thout a doubt *Electraglide* is the most unusual boat I've reviewed for this magazine – and I've tested a few. It's not so much that there's any single unusual element, more an accumulation of features - a bit like turning up a seven-horse accumulator at the races. No single winning bet need be a particular surprise but, as punters will know, the chances of getting seven of them means multiplying the odds together. Which means it's remote. And the odds of coming up with a boat with as many unusual aspects as this one are equally remote.

So let's take *Electraglide*'s novelties one by one. For starters, its 65ft long. That's relatively unusual; most people who decide to breach the 58ft go-anywhere limit go the whole hog and choose a full-length 70-footer.

Secondly, it's a tug. Tugs are - in my opinion the most beautiful of narrowboats but they do 'waste' precious living space with their long decks and most people still prefer function to form when it comes to their canal boats. So that's another out-of-the-ordinary feature.

Thirdly, it has a composting toilet. Ecologically aware they may be but these are still very much in a minority on the canals. It is also gas-free, relying on electricity for all cooking; a minority decision once more and - now this is a real long shot - it has no conventional cooker but rather a series of portable, plug-in cooking appliances.

And finally, it is electric powered. Yes, a tug, that most traditional of craft which almost invariably comes complete with slowly thudding Gardner and lavishly scumbled back cabin, here has an AC electric motor for its powerplant.

Interest in electric power has certainly grown. This is the fourth electric narrowboat I've tested, but remarkably it is also the fourth different approach to the whole matter. After two variations on the diesel/electric hybrid system we then looked at a boat (Nb Timewarp) permanently driven by an AC electric motor which was fuelled, as it were, either by batteries via inverters or a cocooned AC generating set. The system switched automatically between these as engine demand and battery state dictate.

Now in Electraglide we find ourselves with another that has permanent AC drive, but its Fischer Panda UK developed system has a motor powered by a constantly running cocooned generator. So, technically, it's a diesel-electric rather than an electric craft

So now you know what I mean by an unusual boat - and there's more to come too. But let's start at the beginning. >

Woodworks 65ft BOAT TEST CLECTRAGLIDE Flectric Olide in blue Electra by name and electric by nature, this is one of the most unusual boats we've ever tested ORDS BY KEVIN BLICK PICTURES BY DAVID OAKES

# **BOAT TEST** Woodworks 65ft







## **◆ EXTERIOR AND LAYOUT**

The shell of *Electraglide* was built by Mel Davis and the fitting out done by Andrew Hooke's company, Woodworks Boat Fitting. For both of them it was, as you can imagine, a very out of the ordinary project. Indeed, the reason the owners (who want to remain anonymous) chose Mel Davis was because of his willingness to tackle something so out of the ordinary, unlike some other shell builders they had contacted.

Mel is known for his handsome and beautifully detailed shells but he has also tackled some very unusual builds so *Electraglide* held no fears for him. He is also something of a tug specialist and



the boat's elegant look on the water is a tribute to that. It might be modern, but it looks spot on.

If you're going to have a tug it needs the long deck this one has – ten feet of flat deck and another five of bow lockers ahead of it. It might seem wasteful of space to some, but it's actually surprisingly space efficient: under the deck is the double bed and ahead of that the water tank, bow thruster locker and diesel tank for the Mikuni central heating boiler.

The shell is relatively simple in execution – the flamboyant detailing of some tugs would probably be inappropriate on such a modern craft – but it looks handsome all the same in its Hempel (formerly Blakes) True Blue and Pearl White paint scheme. The exterior fittings from chunky portholes through to the Francis searchlight-style tunnel light are all traditional brass, however.

As well as the ports there are side hatches amidships either side, the port side ones having a matching drop back roof hatch and steps, and shallow pigeon boxes at either end of the roof.

The rear hatch is large so both owners can stand together at the tiller, but it runs on a clever system of rollers so it opens and closes easily. There are 'plip' activated Cobra sensor alarms protecting all the hatches.

