**Friends, Donors, and Fellow Lovers of Liberty,**
As is seemingly usual, please excuse that it's been a while since the last special update. As might be obvious, I believe we are now in a very different place with the Dagger project than we were last update. It is always a decision point for me between spending resources on technical development or administrative duties like publicity and writing these updates (I usually devote a day's work to them to be as thoughtful, complete, and accurate as possible). We lost 2 solid months of good testing weather in September and October, spending all that time on publicity and administration surrounding the penetration demonstration video, and I was eager to get back to the engineering work and show more progress. But it's been some time and I certainly owe you supporters some more news and insight, and there is much to tell.

## The crowdfunding goal was met one week after the video release.

The day before the demo video release, the funding progress bar sat at a little over $12k. Nearly exactly a week later **we crossed the $30k funding goal.** That's more than $15k (half) in funding in a single week just by exhibiting proof of minimum viability! **An extremely successful funding drive** by both relative standards and our own goals. I had long believed we would reach the goal after proving the Dagger could live up to our promises, but I was never as optimistic as reality has been. Even now, donations continue to trickle in, $5k past our goal. As Gun Dynamics releases these funds to us little-by-little (frustrating but they have been friendly to host the campaign free-of-charge), we will be outfitted to purchase the materials we need to deliver all aspects of the open-source project.

## The Dagger penetrates IIIA+ soft armor.

A penetration test of IIIA+ soft armor was performed about 2 weeks after the IIIA video release, using an unoptimized Dagger prototype identical to that in the demo video (absent the premium alloy). **The Dagger cleanly penetrated through a Safelife IIIA+ panel** rated to stop FMJ 5.7X28 (a cartridge designed for armor penetration) and the few 9mm rounds which may sometimes penetrate cheap IIIA armor under perfect conditions. However, having reached the funding goal, **we do not intend to spend any more time and money investigating or publicizing such additional capability** until development is complete.

## Atlas Arms welcomes aboard Michael Riettini.

Known for some time in the printed firearms and bitcoin communities, he boasts a background in precision shooting, reloading, and serious tactical training, as well as business management and administration in the oil industry. **Michael will ensure the business and logistics run smoothly around here**, both nonprofit and commercial, but has and will continue to help in technical avenues such as investigation into 3D-printed Dagger jackets. I am personally happy and relieved to have someone principled and passionate about the individual armament mission of Atlas Arms to take some tedious administrative burden off my shoulders so I can focus on engineering. We don't care much for corporate titles around here, but as "COO" best matches his role, so will be his official title. Michael will also be bringing significant investment capital into the commercial operation.

On the note of investment, **we are open to additional investment** to kick-start the

commercial operation, and you donors are far preferred. I know some of you have emailed me to inquire into the matter already. Please excuse my delay in response as I've been trying to drink from a firehose of emails since the demo video release, but I'll get to it in time.

## Manufacturing is forecasted.

Knowing that all of you and a hundred of thousand more are eagerly awaiting the Dagger's commercial release, **we have already initiated investigations into manufacturing logistics** such as materials sourcing and pricing and manufacturing services so we'll be ready to begin manufacturing soon after development is finished. What we've found seems to confirm that we will indeed have to retail Dagger projectiles as currently designed for **$2.25-$2.75 each** in the beginning, more costly than we'd like, but not insane, especially considering Biden/Covid-era general pricing. However, I'm very excited to announce 2 pieces of excellent news for the shallow-pocketed:

1. **Printing Dagger jackets with SLA technology appears more promising** as work continues and may even prove appropriate for commercial production, knocking off up to $0.40 of that per-bullet pricing!
2. **We will be offering economy version(s) of the Dagny Dagger technology**, trading some penetrative ability for enormous cost savings. I tentatively refer to one variant as the "Piggy Popper", intended for hunting and feral hogs in particular, while another may be marketed for general personal defense (perhaps named for Eddie Willers) as BBHP (Barrier-Blind Hollow Point). These variants are not "designed primarily for the purpose of penetrating metal or body armor" and so will be legal in Texas and other states of poor firearms freedom. Also, depending on the prospect of printed jackets in commercial production, **these economy versions may compete on price with Speer Gold Dot and Federal HST** while offering far-superior performance!

