

**EASTERN  
PROMISE  
FULFILLED!**

**WE'RE OFTEN ASKED WHY THE MEMBERS OF THE AA LEGION MAKE SUCH A BIG DEAL ABOUT ATTENDING THE BIG SHOWS IN THE USA, EUROPE, AND TAIWAN EACH YEAR, AND WHY WE DEVOTE AS MUCH SPACE AS WE DO TO SHOW REPORTS... THE FACT IS THAT THIS IS WHERE WE GET A FIRST TASTE OF NEW MODELS AND LINE UP OUR REVIEW SCHEDULE TO A DEGREE. AT SHOT '23 THE AA CREW GOT THEIR FIRST LOOK AT THE NEW PP-19-01 PE FROM ARCTURUS, AND NOW DAN LANDS HIS REPORT ON AN EXCITING DEVELOPMENT THAT OTHER MANUFACTURERS MIGHT WANT TO TAKE NOTE OF!**



**B**ack in late January Boycie, L'il Stu and I made an impromptu visit to the MOS Manufacturing booth at SHOT '23. Nestled amongst the impressive booth display was an equally impressive array of hardware from Arcturus and E&L, but the item that most conspicuously caught my eye was the pair of Vityaz PP-19-01's dressed in Zenitco livery resting on the wall. Up until now, the only other example of this "9mm AK" replica we had to choose from was the LCT version, which has held firm command of this corner of the market for a number of years now. It didn't take more than a second glance to realize the Arcturus version was uniquely different however.

Zenitco furniture aside, the most notable standout feature was the more accurate dimensional footprint; the magazine was the correct curvature and size,

and the receiver was smaller and true-to-form. Based off data I have collected, this is in fact the truest 1:1 Vityaz variant to date. Since SHOT 23', Arcturus has now released several variants of the Vityaz to the market. There is of course the traditional version fitted with the triangular steel folding stock and polymer forearm. Then we have one that is nearly identical, save for being fitted with the polymer folding stock as found on the AK-12 series. And finally, we have our two "tacticool" examples fitted in full Zenitco kit, which come in both a short-barreled CQB and the longer carbine length. These particular models are also a special edition release, and therefore they have been limited to just 500 examples of each version worldwide. The model covered specifically in this article is the PP-19-01 PE Vityaz Z-TAC SP1, or simply the "CQB" version if you wish to spare yourself the alphanumeric soup!

As equipped from Arcturus, these platforms share essentially the same parts configuration, save for

**"AND FINALLY, WE HAVE OUR TWO "TACTICOOOL" EXAMPLES FITTED IN FULL ZENITCO KIT, WHICH COME IN BOTH A SHORT-BARRELED CQB AND THE LONGER CARBINE LENGTH. THESE PARTICULAR MODELS ARE ALSO A SPECIAL EDITION RELEASE, AND THEREFORE THEY HAVE BEEN LIMITED TO JUST 500 EXAMPLES OF EACH VERSION WORLDWIDE"**

the barrel length and associated difference in rail systems. The included accessories package is also the same between the two. Players who prefer a little more room on their guns will enjoy the longer carbine version, whereas if you like things nice and tight, then the CQB will feel right at home. Regardless of length, I have

the top of the dust cover too.

Finishing out the



found both variants are exceptionally well balanced, lightweight and comfortable to handle. The CQB version has been retailing for around US\$550, with the carbine version coming in a little higher at US\$600. You might find some pricing differences with some retailers cheesing MAP a bit.

