

Pressurized Beechcraft Duke. The ultimate piston twin.





## MAKE THE STATEMENT.

Even on a crowded, wingtip-to-wingtip flight line, there is no mistaking a pressurized Beechcraft Duke.

It sits tall and proud on the ramp, dominating everything around it. Its gleaming finish and perfectly proportioned design irresistibly draw your eyes to it. And its sweeping lines and rakish appearance invite you to step aboard and take command.

Quite simply, there is

no other airplane in the world like the Beechcraft Duke.

The reason is simple. From the very beginning, the Duke was designed to be more than just an exceptional airplane.

It was designed to be a visible extension of your personality. To be testimony to your lifestyle. And to make

a bold statement about your achievements that no other airplane can.

No pains have been spared in achieving this goal. The result is the world's ultimate personal business airplane.

We invite you to examine the Duke on paper now. Then slip into the left front seat of one. And make your own statement.







## THE AESTHETICS OF GOOD ENGINEERING.

Without question, the pressurized Beechcraft Duke is one of the most strikingly styled and aesthetically pleasing airplanes in the world.

But behind all of its distinctive beauty is some distinctively beautiful engineering.

You can see the beauty of the Duke's engineering design wherever you look.

A good place to start is the lean, tapered nose. That graceful slope isn't just a cosmetic touch. Instead, it drops the nose completely out of sight to give you a panorama of unrestricted forward visibility, even when you're climbing.

Run your hand along the glassy smooth, polished skin covering the Duke's airframe. You won't see or feel many protruding rivet heads. That's because much of the Duke's surface, including almost the entire empennage and the fuselage, is flush riveted to reduce drag. In the process,

appearance is not only enhanced, so is performance.

There are many other areas where the Duke's beauty is exceptionally functional.

Step back to the door, for example, and you'll discover something quite unique. The Duke's door opens like a door. No complicated, confusing clam-shell arrangement—just a beautifully simple door that swings out to open, and in to close.

It's not only the easiest to use door in this class of airplane, it's the widest. And because no one likes to board or deplane hunched over, the Duke's door is curved gracefully into the cabin roof so you and your passengers can stand erect while entering or exiting.

Equally well-designed is the Duke's huge, 500 lb. capacity nose baggage compartment. To get an idea of what we mean by huge, you need only know that, should the occasion ever arise, you can stow as many as five large sets of golf clubs in the nose compartment. In fact, you can get as much into the nose of your Duke as you can in the trunk of any six-passenger executive automobile.

Making the nose compartment even more impressive is the completely carpeted floor. The floor is also flat, thanks to the nose gear that rotates 90° during retraction. With this flat floor, you never have to arrange

your baggage around an inconvenient hump.

Best of all, you'll find loading your luggage into the nose compartment of the Duke is easier than with any competitive airplane. That's because the door has been thoughtfully placed at waist level so you don't have to stretch to reach it.

Yet another example of the beauty of the Duke's engineering can be seen in the placement of the powerplants. Instead of spinning the propellers seemingly inches away from you, they sit well forward of the cabin area to reduce noise and vibration, and provide you and your passengers with a remarkably quiet, totally relaxing atmosphere.

With the Duke, you'll also find the simplest fuel





management system around. Simply select on, off, or crossfeed, and that's it.

Again, beautiful engineering.

Obviously, the Duke incorporates many unique engineering advantages not found with competitive airplanes.

But to truly appreciate the engineering that goes into every Duke, you must take the controls and fly one yourself.

Because once you do, you'll know beyond any doubt that no airplane in the world handles as beautifully as the Beechcraft Duke.

Control response is crisp, clean, and as precise as a finely tuned sports car. In fact, the control response of the Duke is so precise, that it takes less than one-third of the total aileron deflection available to sweep the Duke into a graceful turn. Put another way, that's only about three to four inches of control wheel travel to achieve even a steep bank.

That's Beechcraft engineering.

But it doesn't stop there. It continues, and manifests itself in many other ways.

One of the most important is stability. Set the Duke up for cruise, trim it for level flight, and then sit back and relax. Because the Duke will stay level. No pitching up or down, and no gradual dropping of a wing. Just a smooth, level flight.

With the Duke, you'll also find you can extend the flaps and the landing gear without encountering any abrupt change in pitch.

All in all, the Duke is one of the most highly controllable, smooth, stable and well thought out piston twins ever designed.

In short, it's a beautiful airplane. Any way you look at it.







## GRACE UNDER PRESSURE.

One of the more subtle pleasures of owning a Beechcraft Duke is observing people as they step on board for the first time.

