lying the Beech 18 is an honour and an experience that few pilots ever get over. Stories of its 'scary' flying qualities are hogwash, perpetrated by inexperienced aviators. The 18 is a delight to fly, and as honest and straightforward a flying machine as you'll find anywhere.

I first flew one in 1986 when I was taking my commercial licence in Plymouth, Mass. At the nearby Hyannis Airport there was a Beech 18 hauling newspapers to Nantucket and Martha's Vineyard, the islands just offshore. I had told everyone at the flight school about my love for old aircraft, and somehow I got in touch with the pilot who willingly agreed that if I helped him load and offload I could fly in the right seat. Unfortunately the air taxi folded

a week later so it was a short ride – but I caught the bug...

In later years, with the need for a corporate icon and advertising image for our company and the funds to pay for it, my partner and I decided to get a Beech 18. We found this one, N21FS, in California after having looked at two other aircraft, and the only thing our purchase inspector wrote in his email after seeing it was – "BUY IT!" So we paid for her sight unseen and flew to California to pick her up.

The aircraft we now call 'Great Danes' is

The aircraft we now call 'Great Danes' is one of the world's most outstanding Beech 18s and as the corporate flagship and icon for our company OPMAS will be touring the European air show scene in 2007. N21FS was built in March 1952 by Beech Aircraft Corp in

Wichita, Kansas as a Model 3NM for the Royal Canadian Air Force and was assigned to the 6th Repair Depot Station at Trenton. After service with the Central Experimental & Proving Establishment and the Air Defence Command and the Air Transport Command, it went to the National Aeronautical Establishment in Ottawa in May 1964. Subsequently it passed onto the civil register as CF-SKJ-X – although the X was subsequently dropped – and was operated by the Canadian government on environmental work.

In March 1992 it was sold to former astronaut Frank Borman, flown to New Mexico and registered N21FS (FS for Frank and his wife Susan). A year later it was



bought by Tom Leatherwood and moved to Paso Robles, California, and in 1994 it won the Best Twin Beech award at Oshkosh. OPMAS bought her in April 2006 had her ferried from California to Europe, and she is now based at Aarhus Airport in Denmark.

When we picked her up we prepared first to fly from Paso Robles to Waterloo, Iowa, for some avionics work - so after 20 years I finally got to fly left seat in a Beech 18. Along with us we had Taigh Ramey, who is a very experienced 18 pilot, instructor and mechanic.

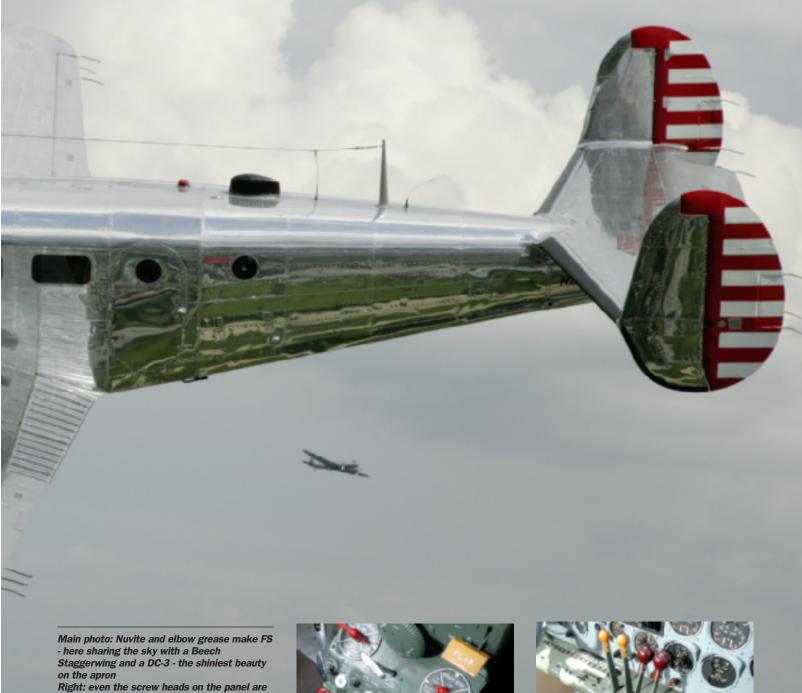
I've flown small single engine taildraggers and several different large twins including the Shorts Skyvan and Cessna Citation and the DH104 Dove, but never a taildragger twin, so it was a step up for me from the more modern equipment. The cockpit is very well arranged and doesn't take long to get used to, although the controls are a bit different with the throttle levers being in the centre, the prop levers to the left and the mixtures to the right. There are a lot of other handles and buttons and switches, and it looks awesome.

