

ALPHA MAIL

Terry gets an email from Daystate, asking him to test the brand-new Alpha Wolf

The email from Daystate's Tony Belas simply stated that, 'the new Alpha Wolf will be with you tomorrow, exactly three weeks before its official launch, and we'd like you to put as many pellets through it as your schedule allows. There will be a .22 barrel kit with it, plus a .22 magazine, and we'd like you to see for yourself how easy it is to swap calibres. All input welcome – give it some serious stick!'

Well, there's a communication designed to brighten a gloomy Monday morning. So it was that I cleared a Wednesday window in my minor publishing executive schedule, and spent Tuesday with my ear cocked, listening for the delivery person's arrival. The package was delivered, mid-morning, and, consummate professional that I am, I dropped everything I was doing and headed straight for my club to shoot the Alpha Wolf for a couple of hours. I learned a great deal from that first session, and from many subsequent ones, but before I tell you what

Meet the Alpha Wolf - Daystate's latest, all-electronic supergun.

this remarkable new, all-electronic rifle is all about, I need to establish what it isn't.

FUTURE PROOF

The Alpha Wolf is neither replacement for, nor successor to, the Delta Wolf. These rifles represent two, essentially different, routes to using Daystate's user-programmable electronic platform. Since the Alpha Wolf's launch, I've already seen online comments claiming that the Delta Wolf 'didn't last long', and similar misconceptions. Daystate describe both rifles as 'future-proof', and as confirmation of that, all of the technology that has been installed in the new Alpha Wolf can be

retro-fitted into the Delta Wolf, via an optional comprehensive upgrade package. Thus, and just to make this absolutely clear, flagships Delta and Alpha will cruise alongside each other within the Daystate portfolio.

IT'S NOT PHOTOGENIC

When I lifted the lid on the Alpha Wolf's supplied padded hard case, I was struck by a wave of déjà vu, in that, just like when I first saw a Daystate Pulsar 'in the flesh', I said out loud, 'well, those photos don't do you justice, do they?' They don't either, and that has since been confirmed by pretty much everyone who has seen only photos of this rifle. The test sample is the sub-12 version, and that comes with a shorter barrel, so I think that could have made a bit of difference to the visuals, but time after time, the many interested observers remarked that this rifle is way better looking than they thought it would be.

THE ALPHA WOLF

What we're all looking at is a compact – just 24.4 inches long – fully-regulated, pre-charged pneumatic, ambidextrous bullpup, designed around a bicolour, adjustable, birch laminate stock and a matte-black, anodised aluminium chassis. The rifle is powered from a 480cc carbon-fibre air reservoir, via its computer-controlled, electronic shot delivery system, multi-shot magazine and shrouded barrel. A hugely-adjustable, Picatinny sight rail incorporates a spirit level, and it's clamped to a dovetail rail that runs the length of the chassis. This is backed by three, abbreviated Picatinny accessory rails, and it's obvious that Daystate has prioritised the option to add accessories.

THE ELECTRONICS

Inside the Alpha Wolf sits an electronic package that micro-manages the whole



THE EDITOR'S TEST



Bullpup stability, electronic precision - it's an incredible combination.

shooting cycle, as well as the rifle's trigger. There's also an on-board chronograph, and the ability to program various functions, including the standby time, screen brightness, and muzzle energy. The sub-12 models can be adjusted down from their set, legal limit maximum, whilst the FAC versions can be cranked up and down to the maximum outputs covered in the next section. Further power-tweaking can also be carried out by adjusting the rifle's regulator, and this process is covered in the instructions.

Now add the magazine counter option, the low battery indicator, day/night display mode, low air-pressure indicator, and on the high-power models, advanced shot setting, calibre adjustment and pellet weight adjustment, and you're fairly well sorted for set-up options. Gotta love a bit of user-programmable action.

The gateway to all of this useful, useable technology, is a touchscreen, which does what its name suggests. Sounds a tad intimidating? Yes it

does, to some at least, but most of us are swiping our smartphones toward enlightenment, these days, and those are far more demanding to use than the interface of a Daystate Alpha Wolf.