## Ongoing work and the road forward:

- **Dagger jacket design is nearly complete.**
  Though optimization is the most tedious of design phases, we will soon have gathered enough data to decide on the inclusion of a boat tail on the bullet and pin-down bearing diameter, thus locking-in the dimensional design of the jacket and entire projectile. From there, inclusion of the special alloy and adhesive and powder load optimization are the only items left in the design process.
- **Work has begun on the Ghost Gunner Lathe**
  Somewhat of a sub-project stemming from the need to facilitate Dagger homemaking with a Ghost Gunner milling machine, the GG Lathe takes the form of a Ghost Gunner add-on which allows the machine to function as a lathe to turn solid bullets, ECM chambering electrodes, and other round parts. We now possess a working prototype of the physical tool center add-on, and are thankful to a couple friends at Defense Distributed for supplying us with a GG3 (a very capable machine!) and support for the project.
- **The ammo hose project is progressing.**
  Last week saw the first live-fire testing of the magazine system, achieving certain success. Named for Richard Halley, under power of its own internal spring and without

any additional winding, **the "Halley Hose" fed 9 consecutive rounds into the P80** G19LS seen in the penetration demo video, and appeared capable of continuing had I continued squeezing the trigger. Our intern Will deserves credit for much of the progress.

- **Gun Dynamics is defunct (for the moment).**
  On the eve of emising this epistle, Gun Dynamics has informed us they've been declined by their payment processor and cannot accept donations on our behalf. Of course this is political business-as-usual at this point in the firearms space, and a clear case for using and becoming comfortable with Bitcoin if you like freedom, guns, or anything else our Hegelian overlords might deem objectionable. We still accept (and prefer) bitcoin donations through our own site (atlasarms.org/btc) and will be building a contingency to accept our own USD donations.
- **Come to the "Bear Arms and Bitcoin" event if you can (again).**
  The conference is organized by Guns 'n Bitcoin on whose podcast I and Will have been guests. Speakers include many in the DIY firearms and bitcoin space in the spirit of "freedom tech". Frustratingly a mere 7 months after last year's conference, we haven't much time to prepare. However, both Will and I will be speaking and we hope to exhibit 3D-printed jackets, GG Lathe-turned copper bullets, and live-fire demos of the Halley Hose and Piggy Popper, all for the first time! **April 10-11 in Austin, Texas**.
  https://gunsnbitcoin.com/

The light at the end of the tunnel of the Dagny Dagger project grows brighter and more vivid. [cue Ron Paul "It's Happening" meme] We have much left to do developing easy methods of home manufacture and commercial core/jacket assembly, but the addition of capable hands on deck and sufficient funding ease my anxiety and reassure all of us here. And not only the Dagger, but a wealth of projects in, and contributions to, individual armament and the "Militia Industrial Complex" are I hope clear to see now. The first product to market is always the most difficult, and especially as we also endeavor to make and keep it legal, open-source, and DIY-able. But we have a fleet of exciting technologies ready to sail on the winds of the Dagger's success, and many more still in the shipyard, several more exciting than any of these.

As the Dagger project begins its third and final year of development, I've been burned out on this work many, many times, starting about 6 months into it. The challenge to develop and commercialize new technology is always extremely difficult for a new company as nearly all who try it fail, and especially while maintaining our liberal principles of open access and antagonism of tyrannical authority. There are still very few of us shouldering this burden here and there have been fewer. Often I've felt quite alone in the struggle and every bone in my body wanted to quit what has at times felt like spinning my wheels in a mudpit of joyless misery. But I and we have kept at it and rocked our way out of every rut to accomplish what had started to seem doubtful. And we *would* have quit without the bottomless enthusiasm of you friends, fans, and supporters. You guys have believed in us even when we started to doubt ourselves, keeping the company afloat with your donations and our spirits alive with the faith of which that money talks. Sometimes this bullet started to feel like just another hunk of projectile material to throw down range, but the overwhelming popular demand, excitement, and positivity kept me believing in my own dream. I wish then to express to all of you the warmest and most sincere

appreciation of your support and its critical role in this project's imminent success. Thank you.

Keep spreading the word. Email us anytime or engage via social media.

--Austin Thomas Jones
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