**GOODBYE CHEESE GRATER, HELLO “BASIS”!**

There are a lot of details packed into this AEG, so lets dive in and see what we have, starting with the externals first! Lest we neglect the aforementioned alphanumeric soup, the CQB comes outfitted with replicas of the latest modernization kit from Zenitco; namely this would be the “Sport” series handguard, which consists of the B-21L lower handguard and B-19N railed gas tube cover. This is a substantially lighter rail assembly than the old style Zenitco “cheese graters”, which is to say: full picatinny rails. If it helps, one can think of these slimline rails as “Russian MLOK”, though it is formally known as the “BASIS” system. A B-22 optical mount is also fitted to the handguard. This allows for shooting through the irons underneath and is removable if the end-user elects not to use it. Incidentally, if you mount something along the lines of an Aimpoint T2, Holosun, or similar on top of the B-22, this puts the optic at the perfect height for passive aiming through night vision. Your tube(s) will easily clear

furniture is the RK-3 motor grip, an RP-2 handle knob, and the iteration of the famous charging current PT-1 folding stock. As clones of Zenitco stuff go these are excellent examples in the fit and finish department. Purists might be a little dismayed to note they do not replicate Zenitco trades exactly; “Arcturus Tactical” features amongst the Cyrillic text. But it more than passes the 3-yard test.

Arcturus have also provided a small bevy of accessories to go along with these rifles, which include a DTK-2B muzzle brake and a replica of the SV Saiga 9 shot stabilizer, which is basically a linear compensator and flash suppressor, not an actual suppressor. Interested parties will be happy to note this can be disassembled to house a tracer unit. The Acetech AT2000 will fit with a wrap or two of tape to space it out. I found the harder choice to actually be deciding which muzzle device to run on the gun!

Finishing out the accessories are a couple of “BASIS” rail sections for attaching picatinny-compatible accessories to the handguard and a magazine-well funnel. These come additional screws and backers for various ways to attach and place the

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rails in your desired location. Lastly a polymer RL-2 handstop rounds things out.

I was quite pleased with the quality of all the items supplied, save for the magazine funnel. This piece unfortunately does not securely attach to the gun. Being that it

is made of plastic I also noticed it splays apart when the

works out to around US\$14 apiece.

On the subject of magazines, this is probably my only real complaint with this package. The magazines do tend to 'run out of gas' if fired on full auto towards the end of the magazine. They are absolutely capable of keeping up 100% in semi-auto, but in full auto mode, if one is attempting to do magazine dumps, you will note the misstep as you reach the end of the magazine. I did take the opportunity to take one



two set screws are tightened. Even in the tightened state, the funnel can be too easily bumped off the magwell by simply depressing the magazine release. Ultimately I feel

this component should like have been made from CNC'd aluminum like the real thing and it wouldn't have the same issues of flexing apart. I do suspect this is likely compatible with real steel magazine funnels, so I will probably order one up for testing. Aside from that is the inclusion of some swag items, such as a sticker sheet, a limited edition patch and more.

There are two magazines supplied with the platform which are switchable from 30 to 95 BB capacities and have the last-round style followers, so every BB is fed upwards. These are true-to-size and feature the Izhevsk arsenal stamp. Contrary to what some sites are posting, LCT magazines are not compatible with the Arcturus Vityaz, however. Extra magazines are sold individually or in 5-packs, which

apart and noted the springs are possibly a bit short, which would create reduced spring tension. Fortunately they are standard sized magazine springs though. Upgrading these with Maple Superfeed or PTS EPM magazine springs would likely solve the issue entirely.

Moving onto the body itself, we have a full stamped steel receiver mated to a 9.4" barrel with standard 14mm CCW threads. The barrel itself is one of the few parts that are aluminum, the other notable part being the rail riveted to the dust cover. While steel might have been more authentic, this does help with keeping the front end feeling livelier. Aside from that, steel (be it stamped, milled or cast) is found in all the places that actually matter. Arcturus has advertised that the body is QPQ finished, which is a specialized type of nitrocarburizing case hardening that is better known through commercial brands, such as Tenifer or Melonite. This type of finish is billeted to protect against corrosion and wear better than hard chrome or nickel plating, even. This SMG does not feature the side rail for mounting optics such as is found on the LCT version. The receiver markings appear to be accurate to the current Vityaz produced

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by Kalashnikov Concern.