OUTPUT AND POTENTIAL

This rifle, like its Delta Wolf stablemate, is not so much a rifle, as a customisable shooting platform, built around a multiple-choice format. Basically, the shooter decides what they need from the rifle, after which it can be built from an extensive wish list. Here are the options, which require careful consideration.

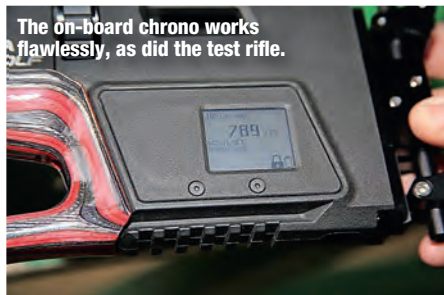
At the time of testing, four calibres are available - .177, .22, .25 and .30 – over two formats, standard and high power. The standard format covers .177 and .22, with .25 and .30 being the province of the HP or high-power modes. Here's where prospective purchasers need to pay attention, because, even in standard format, as seen in this test, the .22 Alpha Wolf can be configured to produce 45 ft.lbs. at the muzzle, given the

provision of the required certification, of course. In high-power mode, that .22, with its re-programmed electronics and longer barrel, can produce just over 60 ft.lbs. For the record, the figures for a .177 are 20 ft.lbs. in standard mode, and 31 in its high-power format. To complete the muzzle energy options, .25 calibre rifles can be ordered with a setting up to 67 ft.lbs., and the .30 offers up to 95. Food for serious thought, right there, and that's before you turn your attention to optional accessories, such as butt pads and bipods.

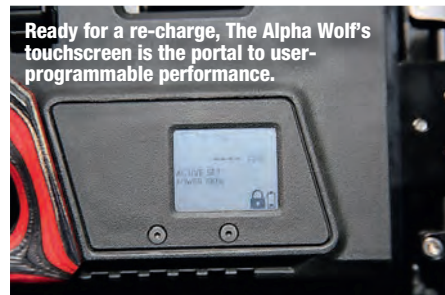
LET'S TALK ABOUT COST

Nobody's going to be shocked to learn that the Alpha Wolf isn't a low-budget option. The standard version costs £2,300 and the HP £2,500. The full Delta-to-Alpha Wolf conversion package costs £600, discounted to £300 for all Delta Wolf owners who registered their rifles before 12/05/22, and comprises the Alpha Wolf laminate stock, including all fitments and safety catch extensions, plus the sight mounting rail and

The on-board chrono works flawlessly, as did the test rifle.



Ready for a re-charge, The Alpha Wolf's touchscreen is the portal to user-programmable performance.



it's locked in position by loading the first pellet. Then, simply load all remaining chambers, close the cover, and with the rifle's cocking lever drawn fully back, insert the mag' into the breech slot – it can be loaded from either side. Close the lever, flip the safety catch to the 'fire' position, and the Alpha Wolf is ready to shoot.

As always with these things, describing the process takes longer than actually doing it, and the whole Daystate magazine thing is simplicity itself to use.

THE ALPHA WOLF IN ACTION

Cycling the Alpha Wolf's action is all but effortless, because you're basically just activating a switch and pushing a pellet into the breech, with both actions mechanically assisted by an articulated sidelever. I found that I could cock and load the test rifle with a back-forth 'flick' of my thumb, leaving my sighting eye in perfect position behind the scope, at least when I was shooting off the bench.

Daystate told me to shoot as many pellets through it as I could, and the pure ease of cycling that action soon emptied the .177 magazine. There's a 'tandem mag' option, too, where a second magazine fits to the 'active' one courtesy of two strong magnets, so when the first mag' is empty, the second can be

pushed across to provide twice the pellet reserves. It's a great option.

