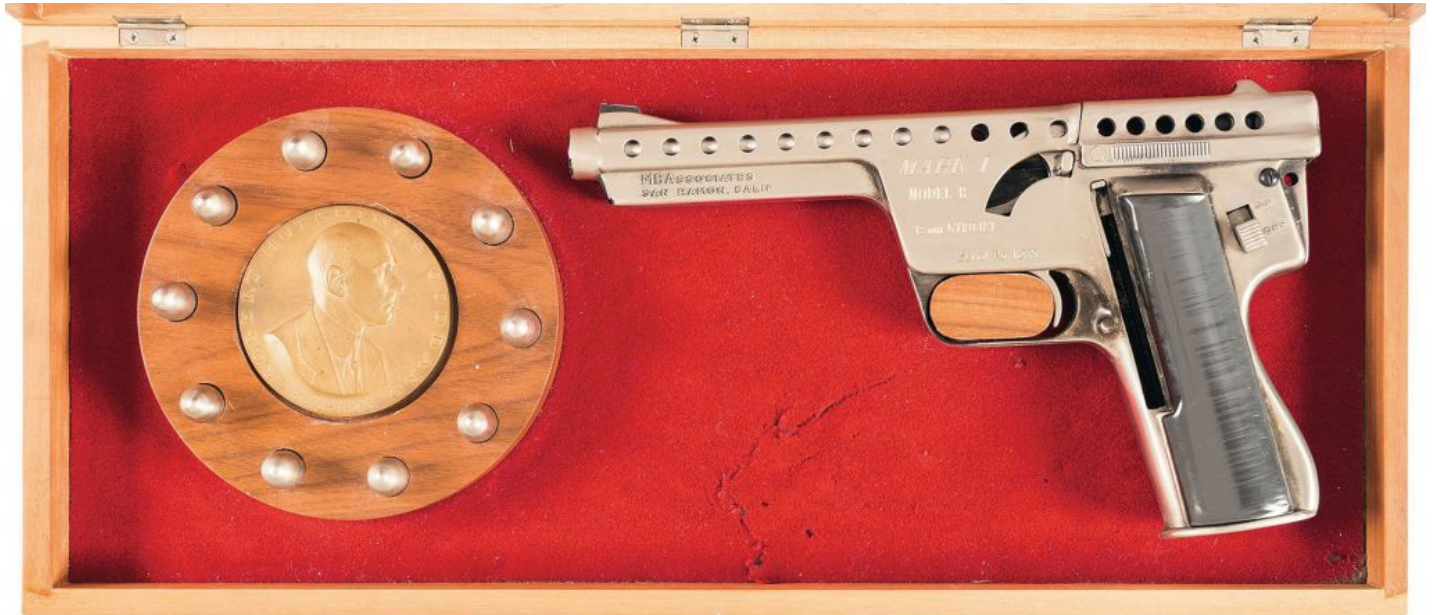




Written for the December 2018 Premiere Gun Auction-#75

11/27/2018

Logan Metesh



*Lot 835: MBAssociates Mark I Model B Gyrojet Pistol With Presentation Case. Available December 2018*

When the 1960s dawned, the future was bright and anything seemed possible – including outer space exploration and colonization. NASA had been created two years prior in 1958. In 1961, Alan Shepard completed a successful suborbital trip to space. The following year, John Glenn was the first American to orbit the earth. In September of that year, President Kennedy uttered the famous line, “We choose to go to the Moon.” At that same time, Robert Mainhardt and Art Biehl teamed up to form MBAssociates, or MBA, for short. The goal was to develop a new small arms projectile that utilized solid rocket fuel instead of the centuries old method of using gunpowder. Very space age, indeed.

Such a unique projectile would require an equally unique firearm. Because the cartridge was such an unusual design, it had to be finalized first so that the firearm could be created around it. What resulted was a self-contained, non-reloadable brass cartridge, propelled by burning solid rocket fuel that was channeled through angled jet ports in the rear of the cartridge. The jets provided the spin necessary to stabilize the rocket in flight, much like traditional rifling or the spiral of a football. The Gyrojet’s rockets were unlike anything anyone living had ever seen. I say *living* because something similar existed more than 100 years prior: Walter Hunt’s “Rocket Ball” from 1848. It, too, was a self-contained cartridge, with the propellant located in the base of the projectile. The design had flaws and shortcomings that foreshadowed the Gyrojet’s fate.