Among the few non-conventional features one can spot are the spinning stainless steel vent cowl and chimney of the Envirolet toilet, the boldly futuristic signwriting, the herringbone patterned anti-slip panels on the deck and the unusually shaped framed glass inner front doors. Just hints of what is to come. (In case you're wondering, the bucket on the deck is not another of these unusual design elements – just a handy way to keep the anchor chain stowed but accessible when the boat is out on the river which it often is. On the canals there's space for anchor and chain to be put away in the lockers.)

As we've just said, *Electraglide*'s double bed is stored under the tug deck but pulls out into the body of the saloon when needed. That means some shuffling of chairs at night, but there's plenty of space in the 15ft-long area for that to pose no problems.

Behind the saloon is the galley, either side of a central aisle and the aisle continues through the full width bathroom. The rather sizeable Envirolet loo sits in its own compartment behind on the starboard side and in front of a full height cupboard that houses the washing machine.

Aft of this is a long curvaceous desktop that runs to the end of the cabin, while opposite are extensive drawers and wardrobe cupboards under which can also be found the large generator set. A set of four steps curves up to the rear deck and removing these gives access to the electric motor itself.

The fit-out is in American oak and, like the shell, it is all executed in a deceptively simple,



clean and modern fashion that belies the skill and careful detailing that has gone into it – the curved corners of the various units, the ten-sided porthole liners, the subtle matt finish of the woodwork, the handsome fittings and so on.

### **SALOON AND CABIN**

These have to be considered together as they're very much a shared space. The area sets the tone for the whole interior – simple in overall style but rich in detail. The solid oak framing is slim but carefully moulded and the joints are almost invisibly tight. The portholes are, as we said, edged in ten-sided oak mouldings that must have been painstakingly tricky to cut and apply (even more so the tiny eight-sided pieces around the little pigeon box glasses!).

The crown-cut oak veneers of the cabin sides and deckhead are beautifully grained with carefully matched panels. And the herringbone pattern oak flooring is a real eye-catcher in this large, open space.

The space is perhaps a bit too open for some – there are no bookshelves, for instance, and only one small wall cupboard that houses the hi-fi and DVD equipment. The absence of the usual comfy armchairs is another curiosity: the owners might put some in when they eventually move onto the boat permanently, but at the moment the comfort and versatility of their collapsible director's chairs has won them over.



They also tend to lounge on the bed watching the TV – as you can, of course, when your bed slides into your living room.

Heating is by a large radiator and a Morso solid fuel stove, with one of the new stove-top mini-ovens just fitted.

The bed rolls very neatly and easily, fully made up, under the tug deck, latching in place with a couple of drop bolts into the floor. In a rather complicated set of options it can be fully pulled out for sleeping, two-thirds extended for bed-making or one-third extended to create rudimentary seating. You can do all of this with the steps either attached or unclipped and the base board unclips in three sections too – remove the side pieces and leave the steps in place to create seats and a table for coffee cups.

To be honest, although it has all been very impressively executed by Andrew Hookes it did seem a rather fiddly set-up. Either a pair of armchairs or a pull-out bed that converted properly into a sofa using a fold-up backrest would have been our preferred alternatives. But it's what the owners are happy with and it's something that could be very easily altered if they change their minds.

The bed itself has large amounts of storage underneath which is sensible, and it also sits over the calorifier, so that too is hidden in the voluminous tug deck.

Finally, those unusual looking glass inner front doors are another eye-catching style feature – their shape allows them to open right back flat against the bulkhead.

### GALLEY

Two impressively long Corian worktops are the centrepiece of a very singular galley. On the port side all seems quite normal: a matched pair of large rectangular sinks bonded into this clever worktop material and with a range of cupboards and drawers below.

The run of work surface opposite, however, is devoid of any in-built fittings; it is simply a long and rectangular stretch of Corian. The forward part of this has no base units below it and serves as a breakfast bar, while a matched floor standing fridge and freezer complete the rest of the under surface space.

Instead of a fitted hob the boat's owners use a single element portable induction hob. ▶

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# **BOAT TEST** Woodworks 65ft



◆ (For the uninitiated this sort of hob produces a high-frequency electromagnetic field that generates heat in the saucepan while the hob plate itself remains cold.) They also have another portable cooking appliance for the worktop, a Prima Superchef convection roaster.