The selector switch is perhaps not accurate to the military versions of the Vityaz as the design harkens to the famous Krebs Custom selector switch. This features a wide ledge that allows for it to be manipulated without taking ones hand off the firing grip. It would have been nice if this had also had a notch for locking the bolt to the rear when adjusting the hop up chamber, but this is a minor quibble. The indexing into the selector grooves is nice and positive, and the switch isn't easily bumped out of position as it might be on some of the cheaper AK Airsoft variants. The charging handle is a solid one-piece design that operates smoothly and has an appropriate distance of travel. The RP-2 charging

handle knob is removable, which reveals the traditional curved style hook most are familiar with. I really like the feel of the bigger knob, so I plan to keep it affixed.

As on the real version, the magazine well is made from polymer and dovetails neatly into the receiver. The trigger guard and magazine-well support is realistically riveted to the receiver, as opposed to using hex screws as is more commonly found on AK pattern stuff. There is also an insert inside the magazine well that prevents magazines from being over-inserted. At the 12 o'clock, we have a captured-style dust cover, similar to that found on the 74U series, albeit this one is equipped with an optical rail. My example was fairly rigid and stable, though it's

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not going to be as rigid as the Zenitco B-33 railed dust cover, if one is familiar. For true optical zero, I would suggest using either the B-22 mount that's included or the B-19N gas tube rail. The PT-1 stock is quite comfortable and features massive length of pull adjustment as well as cheek riser height. Even the buttplate can be adjusted up or down to better fit the shooter. Much like any modern AK variant, this also folds to the side for more compact storage.

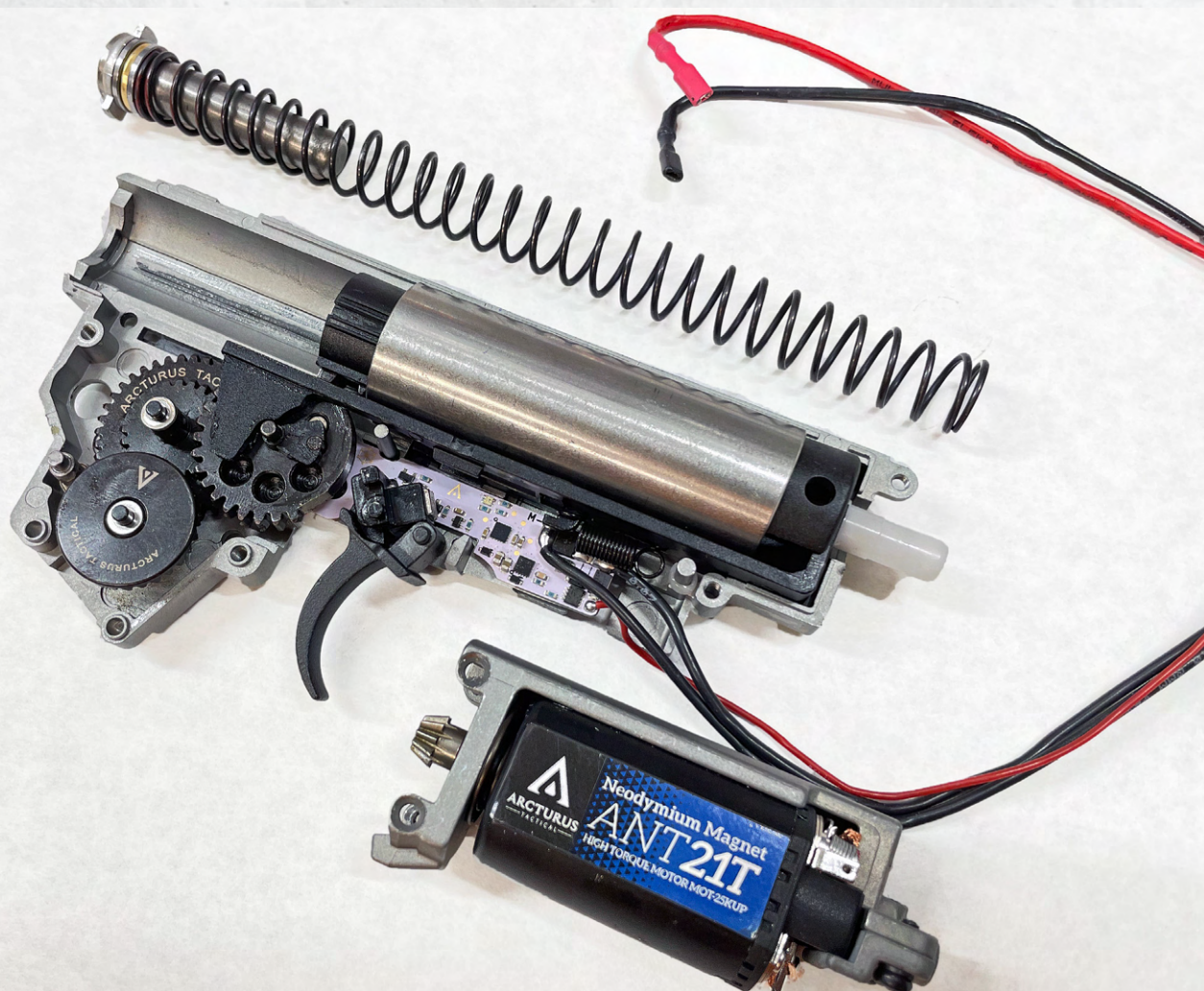
Overall, this is an absolutely solid set of externals that not only looks the part, but also feels amazing to boot. With all the accessories and upgraded furniture installed, one might be thinking this is a heavy setup. On the contrary – modern Zenitco (and its Airsoft analogs) are quite lightweight. The entire