Their eyes become wide as they take in the splendor of the cabin.

And chances are, especially if they've been aboard other piston twins, they're likely to remark they've never seen anything like it before.

Because they haven't.

In every respect, the Duke is a first class airplane that attends thoroughly to you and your passengers' comfort.

And as you would expect from a truly first class airplane, the Duke is pressurized.

What you might not expect, though, especially if you've looked at other airplanes in this class, is the

degree of sophistication the Duke's pressurization system offers you.

To begin with, the pressurization system gives you, as standard equipment, a Cabin Altitude Programmer. This lets you climb or descend rapidly without worrying about passenger discomfort. Because the Altitude Programmer automatically and reliably adjusts cabin altitude at a rate pre-selected by you—regardless of your actual rate of climb or descent.

Another important advantage of the Duke's pressurization system is the high degree of reliability and peace of mind it gives you. The Duke's system is designed so that either engine is capable of maintaining cabin pressure.

Perhaps the most impressive thing of all about

the Duke's pressurization, though, is the comfort it provides.

With a 4.6 psi pressure differential, it maintains a sea level cabin at 10,000 ft., and a 7,000 ft. cabin at 20,000 ft.

To further enhance comfort, the pressurization system is totally silent, with no annoying hiss—thanks to a thickly insulated outflow valve located well aft.

But no matter what altitude you fly, the Duke will pamper you and your passengers in almost every conceivable manner.

Because the Duke's cabin is every bit as plush as the dashing exterior suggests.

Sit in one of the deeply sculptured seats. You'll find it supports you gently, yet with just the right degree of firmness. You'll also find it







sits high off the floor, so your legs can assume a natural, stretched-out position. And that it has a specially contoured lumbar support to keep you comfortable on even the longest of trips. You'll even find that your seat reclines to your choice of three relaxing positions.

Now look around you. What you're seeing is the most gracefully appointed interior to be found in any pressurized piston twin.

Notice the handsomely recessed sidepanels. They not only look better, but give your passengers more hip and elbow room.

Open one of the ashtrays. You'll be pleasantly surprised to find they have cupholders built-in for your passengers' convenience.

Reach up and touch the clean, unobstructed headliner, and notice how perfectly straight it is. While your hand is up there, adjust one of the six individual fresh air outlets.

Flick on one of the four



individual reading lights. They're brushed aluminum, too. And they let your passengers read in comfort during night flights, without disturbing other passengers.

For safety and convenience, there's a cabin courtesy light. When the door is closed, it shuts off automatically.

By now you've probably noticed the Duke's large, double-paned, tinted windows. They give your passengers a spectacular view, and yet have tailored curtains that can be closed when you want to keep the sun out.

Everywhere you look in the Duke's cabin you'll

discover touches of graceful beauty.

Perhaps the most beautiful thing of all about the Duke's interior is the incredible degree to which you can put your personal stamp on it.

With the Duke's numer-



ous options, you can create a cabin that genuinely reflects your inimitable style. A cabin that tells people this is your airplane, and yours alone.

For example, standard seating in the Duke gives you four, all forward facing seats. But, should you choose, you can have your Duke equipped with fifth and sixth seats. The classic divan styling of the fifth and sixth seats is unique in the new Duke. They're joined together for



more room, and contoured for individual comfort. Plus, they're designed with convenient storage drawers underneath for in-flight storage of light objects.

You can also have the seats in your Duke arranged in a club seating configuration. This conference-style seating arrangement lets your passengers face each other for easier conversations.

You can also equip your Duke with a solid, sturdily supported executive work table. Open, it provides an abundant, usable surface for



everything from playing cards to drafting an upcoming speech. Closed, it folds flush into the sidewall, completely out of the way. If you wish, the worktable can be silk-screened with a beautiful map of the United States, at no extra cost.

To let you customize your Duke even more, there's a wide range of stunning appointments you can specify.

Like hot and cold refreshment centers. Hand-crafted cabinetry that looks like it belongs in an executive

office instead of an airplane. Even a toilet with a privacy curtain.

Of course, you can also equip your Duke with air conditioning. Eight outlets throughout the cabin will allow you to rapidly cool the interior even on the hottest summer day. In addition, you can even have a stereo cassette system. Imagine listening to your

favorite music while surrounded by the elegant beauty of the Duke. Best of all, you won't have to worry about missing a radio transmission, because the sophisticated AM/FM stereo is designed to cut out when someone contacts you on the radio. It even has a 3-second delay to give you time to determine precisely what was said.