Aft of the worktop is a full-height unit that displays more of Andrew's lovely rolled oak corners. The base is a cupboard with a bi-fold door for easy access. Above this at eye level is the combination microwave/oven and grill, while above this is open shelving. Finally, the galley is completed by one of those space efficient, full-height pull-out larder units.

The galley might be considered odd by many but it works for them and – again – a conventional electric hob could easily be installed if ever needed. Our only comment is that, given the lack of a snazzy hob to catch the eye, the straight-through galley does look a bit functional and would maybe have been improved by a few curves or angles in the configuration, or even oak doors over the white goods.

#### BATHROOM

The boat's central corridor continues down through the middle of the full-width bathroom which, curiously once more, has no doors. It is entirely open-plan with the rest of the boat –



again, another choice of the customers. An almost full-length shower-bath sits along the starboard side. There's a curved glass shower screen and attractive mosaic type tiling. Across the way is a large oval basin with a mirror above it and sitting on an elegant oak vanity unit.

The Envirolet toilet (which is behind double doors you'll be relieved to learn) is a very substantial and functional looking unit that's quite different from the elegant ceramics of conventional modern toilet pans. But it does its job. This model has two 12v fans which draw air

up through a boxed in duct to the roof vent and a 240v heater to speed the composting process.

If composting systems have a shortcoming it's their ability to cope with liquids and Andrew has installed an overflow tank for the Envirolet which can be separately emptied if ever needed. It's beneath the washing machine next door.

#### UTILITY/OFFICE

The final 13 feet of Electraglide's cabin are taken up with a multi-purpose utility, office and cupboard space. Aft of the toilet is an open utility

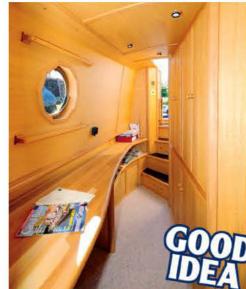
### **ANDREW HOOKE**

ANDREW HOOKE'S YOUTHFUL features belie his 37 years – of which 13 have been spent running his own boat-fitting company, Woodworks Boat Fitting based in Ollerton. He graduated from Loughborough University in 1994 with a degree in industrial design and, having previously done cabinet making and joinery, found in

cabinet making and joinery, found his way into boat-fitting with a local firm. He then formed Woodworks with the support of the Prince's Youth Business Trust, and in 1999 won their Simon Whitehouse award for business achievement. Since the very beginning Woodworks has specialised in producing individual bespoke boats to meet the taste and requirements of its customers. And, though his is a small firm he has some impressive boats to his credit, from Dutch barges through to the

famous Tuesday Night Club's much travelled narrowboat *Earnest*. The technical complexities of *Electraglide* have made it one of his toughest challenges to date though.





cupboard housing a domestic size washer with shelves above. This leads on to a gorgeous S-shaped sweep of solid oak desktop built up from hand picked sections of oak in contrasting tones and grains.

Opposite there's a plethora of cupboards. The generator occupies a double base cupboard, but even so there is more than ample storage space for clothes and household necessities – illustrating one of the great advantages of the boat's extra length. To facilitate access to the genset for maintenance the doors have lift-off hinges and the shelving above can be removed leaving ample space to work on it. One could comment that while the wardrobes are at the stern, the bed is up front but then that's a layout compromise many tug owners have to make.

From the rear of the office, steps (with more storage under them) curve up to the rear deck.

## **TECHNICAL**

Fischer Panda has a number of marine electric propulsion systems but *Electraglide*'s is a bespoke design created both to drive the boat and to cope with its considerable domestic electrical requirements. A fully cocooned Fischer Panda AGT DE 2600 diesel generator is the heart of things. At 3000rpm this has a maximum 26kW output of 440-volt, three-phase



Beautiful sweeping 'S' of oak (left) acts as a desk, while opposite the array of cupboards provides storage and houses the generator

AC power. This directly drives the boat's AC electric propulsion motor, another Fischer Panda unit, that produces 15kW (approximately 20hp).