13mm GyroJet Cartridge



*Cross section of Gyrojet ammunition. Photo credit: unknown.*

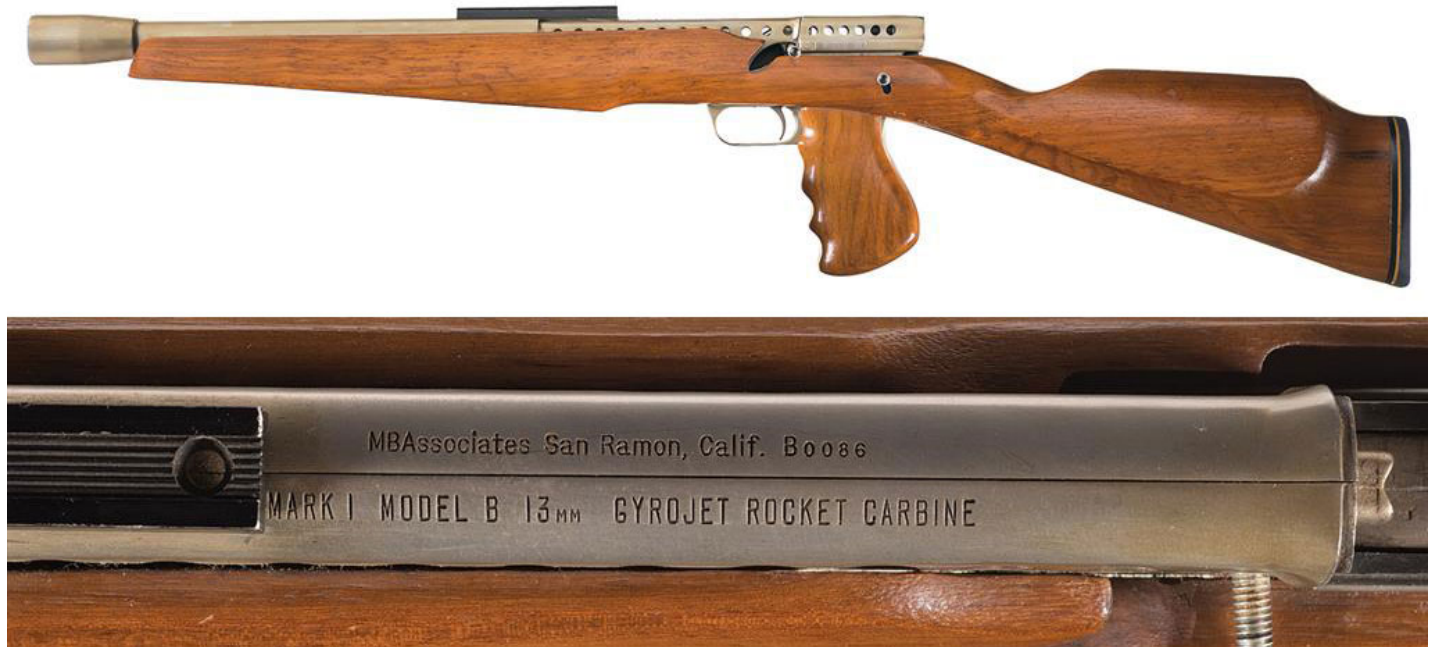
Unlike a traditional bullet that slows down once it is fired, a Gyrojet rocket picks up speed after it has been ignited, because the rocket fuel is still burning and creating energy. Unfortunately, this meant that the rockets had a very low muzzle velocity, making them susceptible to wind or other outside forces acting upon it early in flight. The pistol's short barrel put it most at risk for adverse outside effects, but the carbine's longer barrel didn't fare much better. Slow initial velocity was a problem that MBA was well aware of from the beginning. The owner's manual included instructions for what to do when a cartridge misfired. If it simply failed to ignite at all after two hammer strikes, the rocket was to be manually extracted and discarded. If the rocket ignited but failed to exit the barrel, the user was instructed to push it out manually from the muzzle toward the rear and discard it. (Proper disposal for a cartridge containing solid rocket fuel wasn't even considered.)

With the cartridge complete, Robert and Art set out to develop the gun that would fire this unconventional projectile. What resulted was anything but conventional. The hammer was located in front of the rocket instead of behind it. When the trigger was pulled, the hammer forced the rocket rearward onto a fixed firing pin. This ignited the rocket fuel and propelled the projectile down the barrel, which also reset the hammer as it exited the gun.

