

WEL:T 7-12-65

22 CALIBER RIM FIRE

MODEL 6600

It is planned to introduce this model January 1, 1966. The general construction of the rifle presents the highest quality appearance with ultra high polished receiver and barrel, utilizing a frosted finish upper hand guard constructed of nylon which supports the rear sight, and which also contains an adjustment for windage and elevation. The receiver being made of heavy gauge steel, approx. .100" thick, is formed in a manner such that it will accommodate a front and rear section of braced powder metal inserts. These elements support the walnut stock and fore end which will contain a highly decorated checkering design and an ultra high finish protected by the RK-W process.

The trigger guard will be highly polished aluminum and extend the full length of the bottom section of the receiver. The inside of the receiver which will support the moving parts of the already existing Nylon 66 model will be of frosted black nylon material which provides adequate and permanent lubrication for the reciprocating parts and mechanisms.

It is contemplated that a companion piece such as a Model 6600 Pump of the same high quality could be introduced in January 1967. It is also contemplated that the new 5mm Magnum cartridge could be introduced into these models but this would require a locked system or at least a delayed blowback action system. Some development work would be necessary in producing such a locking mechanism but these two could possibly be introduced in 1967 or 1968.

MODELS 580 - 581 - 582

The new bolt action line in the rim fire we call the Models 580, 581 and 582. Also the 580M, 581M and 582M, respectively, which are Magnums, are planned for introduction in 1967. All of these models incorporate the strongest action in the world, boasting locking lugs on the bolt instead of the bolt handle, match type fire controls, high quality sights with windage and elevation adjustment, a new unique feature of molded upper hand guards supporting the rear sight, full men-size walnut stocks in the Monte Carlo design, handsome receivers with tapered rear sections for better sight alignment, for a general overall new look of quality and strength in the low priced field.

In addition to the 580 Series standard grade it is planned to introduce a high grade series containing genuine walnut stocks with cheekpiece and high grade checkering impressed in the fore end and grip section, the stock being protected with an AK-W finish. It is planned that these models will include the magnums also.

All of the group in the 580 Series are single shot, magazine feed and tubular feed, respectively. To our knowledge there are no existing left handed bolt action 22 caliber rifles on the market. Surveys show that at least 10% of the people are left handed. It is believed that a good market exists in this field and with the design such as it is in these new bolt action rifles it is possible for us to provide the left handed system with very little machine changeover. It is possible that the high grade system and the left handed bolt action series, which also could be made in standard and high grade, could be provided in 1968.

AIRCRAFT 11

There seems to be a need for some high velocity or fairly high velocity machine guns to be used in helicopters for the purposes of keeping enemy personnel pinned down while the helicopter performs its mission. This requires a high rate of fire, ranges out to 500 yards, and light weight ammunition that can be fed into multiple sets of guns.

A concept utilizing a series of molded type Nylon 66 guns into pod formation which could accommodate six or more at a time has been conceived. The ammunition would be rim fire and possibly utilizing the new 5mm cartridge. It could be belt fed or tubular fed. Combinations of these pods of six Nylon 66 mechanisms could shoot a volume of ammunition at the rate of around 6,000 rounds per minute, each pod being directly either permanently or electronically or mechanically controlled for traverse and elevation from strategic positions of the helicopter. It is believed that a tremendous amount of ammunition could be carried in this manner and the armament would be very effective in pinning down the enemy during strategic operation of the aircraft.

There are efforts under way to determine if such a need for this type of mechanism would be supported by the Armed Forces.

PACKER'S 22 SINGLE SHOT AND AUTOLOADER

This represents a concept of a low cost mechanism where the action breaks at the breech of the gun, allowing the barrel to fold back under the stock. The mechanism in the single shot would eliminate completely the bolt system generally used in bolt action single shot rifles, and it is believed that by utilizing the firing pin and 514 type trigger mechanism, such a rifle in single shot version could be produced at less cost than the existing 514. Being light weight with packaging of a short system it would be ideal for campers, boating enthusiasts, explorers, and anyone interested in lightweight versions of a 22 caliber rifle.

This could be pursued further into a completely rustproof version which might be ideal for a survival weapon for the Armed Forces. A semi-automatic version of the single shot 22 could also be constructed which could be box feed utilizing the 22 RF ammunition also.

Continuing with the 22 Caliber Rim Fire versions, we have the 22 Rim Fire target rifles in the 580 Series which are single shot, utilizing heavy barrel and light barrel versions, and also the clip models with heavy and light barrel. These models are to replace the 513 and 521T, and will contain the new superior lock systems, match type fire controls, ultra smooth bolt actions, and with improved stock design and other combinations and features that are found in the latest target rifles, which should put us in a very favorable competitive position, if not in advance of the existing competitive lines. These possibly could be introduced January 1967.