The preflight inspection includes swinging the propellers through 10 rotations to feel for resistance and a possible hydraulic lock; hard work. Refill the oil - she uses about one quart per hour per engine – and the do the usual inspections before climbing into the cockpit. Starting the engines require quite a lot of priming, seven strokes with full resistance. Mixtures rich, props fine pitch, throttles open till just after the gear warning switch 'clicks',

fire extinguisher to the right engine. Select RH engine and press the start button. After five revolutions, mags on, and she should fire just fine, with a plume of smoke and a sound that you'll never forget. Same procedure for the LH

Warming the engines is critical. Do not run above 1000 RPM at less than 40 degrees. That can take a while, but it gives you time to set up the avionics and get everything organised. Taxiing is easy despite the full swivelling tailwheel. The view forward is OK and with differential power and effective toe brakes you will have no problems.

Before take-off one must remember to lock the tailwheel. Just line her up and push the Tbar on the lower section of the throttle



made to line up perfectly Far right: pitch, throttles and mixture - not an oil stain or a speck of dust anywhere







quadrant, and try with one brake to check if it is locked. No flaps for take off. Power up to 36 inches MAP. Get the tailwheel off the ground, and lift-off follows at about 60 kts. Gear up — which is very quick — and accelerate to about 90 kts in the climb. Reduce to 2000/30 and enjoy. Nothing to it, as long as everything works.

If one engine quits when you have a full load, identify, verify, feather – by pushing the red prop feather button on the panel. This activates a hydraulic pump which feathers the failed prop, but it can sometimes be quite slow, and if you get a feather pump failure – not unknown – then you're really going to have your hands full. Under most circumstances the 18 can be trimmed to fly hands off with one

engine out and can climb even at max TO weight in favourable conditions. During training we shut down both engines – in turn – and did a little airwork and found her to be highly manageable.

Cruising is done at various power settings, from 1800 RPM and enough MAP to maintain 125 kts for best range to 2300/33 for max speed which will give you 160-170 kts, and empty your wallet – she will use 60-70 gallons an hour at that power setting. Cross country trips are planned at 150 kts and the fuel burn about 40 gph. The ailerons are light, and although it is a big aircraft it is quite responsive. It is of course nothing like the L29 I also fly and is a bit slow to react when you do an airshow with quick manoeuvres. but

flying straight and level with the normal small adjustments to stay on track and keep altitude is a piece of cake for any pilot. In turbulence she has a tendency to swing the tail a little, which is uncomfortable for the passengers, so one needs to work the rudders when it's windy.

Entering the pattern you want about a 120 kts, so go for 20/20 on the dials, lower the gear and set the flaps. Again the gear is very quick to come down. The flaps, which are electric, can be set at any angle you require. Normally I apply a little bit to slow her down, more on base and full flaps at 500 feet when landing is assured. There's a noticeable pitch and trim change, so don't wait until the threshold because you'll overload yourself when you

Fifty years of TLC

Great Danes, a Beech 18/C45, was built for the Canadian government as a navigation trainer. It was never used for that purpose, however, but was configured with five cabin seats and used as a general purpose aircraft. Incredibly it remained in service until 1991. At the end it was used by the Canadian version of the American Environmental Protection Agency to conduct air sampling or "sniffing" of the atmosphere to detect pollutants.

The Canadian maintenance programs are among the best and most thorough in the world. The result is that the aircraft was maintained throughout its entire life to the highest standards. The records are impeccable and would fill a filing cabinet. The flight log records every flight, the pilot and the purpose of the flight.