Because the entire cartridge is fired, the gun lacks an ejection port in the traditional sense. A cover on the top of the pistol provide access to the integral magazine. If you need to remove any rounds for any reason, you would open the cover and (carefully) extract the cartridges. Since there are no feed lips, all of the rockets can fly out of the spring-loaded magazine if you don't keep your thumb or hand over them to prevent that from happening. Since there's no need to eject anything, the gun has no slide. The only mechanical movement that happens when the gun is fired is that of the hammer rising, pushing the cartridge back onto the firing pin, and then the hammer being pushed back down by the rocket passing over top of it. Then, another rocket is raised into place from the integral magazine.

The Space Age was also smack dab in the middle of the Cold War, and this new rocket technology caught the attention of the Soviets. On April 15, 1966, two Russians later identified as Col. Useolad Stepanovich Tovna and his aide, Col. Nicolai A. Burmistrov entered a San Jose, California, gun shop run by Frank Schilling. The two men tried to purchase a Gyrojet pistol from Schilling, but he refused to do so. Oddly enough, he did sell them some rockets – which is probably what they were really after anyway.

Inventors Mainhardt and Biehl had big plans for their new creation. They had more than 50 variations planned, but few materialized. The pistol and the carbine, both of which were initially designed to fire 13mm rockets, are the most widely recognized. MBAssociates also designed flare guns, a rifle meant to compete against the M16, and an underwater variant called the Lancejet, just to name a few.



*Scarce MBA Mark I Model B Gyrojet Carbine Serial Number "B0088". Sold by RIAC in September 2015 for \$3,450*

With the passage of the Gun Control Act of 1968, projectiles larger than .50-caliber were classified as "destructive devices." Unfortunately, 13mm converts to 0.511 inches, so the size of the rocket had to be reduced to 12mm in order to fall under .50 inches, which is 12.7mm. The 13mm variants of both the pistol and the carbine are known as "Mark I" and the 12mm variants are known as "Mark II." Eventually, the original 13mm designs were exempted by the ATF and they can be owned and sold like any other regular firearm, no special forms, stamps, or waiting periods.

This December, a Mark I Model B Gyrojet pistol will cross the auction block, housed in a handsome hardwood presentation case with more than a dozen rockets (some spent, some possibly live). Also present in the case is a medallion with Robert Hutchings Goddard's face on it. Goddard, dubbed "the father of modern rocketry," created the world's first liquid-filled rocket and is credited with ushering us into the Space Age. NASA's Goddard Space Flight Center in Maryland is named after him.





*Robert H. Goddard on March 16, 1926, Auburn, Massachusetts. Photo from [nasa.gov](https://www.nasa.gov)*

The gun is in fine condition and works mechanically. It has been mostly polished bright with areas of the original black finish remaining in the harder to reach places. Even with the polishing, the markings are sharp. The grips are fine with some small dings and the left panel having separated from the frame. The lot also includes two magazines. One is the September 1965 issue of *Gun World* with a cover story on the Gyrojet. The other is the January/February 2015 issue of *American Handgunner* with an article on the Gyrojet pistols.

By the end of 1969, the United States had fulfilled former President Kennedy's dream. Apollo Missions 11 and 12 had placed men on the moon and brought them back to Earth safely. The future was bright for the Space Age as a new decade approached. The same cannot be said for MBAssociates. Their unconventional design, low muzzle velocity, poor performance, unreliable ignition, and high cost of ammo (around \$3 each) proved too much for the company to bear. They folded in 1969.

Two things have remained constant in the 49 years since production stopped. The rockets are still cost-prohibitive to own and shoot, and they're still just as (if not more) prone to failed ignition now. In the September 2015 Premiere Auction, a box of 24 rockets sold for \$3,738. That's \$155.75 a piece! Because of the short production span and low production numbers, all things Gyrojet – the pistols, carbines, and even the ammo – are definitely collector's items. If you're a fan of the weird and wacky or the evolution of arms and failed attempts at progress, then this is an opportunity you won't want to pass up. After all, you only live twice – one life for yourself and one for your dreams.



*This similar cased Mark I Model B, also with ammunition, sold in September 2014 for \$6,325*