There are many ways to personalize your Duke. And one of the best is in your selection of colors and fabrics.

Instead of the usual four or five interiors to choose from, the Duke offers you hundreds of color and fabric combinations. Worsted wools, imported leathers, fine vinyls, deep pile wall-to-wall carpetings. You name it, and chances are you can have it in your Duke.

No other airplane in its class lets you customize as much as the Duke. And with all the options to choose from, it's almost certain your Duke will be one of a kind.

Like you.

One day soon, use your own good taste to create your personal Duke. The result will be beauty. In the eyes of every beholder.





## POURING IT ON. WITH STYLE.

Owning an airplane says a lot about you. Owning a Duke says it better.

Because when you taxi by in a Duke, everyone knows you're a performance-minded pilot.

But the sleek lines the Duke presents to all who see it are only a hint of its outstanding performance. To get the full story, you need to fly one. Because quite simply, the Duke puts on its best show in the air.

To begin with, the Duke is turbocharged. Designed to fly high and fast, where the air is thinner and a gallon of fuel takes you further. It's powered by two Lycoming 6-cylinder turbocharged engines rated at 380 horses apiece.

But these aren't just engines with turbochargers added on. Instead, they're engines specifically built for turbocharging. Specifically designed to take the extremes encountered in high

speed, high altitude flying.

In short, the turbocharging of the Duke is a totally integrated system.

Best of all, it's one of the simplest turbocharging systems to manage. Everything is linked through the throttle. Just set the desired manifold pressure during climb, and that's virtually it. A variable absolute pressure controller takes over from there, and automatically adjusts manifold pressure for changes in altitude. In addition, it prevents overboosting by regulating the oil pressure to adjust the waste gate. Beautifully simple.

The real beauty of the Duke's turbocharging, though, is hard charging performance like this:

A top speed of 246 kts (283 mph).

A sea level rate of climb (two engines) of 1,601 fpm.\*

An over-the-weather service ceiling of 30,000 ft.

A useful load of 2,413 lbs.

A maximum range of 1,168 nm (1,344 sm).\*\*

To really understand the significance of these numbers, though, you need to look at what they mean to you in actual day-to-day flying.

They mean Denver to Phoenix in under three hours.

Taking off at sea level

\*Demonstrated Performance Figure which may differ from figures shown in Pilot's Operating Manual, due to FAR 36.  
\*\*Approximately 63% power.



and leveling off at FL250 28 minutes later.

Flying over the highest point of elevation in the entire North American continent (Mt. McKinley) knowing you could still easily climb another 9,500 ft.

Being able to carry 6 people, plus baggage and full IFR equipment, over 700 sm.

And traveling from Philadelphia to Dallas without having to land to refuel.

The Duke is an excellent high speed, high altitude performer. But it's just as capable in airport traffic patterns as it is at flight levels.

For example, both the approach flaps and landing gear may be extended at an incredible 174 kts IAS (200 mph). So when ATC asks you to slow down for traffic, you'll have no problem. Or





when you need to descend rapidly, you can do so without picking up excess speed or supercooling the engines.

Plus, the flaps travel aft as well as down, which increases the wing area and gives you superb slow flight handling.

The Duke is very much a business machine. And in the real world of business flying, you don't always have a 7,000 ft. paved runway waiting for you at the other end.

More often than not, it's a 3,500 foot strip near a construction site. But the Duke is a real world business airplane, and it can handle short, rough fields with ease. At gross takeoff weight, the Duke will get you off the runway and clear of a 50 ft. stand of trees in just 2,626

ft. And get you back down again in 3,065 ft.

To make it even more versatile, the Duke has no landing weight restrictions. Which means you can take off at gross weight, make a short hop over to a neighboring airport to pick up some important papers, and continue on your journey.

No matter what kind of flying you do, the Duke lets you pour it on. With a style that's all your own.







## IT'S NOT JUST BEAUTIFUL, IT'S BEAUTIFULLY THOUGHT OUT.

If you've been looking for the key to better, easier IFR flying, you'll find it waiting for you at a Beechcraft Aviation Center.

It's the key to a brand new Duke.

Go ahead, open the door, step aboard, and step down the wide aisle. Take your place in that high-backed, deeply cushioned left front seat. As you slide forward, the seat tracks raise the seat to allow for better visibility in the traffic pattern. Both sets of rudder pedals are adjustable to give you and your front seat passenger more room. And take in an eyeful of one of the most professional panels to ever greet a pilot.

Notice how four fresh air/air conditioning outlets will pamper you with cool, refreshing air on a moment's notice.