package with the magazine installed clocks in at 6.7 lbs. / 3.03 kg.

### LIFTING THE VEIL ON THE PE GEARBOX

So what's at the heart of this little beast? With the smaller receiver dimensions, Arcturus has adopted the same tactic as Real Sword by developing a unique truncated gearbox design. This is still technically V3-based, but for all intents and purposes the shell itself should be considered proprietary. Powering the gun is a short-type 21 TPA ANT21 Neodymium motor, which is rated at 25K RPM. If given opportunity to handle one of these in person, you might have noticed the grip is slightly slimmer than most aftermarket RK-3 designs. Initially this

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made me concerned this was using a slim type motor, which have been somewhat problematic. Fortunately my fears were allayed, and this slimmer profile is accomplished by using a G36-style motor cage to house a conventionally-sized motor.

Inside the gearbox we find a set of CNC'd 13:1 gears which have been short-stroked 2-teeth. I am pretty certain these are OEM'd by SHS/Rocket themselves. The appearance and design certainly matches up, in any case. I am estimating the main spring to be a M120 strength, so any risk of PME damage from the higher ROF is being eliminated through this short-stroking technique. Shimming was well done and mostly on-point, albeit a hair loose on the bevel gear side. The gears and piston were not

overly lubricated with a massive slathering of grease such as one finds in a CYMA.

The piston has a full metal rack with the second to last tooth removed and it has near perfect Angle-of-Engagement with the sector gear. The piston body, piston head and cylinder are constructed of black polycarbonate. A POM air nozzle with inner O-ring is a nice touch. Upon checking the air compression, I found this to be excellent, with no blow-by or leaks.

The crowning jewel here is of course the installation of the well-regarded Perun V3 ETU. I believe these are a collaborative version with Perun, but am unsure if there is any distinct difference from the standard Perun aside from pre-configured wiring. These ETU's use a combination of optical

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and magnetic sensors to detect gear cycle, selector position and trigger pulls. Additionally, there is user-configurable active braking, pre-cocking, optional fire control modes and more. Somewhat unique here is the inclusion of a tune-able trigger stop that allows one to adjust the length of travel on the trigger. As it comes from Arcturus, this is set to approximately 4–5mm and has a lightweight trigger spring. Both of these features allows for rather rapid operation of the trigger compared to a traditional AK setup. My ‘feathering’ skills are a little rusty from my Paintball days, but I was able to ghost it along with a little practice!