PELLET GUNS

We are presently investigating all types of BB rifles and pellet guns, the latter being those which utilize rifled barrels and provide better accuracy and more penetration. The market so far has indicated by investigators that the pellet gun version would be far better to pursue than existing BB type rifles made by Daisy Air Rifle Company. We are currently investigating costs and designs of both single shot and magazine feed, spring actuated piston type, and lever action cylinder type, along with various combinations of those powered by CO2 cartridges.

To date two models have been evaluated by Methods & Standards for costs, and a redesign of the Sheridan type pellet gun which at present is superior to other models.

UNDERWATER GUNS

There is an interest by the Navy, and there appears to be some commercial interest, in the development of an underwater cartridge propelled device to be used for shooting fish and sharks, and possibly underwater combat.

Several years ago we developed an underwater pistol based on the 514 action which used a 22 Caliber RF cartridge to propel a drill rod containing a barb and fish line. At that time the market seemed to be limited for such a device. Now there has been increased interest by the Navy in this area and we are awaiting further word from Military Sales as to when to proceed in this development.

BOLT ACTION CENTER FIRE RIFLES**MODEL 788 SERIES**

Calibers 30-30, 44 Mag., 22-250 and 222 are planned to be introduced in 1967. These rifles contain a back lock-up bolt which is necessary to feed and eject rimmed cartridges such as the 30-30 and 44 Mag.. These rifles are exceptionally strong, as strong as any in the world, and are made in a similar manner to the 580 Series wherein the receivers are formed over a mandrel utilizing the Torrington process. This provides high strength locking lugs internally in the receiver and a high quality finish.

The rifles feature extremely fine fire control systems, Monte Carlo walnut stocks, molded type upper hand guard supporting the rear sight,, which is adjustable for windage and elevation, and a handsome front sight which can be removed if necessary. Also, special attention has been made to mounting of telescopes on these receivers and barrels.

It is planned to produce a high grade series of these rifles which would contain checkpiece and high grade pressed checkering. These could be introduced in 1967 or 1968.

Progressing further in the 788 Series would be introduction of 308 and 243 Calibers which would be box feed and provide models in both standard and high grade for possible introduction in 1968.

MODEL 600 - 6.5 Magnum

This is planned for introduction in January 1966. The caliber has been tested in the popular Model 600 with laminated stock and has received good field acceptance for big game hunting, and also utilized for small game. The cartridge was specifically designed to perform efficiently in the short barrel of this model, and those who have used it claim phenomenal performance.

In 1967 a Caliber 30 Magnum based on the same cartridge could be introduced which would round out a three cartridge system for this model.

BANTAM BOX PRED 223 CALIBER

Possible introduction in January 1967. It is planned that this rifle, based on the 580 rim fire receiver but utilizing high strength alloy steel for receiver, could accommodate the 223 Caliber. It is believed this would be an excellent item to test rustproof and weatherproof characteristics necessary for those explorers and military personnel who must have weapons or commercial arms that will perform satisfactorily in all weather conditions. If this can be accomplished it will be a first for Remington Arms Company and it is believed a very important program to pursue. This will force us into utilizing rustproof materials and finishes, and there is a great need for these improvements in the sporting arms area.

MODEL 788 LOCK-UP

This program is a natural which follows the preceding 788 Series. By the front lock-up system it will be possible to accommodate all of the largest Magnum and high velocity cartridges, and in addition it is planned to add features of tapered bore to the system, which will be the strongest in the world and equal or exceed that of the strength of the Model 700.

The tapered bore system is not new in military circles but we believe would be the first of its type in sporting arms field. The system proposes a large caliber bullet at the chamber throat area which is forced to a smaller size as it progresses down the bore. During the process it attains an extremely high speed.

This rifle of the future should contain electric ignition for its special ammunition and special recoil reducing device to be included in the mechanism.

It is believed that it will be possible to produce this rifle and at least some of these combinations by 1970.

SHOTGUNS

OVER & UNDER AUTOLOADER

There has been increased interest over the years in the Over & Under Shotgun. Possibly this has been caused by several reasons; one being that they are rather difficult and expensive to obtain, and also possessing the combined features of reliability, balance, fast firing and fine trigger pull not readily obtainable in other gun mechanisms. However, the volumes as estimated by the Marketing Department have been so low it has been impossible for us to consider tooling up for such an item.

