The 7.62MM Garand – What Is it?

It is common knowledge that the U.S. and other NATO countries jointly developed a cartridge known as the 7.62MM NATO round. This allowed the standardization of ammunition but left weapon standardization lagging behind.

Several rifles were tested and the U.S. moved towards the M14 while Europe moved towards the FAL. The fact that the U.S. was left with millions of serviceable M1 (Garand) rifles was not lost on personnel at the US Bureau of Naval Weapons. (BUWEPS)

BUWEPS decided to investigate the possibility of converting existing Garands to this new NATO round. The Naval Ordnance Plant at York, PA was assigned the task and given a budget of $25,000. In 1962, they in turn contracted with H.P. White Laboratories in Maryland who eventually developed a chamber bushing which converted existing D6535448 .30 barrels to 7.62MM NATO.

The conversion entailed insertion of the chamber bushing, enlargement of the gas port and the installation of a magazine block-off or spacer. Several refinements were made during the process, primarily to correct the “bushing ejection” problem. There were cases where the bushing simply ejected itself from the chamber during firing.

The spacer was developed to prevent a sailor from loading a clip of .30 ammunition in the rifle.

Initially, the Navy determined the conversions would take place in the field. A test program determined it would be better to modify existing rifles in a government arsenal or commercial ordnance facility.

Subsequently, a contract was placed with American Machine and Foundry Company, (AMF) York, PA to convert rifles. It is interesting to note that twenty rifles were given to the USMC for testing from the very first rifles produced by AMF. Later, ten rifles were given to the U.S. Army for testing from AMF production.

An improved process of inserting the bushings in the rifle was developed at the Naval Weapons Facility at Crane, IN. This involved placing grooves in the chambers of the rifles to insure that the bushing would stay in place.

Harrington & Richardson Arms was eventually contracted to convert a quantity of these rifles with AMF. AMF converted 17,050 rifles with no grooves in the chamber to retain the bushing. H&R converted 15,000 rifles with 25% having new 7.62MM barrels and the balance with bushings installed in a grooved chamber. AMF converted an additional 10,000 rifles with 50% having new barrels and the balance with bushings installed in a grooved chamber.
The rifles with the bushings were designated MK2 MOD 0 (zero) by the Navy and the rifles with Springfield Armory produced 7.62MM barrels were designated MK2 MOD1. The MK2 MOD0 barrels, with the sleeve added, are clearly marked “7.62 NATO” near the drawing number of the barrel. In virtually all cases, white paint has been added to clearly display this designation. The barrels may or may not be marked “H&R” or “AMF.”

The newly manufactured 7.62MM barrels have been observed by this writer with dates of 5-1965, 12-65 and 3-66. The 1965 dated barrels have drawing numbers of 11010457 and the 1966 barrels have drawing numbers of 11686514. I have seen several barrels dated 12-65 with “SPL” between the drawing number and the date. It is unknown what this means. Some have conjectured that this meant a “match” barrel but Cdr. Jim Adell, a life-long Navy shooter and researcher of the Navy Garands says it does not.

The early SA made barrels had “7.62MM” marked on the barrel in letters that were the same size as the drawing number. The contractor, AMF or H&R, then added “7.62MM” in larger letters, as well as their own markings, and filled them with white paint. Later SA barrels had factory added “7.62MM” markings approximately the same size as the contractors “7.62 NATO” markings. It appears they were taking no chances identifying what cartridge the rifle used!

The rifles offered for sale by the CMP are all the MK2 MOD 0 variety. While the later MK2 MOD1 rifles were seen with the contractor’s markings on the barrel near the drawing number, this was not always the case with the MK2 MOD 0 rifle. Only a few of the CMP offering were seen with AMF or H&R inscriptions. Billy Pyle of the GARAND STAND REPORT says that the first 100 rifles converted by the Navy had “7.62 NATO” engraved or stamped on the side of the receiver. Several of these rifles have been reported and an excellent picture of one appears in GSR #12.

It is also noteworthy that Billy Pyle recently finished an article for the GSR based on a Springfield Armory report of evaluation on the Navy conversion of the Garand to 7.62MM NATO. The report was dated 30 Oct. 64. Pyle says there are two significant conclusions in the report:

1. “There is no positive method of assuring that the bushing will be retained in the barrel chamber during life of barrel.”
2. “The M1 rifle converted to fire 7.62MM ammunition is considered unsafe for launching grenades because of excessively high bolt recoil velocities.”

The entire article will be featured in an upcoming GSR.

The MK2 MOD0 is a rare rifle to find and one of the easiest to fake. One simply has to obtain a bushing, which once were available on the surplus market, place it in the chamber of a .30 rifle, mark the barrel “7.62 NATO,” and a MK2 MOD0 is “born.” On the other hand, it appears that many of the MOD 0 rifles were given to local law
enforcement agencies in the 60s. There are numerous instances where police
departments have sold MOD 0 rifles when upgrading their weaponry. This has generally
been the only way to document a MOD 0 rifle as genuine.

It should also be pointed out that the U.S. Air Force procured 7.62MM barrels to
build match rifles. These reportedly came from Rock Island Arsenal. It is my opinion
that none of the 7.62MM rifles being offered by the CMP is of Air Force origin but came
from the U.S. Navy.

It is also interesting to note that the MK2 MOD 0 rifles do not generally appear
the Navy’s database of rifles. The reason is unknown.

Thus, the opportunity to obtain one of these rifles from the CMP is a rare
opportunity. Contrary to any reports, the US Navy did NOT award MK2 MOD0 rifles as
trophy rifles. These were all MK2 MOD1s with SA 7.62MM barrels. There is one
incident where a MOD 0 was documented as an award rifle but this is believed to have
been an anomaly. This will be the subject of an upcoming article by Cdr. Jim Adell,
USNR (Ret.) in the Garand Collector’s Association Journal.

Information in this report was derived from reports and correspondence of Cdr. Richard
F. Haley, USN. Haley was an Ordnance Engineering Officer for 25 years. He retired
from the Navy and joined American Machine & Foundry in their Washington, D.C.
offices. Eric Archer graciously provided this information.

Jim Adell also assisted the writer, as did Billy Pyle of the GARAND STAND REPORT
and Bob Seijas, Chairman Emeritus of the Garand Collector’s Association.

Writer was Steve Rutledge.