SHOOTING FACTS AND FIGURES

I've already supplied the shots-per-charge data, albeit not precisely but well beyond the bounds of practicality for a sub-12 rifle, but more important by far is the shot-to-shot consistency, as displayed by the rifle's on-board chrono. This revealed an average variation of just 8 f.p.s. over 50 shots, using Daystate Sovereign pellets straight from the tin. By the time I'd finished that first, 'couple of hours' session, it was getting dark, and I'd formed some significant views on the new Alpha Wolf, in addition to shooting some tidy groups right out to 55 yards, including a few one-holers at 35 yards, despite the gusting left-to-right wind.

EASY PERFORMANCE

I'll conclude this review with a round-up of my first impressions, including a couple of dislikes, but for now I need to emphasise the sheer ease with which this rifle delivers its shots. As already mentioned, the cocking/loading cycle requires virtually no effort, and the same can be said about the rifle's trigger release. There's no intrusive muzzle noise, even without an optional OdB silencer, and this rifle shrugs out

cheek piece riser, with a DTD adaptor which connects to a PC to install the Alpha Wolf's software updates. That conversion kit price to registered Delta Wolf owners nowhere near covers the cost of the stock alone, so Daystate's future-proofing pledge is the real deal.

PROPER PREP'

Right, that's enough description. Let's get the right amount of air and pellets into the test rifle, switch it on, and see what it does, and how it does it. First stop, the friendly, familiarity of the standard, push-fit air connector, and the 20 seconds or so it takes to inject 240 bar into the rifle's reservoir. I'm assured that, in sub-12, this will be 'more than enough for 500 shots, in .177 and .22.' Power reserves sorted.

Next comes loading the multi-shot magazine – 11-shot in .22 and 13 in .177 – which follows the standard Daystate mag' procedure. This amounts to flipping open the mag's spring-loaded cover, rotating the pellet carrier one turn in a clockwise direction, then holding it in place until



Sliver fox meets Alpha Wolf. Clubmate, Alan, has a go.



Flicking that sidelever back and forth is all but effortless - as is the rifle's entire performance.

its shots with casual precision.

My most impressive group wasn't actually the smallest one. It was a 6-shot cluster at the very end of the session, when I'd hammered my paper targets and I was aiming at a blob of bird poo, high on the target board at 55 yards. That 'informal' target was above the cover of the panels that shelter that section of our range, and I just rattled out the remaining six shots left in the final mag' of the session, as fast as I could, making no allowance for the noticeable sidewind. Yes, that group has a linear shape, due to the wind-effect, but every pellet landed exactly where it should have, despite my revved-up technique. I found that hugely impressive.

INITIAL VERDICT

First, I don't like the Alpha Wolf's butt pad at all. It's entirely useable, height-adjustable, and because this rifle is so inherently stable and well balanced, the butt pad doesn't have that much to do, but I think it looks plain, and it doesn't rank alongside its surroundings. I

swapped it for an optional PRS butt pad, and that's what this incredible rifle deserves.

I also don't like the way the safety catch almost intrudes into my trigger finger's territory, and I'd much prefer it to work the other way round, but I understand why that can't be. This rifle is designed along AR15 lines, and that range of rifles relies on exactly this safety catch configuration. To switch it would undoubtedly cause confusion, at best, and present a hazard, at worst. Oh well.

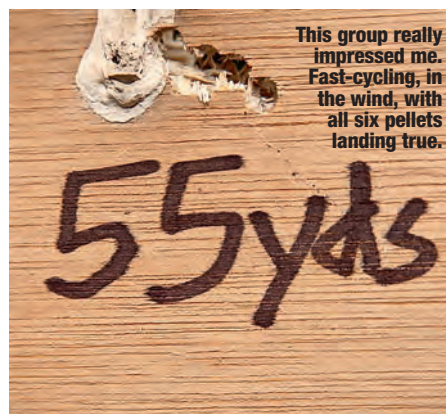
The launch of the Daystate Alpha Wolf marks an astonishing new level of electronic rifle potential. This sub-12 model represents the tip of a performance iceberg that I fully intend to explore in a future issue, but for now, Daystate has another wolf on the loose, and it's going to be fascinating to see it really show its teeth in high-level competitions around the world. Meanwhile, I'll be back at my club range with it, tomorrow, and I know I'll need to be right at the top of my game if I'm going to push this amazing airgun to even greater things. ■



That safety catch is annoyingly intrusive, but I understand why.