The need and desire for such a gun in the Remington line, however, still exists. In evaluating the Over & Under Shotgun there are several characteristics contained over and above those of the pump and autoloading line which seem to make this item more desirable; such as a stronger locked up system, functional performance most of the time reaches perfection, fire control systems are exceptionally good providing clean-crisp trigger pulls, and the balance and feel and swinging capabilities are exceptional; leaving little to be desired. The latter, I believe, is result of length of the receiver being shorter than normally found in an autoloading shotgun. The action seems to be far enough back that balance provides better handling.

Following achievements of the past there is no doubt that in our line of business a large number of parts made on the same machinery is necessary to reduce cost. An idea has been projected that might solve this problem in obtaining an Over & Under in the line. That is to combine it with an autoloading development. This conception would provide a stock, fire control and receiver

section similar to the Model 32 and would be the basic system for both an auto-loader and an Over & Under. The O/U would then continue on in the front section containing two barrels and a fore end, similar to that of a M/32. In the auto-loading version the top barrel would be similar to the top barrel of an O/U but bottom barrel would be replaced by a magazine tube of 5-shot capacity. It is envisioned that the lower section of receiver would have an open ejection port, the action would be break open type for the auto-loader such as the O/U, and therefore loading would be accomplished in this manner with action open.

During automatic functioning of gun, feeding and ejection would take place in a vertical bolt system not unlike the Model 10 with exception that bolt movement would not be reciprocating; thus a short action could be utilized. This also would provide a stronger system than existing pumps and auto-loaders in that the base of the shell would be resting virtually against the back frame of receiver, with all supporting elements in compression instead of in shear. It might be possible to provide such a gun where these forward elements could be interchangeable. In other words, a customer could buy one basic gun, and with a new set of barrels have two combinations. As far as factory production is concerned this system would be ideal.

One of the most expensive elements in O/U type shotguns is the double fire control system, which it is believed could be eliminated in

this combination by utilizing the gas system on the O/U and the subloader to cock the one existing fire control system.

Another feature which does not exist in O/U's but is believed could be introduced into the new combination would be a recoil reducing device neatly fitted between the two barrels and gas operated. This would be an advantage to those individuals shooting O/U shotguns for trap. It would greatly reduce recoil against the shoulder, resulting in less fatigue and better scores. Of course additional weight would be a disadvantage in both of these guns by utilizing the inertia recoil reducing system, and therefore it is believed that the receiver should be as light as possible. The receiver could be constructed from formed aluminum with welded or brazed inserts for mounting the stock at one end and the barrel lock system and forearm at the forward section.

28 & 410 GAS OPERATED AND PUMP COMBINATION

Two approaches to this system are being investigated. One utilizes the existing 28 and 410 - M/11-48 combination where it is believed the existing internal mechanism could be converted to a gas operated system such as that used in the M/1100. This would eliminate one of the undesirable features of a recoiling barrel and would provide a gas operated shotgun to add to our line of three gauges which are already in the M/1100, rounding out the line. If this was accomplished the receiver being used in the M/11-48 could be utilized.

Another approach would be to use a receiver similar to the one in the M/6500 where sheet steel could be formed for the receiver, reinforced by powder metal inserts brazed to the front and rear sections. This system does not require a receiver line of machinery, and scaled down internal parts similar to the M/1100 could be designed and developed to accommodate the 28 and 410 shells. It is believed these two systems would be ideally suited to round out the M/1100 line into a five gauge system, and the economics would be favorable because expensive machinery would not be needed.

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1966 - 67 - 68

XR Series of Rim Fire

These items are in a design and model making category.

Rim Fire -- Announcement January 1966 or 67.

Specifications

Single shot -- 22 short, long & long rifle

5 shot Box fed -- 22 short, long and long rifle & Mag.

Tubular fed -- 22 short, long, & long rifle & Mag.

Barrel tapered 24"

Stock -- walnut - Monte Carlo butt

Sights adjustable -- windage and elevation

Locking system -- rotary bolt - multiple lug system

Match type fire control

These rifles will feature the strongest bolt system ever developed for a rim fire hunting rifle and will feature a design supporting the rimmed case against rupture due to extreme chamber pressure. The fire control will contain a clean, crisp trigger pull comparable with match rifle quality. Receivers and barrels will be tapped for scope and receiver sight mounting with a special feature of supporting the scope mount from inertia forces. Also a special mounting device is provided for varmint rifle scopes. These rifles will provide more outstanding features at a competitive price than any rim fire now available.