One glance will tell you it's beautiful. One flight in some honest-to-goodness IFR weather will tell you it's also beautifully designed.

Everything is right where it should be. A quick glance down at the left sidepanel, and you'll find the ignition and fuel boost-pump switches. On the right sidepanel are the circuit breakers.

Reach over and take command of the power quadrant. Notice how the engine instruments are logically placed above the corresponding power levers to simplify making precise power adjustments. And how the autopilot and three-axis trim controls are located in the center console, right at your fingertips.

Slip your hand into the smoothly contoured grip of

the hefty control wheel. It's large enough to accommodate an autopilot disconnect button, electric trim switch, microphone key, even a transponder ident button. And right in the center, where you can see it easily, you can put a quartz chronograph (an Astrotech quartz chronograph is standard equipment), especially helpful during timed instrument approaches.

Everything about the Duke's panel is neat, trim, and organized to reduce your workload.

In short, it's buttoned-up. But it still has more than enough room for whatever avionics you want. In fact, IFR avionics come standard with your Duke. You may want to supplement them with a Flight Director, encoding altimeter, or the latest weather avoidance radar.





Best of all, you can specify the brand of avionics you prefer. And you can have them installed right at the factory, where all wiring is done on a master harness, then tested before and after installation for greater reliability.

Whatever degree of avionics you wish to equip your Duke with, rest assured there's plenty of electrical power to operate them. The Duke comes standard equipped with two 125 amp generators—the highest output in this class of airplane. These high-capacity generators are routed through a unique split-bus system that provides the redundancy you need for reliable IFR operation.

The Duke gives you extensive system redundancy, including dual static air sources. When you're flying IFR, it's reassuring to

know the Duke has the most extensive back-up systems of any airplane in its class.

As you would expect of an airplane of this calibre, the Duke is certified for flight into known icing, when properly equipped.

Standard on your Duke are heated pitot, heated fuel vents and heated stall warning vane. De-ice options include a wing ice light, pneumatically operated surface de-icing boots, electrically heated propellers, and electrically heated windshield.



When it comes to night flying, the Duke really shines. Standard on your Duke are two high-intensity landing lights, one on each main gear, a steerable nose taxi light, dual bright-white oscillating beacons, and position lights. You can also equip your Duke with a three-light strobe system and wingtip recognition lights.

The instruments of your Duke come with standard post lighting. If you wish,

you can have them internally lighted. In addition, recessed floodlights in the glareshield are standard, as is a control wheel map light.

Put yourself in the left front seat of a Beechcraft Duke soon. And discover for yourself how practical beauty can be.



## NOT JUST ANOTHER PRETTY FACE.

After all is said and done, the most beautiful aspect of all about the Duke is the care and quality with which it is built.

For over 47 years now, Beech Aircraft has held fast to the belief of building airplanes that are "better than they have to be."

And the Duke is one of the most beautiful examples.

This celebrated Beechcraft quality radiates from every square inch of the Duke.

In the control cables that have been scientifically pre-stretched to maintain their tension and always give you quick, positive control response.

In the windows that have been painstakingly hand-fitted to the fuselage for perfect mating.

In the landing gear that has been drop tested at a sink rate of 600 fpm.

In the components that have been chemically milled for greater precision,

increased strength and less weight.

And in the way the finish is applied. First the airframe is entirely hand sanded, then primed, followed by another hand sanding, and another coat of primer. Then

comes not one, but two coats of Alumagrip urethane paint. And finally, the striping, which includes custom metallic pin-striping as standard, is carefully applied.

These are just a few examples of the quality built into every Duke. Quality that

protects the value of your investment year after year.

And in anyone's book, that's beautiful. Just beautiful.

Fly a Beechcraft Duke soon. It's the airplane that speaks well of you.

In so many ways.





## BEECHCRAFT DUKE B60 PERFORMANCE CAPABILITIES.

Maximum Ramp Weight\_\_\_\_\_6,819 lbs. (3,093 kg)  
Maximum Takeoff and Landing Weight\_\_\_\_\_6,775 lbs. (3,073 kg)  
Empty Weight (includes unusable  
fuel and standard avionics)\_\_\_\_\_4,425 lbs. (2,007 kg)  
Useful Load (standard airplane)\_\_\_\_\_2,394 lbs. (1,086 kg)  
Cruise Speed (68% power @ 25,000 ft.) (7,620 m)\_\_\_\_\_225 kts  
(259 mph)  
(417 km/h)

Maximum Speed @ 23,000 ft. (7,010 m)\_\_\_\_\_246 kts  
(283 mph)  
(455 km/h)

(Range figures are based on 232 gallons (878 l) usable fuel and includes start, taxi, takeoff, climb and 45-minute reserve at economy cruise power.)