My least-favourite feature. I swapped it for a PRS option.



This group really impressed me. Fast-cycling, in the wind, with all six pellets landing true.

NEXT MONTH

I'll do a barrel swap, on the range, and I'll be exploring the Alpha Wolf's on-screen activities. See you then.

TECH SPEC

Model: Alpha Wolf and Alpha Wolf HP

Overall length: 722mm (24.4ins) HP: 842mm (33.1ins)

Barrel length: 430mm (17ins) HP: 600mm (23ins)

Cylinder capacity: 480cc

Weight unscoped: 3.35kg (7.4lbs) HP: 3.55kg (7.8lbs)

Available calibres: .177 and .22 HP: .177, .22, .25 and .30

Loading: Multi-shot magazine

Cocking: Sidelever action – reversable

Magazine: 13-shot (.177), 11 shot (.22), 10 shot (.25), 8 shot (.30)

Fill Pressure: Up to 240 bar (3,480psi)

Power/Shots per charge: .177 – 20 ft.lbs., .22 – 45 ft.lbs., HP .177 – 31 ft.lbs., HP .22 – 61 ft.lbs., HP .25 – 67 ft.lbs., HP .30 – 95 ft.lbs.

Trigger: Electronic release, adjustable for weight and length of stage

Safety: Manual, electronic isolation, AR15-type lever

Stock: Laminated birchwood with alloy anodised chassis

Options: Full conversion kit for Delta Wolf, incl. stock, sight rail, safety catch levers, cheek piece riser and latest software upgrade. Full cost, £600, discounted to £300 for Delta Wolf owners who registered their rifles before 12/05/22.

PRS accessories, OdB silencer, bipod, butt pad

RRP £2,300
HP £2,500

BUILDING THE ALPHA WOLF
Turn to page 36 to find out more about this amazing rifle

BUILDING THE

Daystate's Tony Belas gives us an insider's look at the new Alpha Wolf –

If it were not for progress, we'd be throwing stones at targets and chasing rabbits with clubs, but through the medium of engineering, humans have innovated most of the things we see around us today. In air rifle terms, such progress is increasingly complex, demanding time, money, expertise and multi-country coordination and cooperation. For that reason, some it's tempting to stay with what we know, producing products that fundamentally haven't changed in years or even decades. However, consumers today demand more features, better performance and a product that lives up to their increasingly demanding expectations. For sure, there's a lot more to making airguns today than there was 50 years ago, when 'complicated' meant a hand-lapped loading tap that automatically popped open!



Alpha Wolf began with a concept design.

UNLIMITED RESOURCES?

The Delta Wolf, and now the Alpha Wolf are cases in point. It often amuses me when many shooters think that air rifle companies can draw on unlimited resources and armies of technicians, all working in the kind of high-tech facility that would do a James Bond villain proud. Don't get me wrong – at Daystate, we are proud to have some of the best airgun engineers

on the planet, but the scale of operation is a lot smaller than you might expect.

Compare that to German car company, Audi, which has around 750 staff at its design centre alone. Such companies can afford to dedicate entire teams and many millions of pounds on the design of even the most mundane component. By contrast, most airguns are still designed by a single person. For example,

It is laid out and photographed, and the picture is then stored on the rifle's individual digital file containing all test and set-up data. Then, it's ready to go to the dispatch area, where it is packed along with accessories before being sent to its final destination - which could be anywhere in the world.



FUTURE!

the world's most advanced PCP air rifle

Alpha Wolf was created by a very small team with a lead designer, Adriano Nodari.

