Aircraft is pressurized. Cabin climate is automatically maintained.

Ice/rain protection. Aircraft is certificated for flight into known icing conditions.

Cockpit. G1000 uses 3 PFD/MFD/EICAS LCDs to support CNS suite. IR port allows data entry via handheld Garmin PDAs.

Note: Drawings and photos in this writeup feature the TBM 850.



Piaggio P.180 Avanti II

402 ktas, 1530 nm, FL410 \$7.2 million

Technical Specifications

Avanti II is a versatile, high-performance aircraft used in a wide range of public services.

CABIN

Seats (standard/max).....7/9
Volume.....375 ft³
Sea-level cabin.....24,000 ft

WEIGHTS

BOW.....8375 lbs
MTOW.....12,150 lbs
MLW.....11,500 lbs
Payload w/max fuel.....973 lbs

PERFORMANCE

Cruise, long range/high speed.....318/402 ktas
Range, ferry (100 nm alternate).....1530 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....0h53/FL310
600 nm.....1h44/FL350
1000 nm.....3h02/FL390

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....3262/1282 ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-66B
Output/Flat rating850 shp/ISA+28°C

AVIONICS

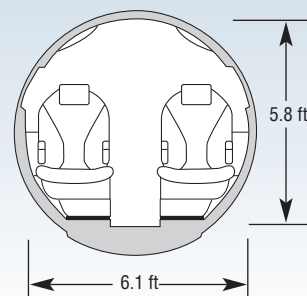
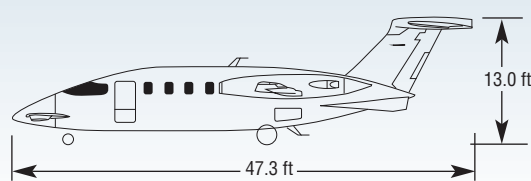
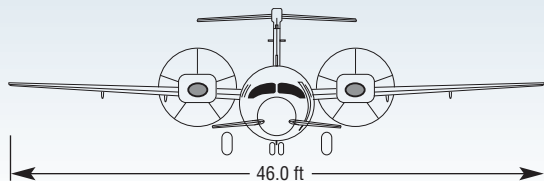
Manufacturer/Suit.....Rockwell Collins Pro Line 21

Cabin. Spacious cabin permits installation of seats, equipment and systems in widely ranging configurations.

Pressurization/ECS. Cabin altitude permits comfortable long-loiter at high altitudes.

Ice/rain protection. Aircraft is certificated for flight into known icing conditions. All-weather Protection is provided by a combination of bleed air, electrical and pneumatic anti-ice systems.

Cockpit. Avionics suite features 3 10.8 PFD/ MFD/ EICAS LCDs, Pro Line radios, 1 FMS AHRS, TCAS, TAWS, and numerous options.



Pilatus PC12 Spectre

280 ktas, 1582 nm, FL300 \$4.6 million

Technical Specifications

Spectre is a multi-purpose variant of the PC12 line with enhanced avionics and performance.

CABIN

Seats (standard/max).....7/10
Volume.....330 ft³
Sea-level cabin.....13,100 ft

WEIGHTS

BOW.....6782 lbs
MTOW.....10,450 lbs
MLW.....9921 lbs
Payload w/max fuel.....1456 lbs

PERFORMANCE

Cruise, long range/high speed.....208/280 ktas
Range, ferry (100 nm alternate).....1582 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....1h11/FL260
600 nm.....2h18/FL270
1000 nm.....3h49/FL280

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....2650/NA ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-67P
Output/Flat rating.....1200 shp/ISA+35°C

AVIONICS

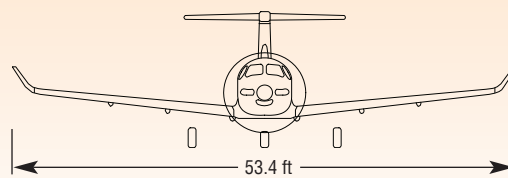
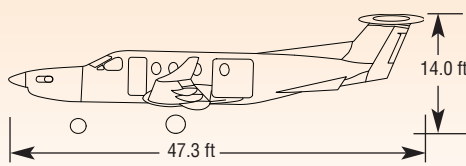
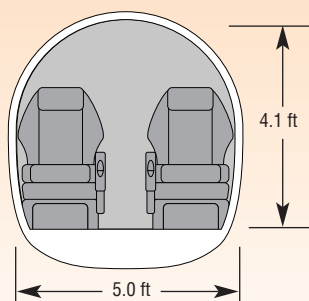
Manufacturer/Suite.....Honeywell Primus Apex

Cabin. Large cabin can accommodate handling of bulky items and equipment.

Pressurization/ECS. Aircraft is pressurized. Cabin climate maintained by the pilot.

Ice/rain protection. Aircraft certified for flight into known icing conditions. Pneumatic boots on wing and horizontal tail. Other systems electrically heated.