Last but not least is a stainless-steel ball-bearing spring guide. This is easily accessed through the

back of the receiver when the stock is folded, so it is indeed a quick-change spring guide assembly. I am always eternally grateful when it is not necessary to yank a gearbox free to perform something as mundane as a spring swap to meet site limits.

### SET TO STUN!

On the performance metrics, I can summarize it as this: this gun absolutely stuns with the out of the box performance. Out of the box, my example arrived shooting exactly 398 FPS/1.47J with an amazing consistency of 0.5–1 FPS between shots. This was actually a little higher than the published specs on the quality control sheet that came with the gun. Fitted with an 11.1v 1200mah stick LiPo, a rate of

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fire of 25 RPS was achieved. Aside from opening the gearbox for inspection and the purposes of this review, I elected not to change anything (well, almost... we'll get to that in a minute) until the gun was given a thorough shakedown first.

At the time of SHOT Show, Chris Yue of MOS Manufacturing had informed me the hop up chamber on the display examples would be changed to a new type with a top-down-center design. This is reflected here in the production version, and I can say without hesitation that the new chamber design is phenomenal and probably stands amongst one of the very best AK hop up chamber designs to date!

Simply put, this gun is a laser beam and will have no qualms about reaching out and touching someone across the field. Arcturus uses a nicely

finished steel 6.02 diameter inner barrel paired with their 60 degree split-style bucking. I would be very confident in running this setup as it comes save for maybe changing the nub out so it will lift heavier BB's. As it is, one should not experience any issues running anything up to a .28g. That being said, I did run into a very minor issue with the chamber tapping out with .30g's at maximum hop up adjustment. After changing the nub for a slightly firmer one I was able to easily lift the .30g's and the slightly heavier .32g I normally use. So full disclosure: this was the only thing I changed.

Having now run several thousand BBs through the PE, and sneaking in a small private game or two, trying to push it hard all the while, it hasn't let up a beat. I do still experience some issues with the

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magazines struggling to keep up on full-auto when they reach the end, but I will rectify that shortly with some new springs. As previously mentioned, they do not present an issue when shooting in semi-auto mode, which is how I normally run the gun. Overall, I am very pleased with the reliability and performance here. It's just a damn solid build.

One of the things that struck me most when visiting the MOS Manufacturing/Arcturus booth was that they were absolutely keen on listening to customer feedback and were themselves embracing and well-informed of the technical aspects of their models. This was quite refreshing to see and stood in stark contrast to some of the other airsoft booths where little was seemingly known about the models on display. That same attention to detail and care is clearly reflected here with the PP-19-01 PE Vityaz Z-TAC SP1. As a full-time Airsoft Tech who's had his grease-laden fingers inside countless guns now, very few factory builds manage to impress me with their out of the box performance. Arcturus has assuredly presented us with something special here, true to the

"Special Edition" nomenclature and I daresay even a market disruptor when held up against competing models.

To build from scratch to an equivalent spec (or as close as is possible with off-the-shelf components), you would be looking at spending at least US\$850+ and it would still be missing some of the components and accessories that are included with the Arcturus. So in my opinion, this is a premium platform being sold at a mid-range price point... which makes it a fantastic value for everything contained herein. In closing, this is in this author's opinion the best PP-19-01 on the market today and will surely satisfy newcomers and fans alike of this unique eastern-flavored SMG.

Many thanks goes out to Art and Jackie Bigelow of Nomad Airsoft (<https://www.facebook.com/NomadAirsoftSupply>) for ensuring I was able to snag one of these for this review. This was not a paid, solicited or endorsed review and was wholly purchased with my own funds for my own personal use. **AA**