CORE DESIGN TEAM

To be fair, I should I qualify that, and although the core design team is a small one, plenty of others, many of whom are experts in their specialist field and not necessarily working at Daystate, play a vital part in the process. Over the developmental life, many of these specialists and expert advisors come and go as required, but some are dedicated to the project for long periods of time. What remains constant is the vision of what we want to achieve, based on feedback from customers, and that is best achieved by keeping the core team small.

The real powerhouse behind any new airgun becoming a reality are the teams of assembly engineers and testers. They are a vital, full-time team who work at least eight hours a day, and often six days a week. It's this I want to focus on here, but first, a few words on development.

IN THE BEGINNING

You start with a design that has been developed and crafted in CAD modelling software, over many months before eventually being refined to the point that working models can be made. Parts are made one section at a time, and fit and function tested extensively. Only when the production engineers are happy are the components delivered in kit form to a key member of the assembly staff to assemble one or two, and make sure everything is as it should be. By this stage,

The rear body on Alpha and Delta Wolf houses the electronic motherboard, touch screen display, battery and hammer assembly, yet once assembled, it attaches with just two screws making final assembly and servicing very simple.



The heart of the rifle is the main body, unique to Alpha and Delta Wolf in which everything sits.

parts have received their surface metal treatment which changes tolerances. This is allowed for, but if something is too loose or too tight, it will show up here.

Simply put, designing and creating something on a CNC machine is one thing, but producing the same parts on production machinery will show up issues that will have to be dealt with to avoid a costly disaster when proper production starts. It's the reason we hear stories of a

Here, a Huma-Air regulator is inserted into the main body. Dutch regulator specialists, Huma, provide a bespoke regulator to Daystate pre-assembled and tested.



single-development car, even the humblest of models, costing millions of pounds.

FUTURE-PROOF

Those of you who have read my musings of the 1992 Daystate Huntsman MK2 will understand that the prototype was a single, hand-made rifle, whilst 30 years later, development of Delta Wolf comprises many dozens of guns extending over months of prototypes and

Alpha Wolf's chrono' revealed. This shroud has been cut-away so the test team can see the otherwise concealed chrono' 'on' light.





All stocks are treated with utmost care, and experience has shown that any movement around a workshop can lead to marks, so all stocks are put on the rifle at the packing area and then straight into a custom-cut box!

testing. However, Alpha Wolf also needed more time than you might expect; there's a lot more going on than the addition of a different stock. From the outset, the vision for the new rifle required significantly more advanced software that could also be retro-installed to Delta Wolf, enabling us to live up to a commitment to make the rifle future-proofed.

ASSEMBLY PROCESS

Assembly starts with components arriving in Daystate's Staffordshire assembly plant. Many come from Daystate's own machines, mainly in

Italy, but some parts come from specialist suppliers, such as barrels from Lothar Walther in Germany and laminated stocks from Minelli, and although many of these companies also supply other manufacturers, Daystate components are made to an exclusive Daystate design.

In all, parts come to us from a host of specialist manufacturers in the UK and all over Europe, some of which have been supplying us for 40 years. However, the pandemic meant a lot of changes needed to be made to the supply chain as some key suppliers simply stopped trading.

Tom, Dick, and Harry three pre-production work-up guns at the factory in January this year.



After assembly, rifles go to a separate test team to set up power and check accuracy.



This rifle was built for stock and allocated to a UK dealer in time for the launch.

BUILD ASSEMBLY

After being booked in and inspected by the warehouse manager, all parts are sent to stock where they are allocated to a build assembly by the production manager. Pretty much every rifle is built to order and the small labels show its eventual destination.

Some parts arrive sub-assembled because it can be easier for suppliers to test this way, using their own test equipment. Other parts are assembled by a sub-assembly worker. Now study the photo guide, and you'll appreciate just some of what goes into producing this unique rifle.

I hope that this has been a small insight into the building of what is always going to be an exclusive and unquestionably advanced airgun – that is built in the UK! ■

On test. Every Daystate is tested on the indoor range. A 12 ft.lb. Alpha Wolf is connected to a laptop to set up and monitor data, which is then stored and used to create a report, an abbreviated copy of which goes into the box with the rifle.