Cockpit. Four large LCDs PFD/MFD/EICAS integrate flight information, aircraft configuration, pressurization, and environmental controls. SmartView displays a natural 3D rendering of terrain.



Quest Kodiak 100

171 ktas, 1181 nm, FL250 \$2.2 million

Technical Specifications

This aircraft is a high-performance STOL utility TP designed for rough and rugged operations.

CABIN

Seats (standard/max).....5/9
Volume.....248 ft³
Sea-level cabin.....NA

WEIGHTS

BOW.....4428 lbs
MTOW.....7255 lbs
MLW.....6690 lbs
Payload w/max fuel.....733 lbs

PERFORMANCE

Cruise, long range/high speed.....139/171 ktas
Range, ferry (100 nm alternate).....1181 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....1h49/FL100
600 nm.....3h38/FL100
1000 nm.....5h54/FL100

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....1468/1050 ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-34
Output/Flat rating.....750 shp/ISA+7°C

AVIONICS

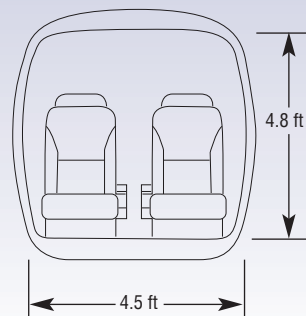
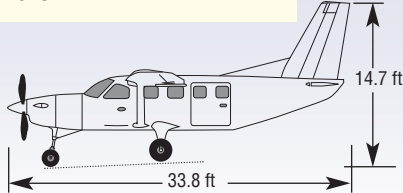
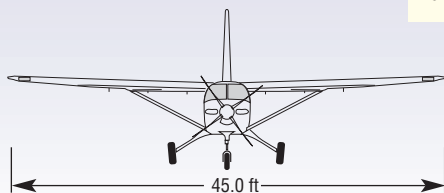
Manufacturer/Suite.....Garmin G1000

Cabin. Cabin can accommodate a wide range of configurations. Optional external pod affords additional 63 cu ft capacity.

Pressurization/ECS. Aircraft is not pressurized. Cabin climate control is maintained by the pilot.

Ice/rain protection. Flight into known icing conditions is permitted with optional TKS ice protection system installed.

Cockpit. G1000 features 2 TFT PFD and 1 MFD/EICAS LCDs complementing CNS suite. Options include radar, Stormscope, synthetic vision system (SVS), and TCAS.



Viking Twin Otter 400

182 ktas, 799 nm, FL250 \$5.9 million

Technical Specifications

Twin Otter can operate at remote, unimproved airfields and in challenging environments.

CABIN

Seats (standard/max).....NA/19
Volume.....384 ft³
Sea-level cabin.....NA

WEIGHTS

BOW.....7100 lbs
MTOW.....12,500 lbs
MLW.....12,300 lbs
Payload w/max fuel.....NA

PERFORMANCE

Cruise, long range/high speed.....NA/182 ktas
Range, ferry (100 nm alternate).....799 nm

MISSION PERFORMANCE (time/flight level)

300 nm.....NA
600 nm.....NA
1000 nm.....NA

AIRFIELD PERFORMANCE (SL, ISA)

Field Length (MTOW/MLW).....1200/1050 ft

POWERPLANT(S)

Manufacturer.....Pratt & Whitney Canada
Type.....PT6A-34
Output/Flat rating.....NA/NA

AVIONICS

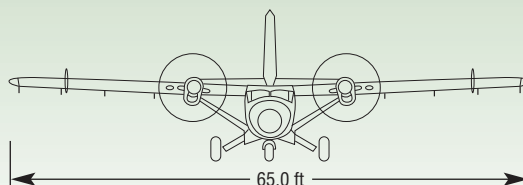
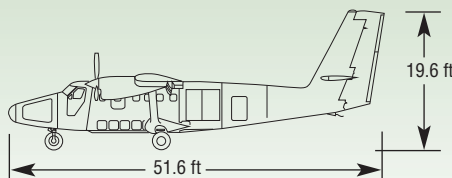
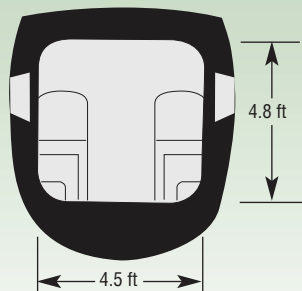
Manufacturer/Suite.....Honeywell Primus Apex

Cabin. Interior features multiple quick-change configurations and accommodate handling of bulky items and equipment.

Pressurization/ECS. Cabin not pressurized. Cabin climate is maintained by the pilot.

Ice/rain protection. Optional full airframe de-ice package, propeller de-icing, heated windshields.

Cockpit. Avionics features 2 large LCD PFD and 1 MFD/EICAS to integrate and display flight, configuration, and environmental information.



TBM 900

330_{KTS}

The fastest **New** certified single-engine turboprop



MAX RANGE

1730_{NM}

CLIMB TO FL310

18_{min45}