

The 175 gr. bullets in the M118 LR and most likely the 180 gr. bullets, have just enough different and longer ogive or outer shape of the bullet, that they require a longer Leade in the chamber to shoot well than you get using standard .308 Win pull-through chambering reamers. "Leade" is defined as the conical transition at the very beginning of the rifling, so the bullet doesn't hit the full-size rifling hard all at once after the free-bore space when the bullet exits the cartridge case. For example: the standard .308 Win/7.62 Leade is 0.090" to 0.100". The M118 LR chamber Leade is 0.116." Fortunately, Pacific Tool and Gauge makes special pull-through chamber reamers for this longer Leade. The good news is that chambers cut with them still shoot 168 and 173 gr. NM Bullets/Ammo well. After I learned this, I bought the new "longer Leade" pull-through reamers set up for the longer bullets from Pacific in both .30-06 and .308 Win. I can confirm this is true, as I have since cut all chambers this way.

#### **Important points in summary:**

1. For safety reasons, you must use ammo with no higher than 50,000 psi chamber pressure unless you successfully use a commercial Adjustable Gas Pressure Lock Screw (M1) or Gas Plug (M14/M1A).
2. .308 Win. chamber headspace of 1.631-2 will allow you to use American manufactured NATO ammo and many types of .308 Win. ammo (under 50,000 psi) with bullets of 147 – 173 grain weights.
3. If you wish to use 175 – 180 grain bullets, you will need to have your armorer or gunsmith cut a longer Leade or Extended Relief chamber in a NEW barrel for best function and accuracy. (Note: It may or may not be possible to re-cut a standard length chamber for Extended Relief and many times it isn't possible.)
4. If you wish to set up your rifle for a wide range of 7.62mm NATO rounds, I suggest you have the chamber headspace cut to the Military Minimum of 1.6355 and with Extended Relief.

I appreciate the information Jim Adell gave on Navy Garands and their use in competition, to make this a better article. I also want to thank Rick Gushman for his assistance as a Mechanical Engineer in providing and evaluating some of the technical information.



## **GIFT MEMBERSHIPS**



As the holiday season approaches, we would like to remind our members that it is possible to purchase a Gift Membership in the GCA.

In order to purchase and create a Gift Membership, we ask you to understand and follow a few directions. First of all, because of the interaction with the CMP, the GCA maintains a strict one distinct E-mail for each individual member. Therefore before purchasing a Gift Membership please ensure that you have a distinct E-mail address. Sorry but you cannot use your E-mail address for all of the new "Gift" members.

After picking the membership item from the store you will be given an opportunity to input the "Gift" members USER E-mail. Please note this can be different from your billing E-mail.

The other item to remember is that you are answering questions about "Accepting GCA Member Conduct Policy" as well as the "Gift" Member's choice about sharing information with the CMP.

We do hope that many of you will take advantage of our "Gift" Membership program and share a year's worth of GCA Membership.

Questions, send us a note to at [info@thegca.org](mailto:info@thegca.org) or use the CONTACT US page on the Website.

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