It also supplies the craft's domestic 230v AC requirements and, in addition, is fitted with a 140amp DC alternator that charges the batteries for the 12v DC on board systems. The generator runs at constant revs and is raw water cooled.

The question that probably comes to mind is why not just have a diesel engine to drive the prop instead of having one to produce electricity to drive a motor to drive the prop?

The answer, says Fischer Panda, is that diesel electric is more efficient since an electric motor delivers maximum torque at very low revs which is ideally suited to the slow running needs of a canal boat, leading to a big improvement in fuel consumption. And noise levels from the cocooned, slow-running genset are very low too.

And because the generator rather than batteries is the primary power source, the system can also cope with the combination of electric propulsion and the on-board electric demands without the need for the massive battery banks one sees in electric and hybrid power plants. Indeed, *Electraglide* just has four 200Ah domestic batteries together with a Victron Multi 3000W inverter/charger to provide AC when the engine is not running.



### ON THE WATER

We had some tough conditions in which to try out this system, with very strong winds confining us to the marina rather than chance the close manoeuvreing needed for photography in the busy river beyond.

But it coped pretty well considering its size and the inexperience of this helmsman with the system. Electric boats do feel different – there isn't the same 'real time' connection between the control lever and power unit. And, even more confusingly, the quiet background hum of

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# **BOAT TEST** Woodworks 65ft







Not your usual set-up - while the electrical cupboard might look reasonably normal (top left) the motor (centre) certainly doesn't; bottom left is the genset that powers it all

◀ the generator never changes revs which is completely counter-intuitive. But the ability of the boat to trickle gently and then almost immediately be willing to provide a hefty burst of power was remarkable.

Sizeable 95kgf bow thrusters helped manoeuvring in the tight spaces available to us, though you were certainly still aware of the boat's length in the wind and the somewhat heavy tiller needed a firm hand too.



## CONCLUSION

Electraglide is not just a unique boat but a very handsome one as well. The Mel Davis shell looks cracking out on the water and Andrew Hookes' fit-out is superb.

It would be easy to let some of its eccentricities blind one to the cleverness of the concept. Yes, it is a bit of an oddball in some respects but if people don't want doors on their

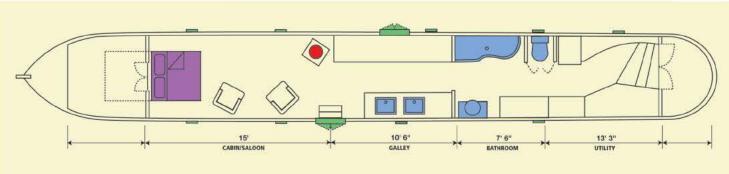
bathroom or a hob in their kitchen, well it's their boat, their money and their choice.

So all credit to them for being bold with their choices. Conventional thinking buyers wouldn't have been brave enough to venture into tugs, composting toilets and gas-free boating, let alone electric power. Certainly not when the final bill for such a project touched £150,000.

It will be interesting to see how the power unit shapes up over time. On paper it does make quite a lot of sense: it offers the advantages of electric power without the need for expensive battery banks that need vigilant maintenance. If it delivers the promised economy then it could be another viable alternative to traditional diesel power.







LENGTH:	65ft   1
WIDTH:	6ft 10in
SHELL:	MEL DAVIS
	meldavis.com
STYLE:	Trad

FIT OUT: American oak | ELECTRICS: POWER: Diesel-electric Fischer Panda AGT DE 2600 26kW output diesel generator

Victron Multi 3000W victronenergy.co.uk PAINTWORK: Blakes/Hempel hempel.co.uk fischerpanda.co.uk COMPOSTING LOO Envirolet

**Woodworks Boat Fitting** Unit 72, Road B **Boughton Industrial Estate** New Ollerton, Notts, NG22 9LD Tel. 01623 860553

Verdict: 'A very unusual, individual and well made boat that looks good'

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