Range (74% power @ 25,000 ft.) (7,620 m)\_\_\_\_1,072 nm (1,234 sm) (1,986 km)

Range (68% power @ 25,000 ft.) (7,620 m)\_\_\_\_1,112 nm (1,280 sm) (2,060 km)

Range (63% power @ 25,000 ft.) (7,620 m)\_\_\_\_1,168 nm (1,344 sm) (2,163 km)

\*Rate of Climb (two engines)\_\_\_\_\_1,601 fpm (488 m/min)

Rate of Climb (one engine)\_\_\_\_\_307 fpm (94 m/min)

Service Ceiling (two engines)\_\_\_\_\_30,000 ft. (9,144 m)

Service Ceiling (single engine)\_\_\_\_\_15,100 ft. (4,602 m)

Takeoff Distance (sea level)

Over 50 ft. (15.2m) obstacle\_\_\_\_\_2,626 ft. (800 m)

Landing Distance (sea level)

Over 50 ft. (15.2m) obstacle\_\_\_\_\_3,065 ft. (934 m)

\*Demonstrated performance figure which may vary from figures shown in Pilot's Operating Manual, due to FAR 36.

## SYSTEMS DESIGN.

### *Air Conditioning and Heating Systems.*

A 45,000 BTU combustion heater is standard on the Duke. A 14,000 BTU air conditioning unit is available. This efficient air conditioning system can be operated at any time in the air or on the ground. Passengers may board or deplane from the left side while the right engine operates the air conditioning system, which assures they'll enter a cool, comfortable cabin. This light-weight system can be installed without sacrificing baggage space.

*Electrical System.* The 28 volt electrical power circuit is energized by two lead acid batteries for a total capacity of 25 ampere-hours. The Duke is equipped with two 125 ampere, double belt-driven generators. An external power receptacle is provided as standard equip-

ment for use with an external power unit.

### *Instrument Pressure System.*

Pressure for all pressure-operated flight instruments is supplied by two engine driven pressure pumps, interconnected to form a single system. If either pump fails, check valves automatically close. The remaining pump will continue to operate the gyro instruments. Cabin smoke and dust do not enter the system, resulting in longer gyro life and greater instrument reliability.

*Fuel Systems.* The standard fuel system consists of a leading edge fuel cell and a wing fuel cell outboard of the nacelle. Total standard usable fuel is 142 gallons. Two optional systems are available: A 202 gallon system, and 232 gallon system. Boost



pumps are controlled by separate ON-OFF toggle switches. The fuel management system is the simplest there is. Just select ON, OFF, or CROSSFEED.

*Powerplants.* The Duke is powered by two six-cylinder TIO-541-E1C4

Lycoming turbocharged, fuel-injected engines rated at 380 horsepower each. They currently carry a time-between-overhaul (TBO) rating of 1600 hours. The turbochargers also carry a TBO of 1600 hours.

*Propellers.* Both looks and performance are enhanced by the Duke's standard three-blade, full-feathering, constant speed propellers. The propeller domes are charged with nitrogen or dry air to prevent propeller freeze-up at altitude, and under extremely cold conditions. This means you will always

be able to change pitch or feather the propellers regardless of temperature. *Landing Gear.* The Duke's rugged landing gear may be normally extended at speeds up to 174 KIAS (200 mph). Gear retraction time is only 4½ seconds, the fastest in this class of airplane.



## SUPPORT PROGRAMS.

### *Professional Crew Training.*

An excellent way to insure receiving the utmost utility and value from your new Duke is to enroll your pilot and maintenance personnel in the free, professionally conducted courses at the Beech factory in Wichita. For the flight crew, the comprehensive facilities of the ground school and flight check

are designed to meet the specific needs of the pilot. For maintenance personnel, extensive classroom work, coupled with direct contact with actual aircraft, provides invaluable experience in the systems, structure and maintenance schedules of the Beechcraft Duke.

### *Beechcraft Product Support.*

Beech Aircraft Corporation, in cooperation with its Aviation Centers and International Distributors, offers worldwide service support for the Beechcraft Duke. Beech Quality Service Centers have the equipment, personnel and technical ability to provide complete service coverage.


Beech Aircraft provides total parts support, with inventories strategically located throughout the world. These field service organizations are backed by a factory inventory of over 80,000 items available 24 hours a day, seven days a week.







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