The Canadian government specified certain upgrades over the US requirements and include such things as metal covered flaps, full fire protection and detection systems, dual rudder trim tabs etc. All this increases gross weight to 9,300 lbs, and

Right: the interior is original, even down to the 'air conditioning', crash-axe and Beechissue potty useful load is 2500 lbs.

Total time is close to 7500 hrs. The engines were majored by Pratt & Whitney of Canada

and run like they are new, with compressions all 76-78/80. Recently all new engine hoses were installed and engine driven fuel pumps replaced. Tyres and batteries are recent as are brake linings and discs. The cowlings are beautiful, inside and out.

The avionics include a Garmin 430 and Collins, with the boxes racked up in the rear.



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Left: roof bubble is handy for the originalequipment sextant, still on board Above: Perspex roof bubble affords a fabulous 360-degree view Right: the 18 can be slow to react, and airshow manoeuvring calls for forethought

should be concentrating on the landing.

At the start, I used to hit the ground before I was ready for it. Flying the L29 you sit close to the ground like a go-kart. In the 18 you sit up high, and the extended landing gear is loooong... it took a few landings to get used to it. She will bite you if you relax because she will bounce readily.

I like to stay at about a 100 kts over the threshold – 90 if we are light, with full flaps, mixtures rich and props fine. Flare, and once you hit the runway ease FORWARD on the control wheel to keep her from bouncing. Do not continue to flare like you do in an aircraft with a training wheel (nose wheel). That will almost certainly get you airborne again, inducing you to move forward on the control



wheel and hit the ground again, and you will do five landings in a row... if you don't lose it altogether. Moving the control wheel a bit forward once you touch the first time means she will stay down.

Crosswind technique is standard – if you remember to ease forward – otherwise it can go very wrong very fast. Once the roll-out is established and you get below 60 bring the tailwheel down, rather briskly if you have a crosswind as you want that locked tailwheel onto the ground to help you. A little differential

power is also good in a crosswind. Remember to unlock the tailwheel before trying to turn...

It's a bit exciting the first few times, and also if you go out after not having flown her for a while, but the engines are dependable and even though they have almost 1500 hours their pressures remain excellent and they run like a charm.

No matter where we go with the Beech 18, people swarm the apron. I love it! Come see us at Aero Expo at High Wycombe in the beginning of June.

The original coffee grinder ADF is in the overhead panel and works like a charm. There is even a UHF system that's perfectly functional. The gyro system is the Sperry H-5 and there's an RMI system with coupling to ADF etc. Everything works perfectly.

All Beech service bulletins have been complied with and are in a hard bound binder

signed and stamped in order of issuance.

This aircraft has a nose tank of 80 gallons giving it a max fuel load of 280 gals, which equates to seven hours endurance. Figure six hours with an hour's reserve and you have roughly a 900 miles range.

The cabin is soundproofed and very quiet. There are five high-backed reclining seats

although OPMAS are only using four, with two in a club seating arrangement with a Beech pull-out table. The original Beech potty is also included, as well as all of the original cabin equipment such as the crash axe, flare gun, sextant, astro compass, fore and aft relief tubes, first aid kit etc.

It has always been hangared and is immaculate inside and out. The highly-polished aluminium is kept shiny with Nuvite, a huge

Left: nose art follows a long aviation tradition Above right: no smoke smuts, no finger marks a pristine aircraft



task but one that is well worth the effort. This is truly a survivor of rare quality. Most Beech 18s have been worked hard, and many have been derelict at some point in their lives. Others have been heavily modified for the role of "freight dog". Few are as untouched and original as this aircraft, or as well maintained.

Owners OPMAS provide VAT minimisation services for aircraft owners operating in the EU. Their business is based on the 6th EU VAT directive – hence the unit designator on their Beech 18, the '6th VAT Tactical Wing...'

The aircraft's nose art depicts two gorgeous blondes in red and white air hostess uniforms each trying to hold back a Great Dane dog which is chewing up a customs officer cap.

Website: www.opmas.dk



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