

cc: J. G. Williams
J. E. Dickey
E. G. Larson
W. H. Foster

Ilion, New York
March 25, 1963

RECEIVED

APR 1 1963

F. E. MORGAN

XP-100

G. M. CALHOUN

This is with reference to your letter of March 19th concerning our joint discussion with Earl Larson over the telephone on the pros and cons of the XP-100 being an unsafe gun. I wish to relate that last week during a visit made to Ilion by Earl Larson and Jack Williams we covered this problem quite thoroughly. I explained that the safety mechanism on the XP-100 is identical to the Model 721-722 and the new Model 700 line of rifles. This particular safety mechanism in my judgment is more than adequate and has been used in several hundred thousand of these rifles. As a matter of fact, you will find a similar safety mechanism as far as its movements are concerned on competitive rifles as well as on the 510 Series in our present line of rifles.

The objection that Earl Larson had to this type of safety mechanism, I believe, are two-fold: (1) wherein if the safety is in the SAFE position and the trigger was being pulled by the right forefinger, the left hand could push the safety to an off position and the gun would fire. This is absolutely true. However, I pointed out to Jack Williams and Earl Larson that it took two hands to operate or obtain this condition. One can also obtain the condition on the 510 Series guns or on the M/700 or all of the 721 and 722's with a one hand movement; the shooter holding the gun with his right hand with the safety in the ON position, pulls the trigger with his right forefinger, pushes the safety forward with his thumb, and firing will result. As a comparison between the present pistol and a rifle I would say that if the pistol is in an unsafe condition in this set-up then we have a very serious condition existing in hundreds of thousands of 721's, 722's, 700's and thousands and thousands of 510's that are already on the market. I would say that as a fair comparison the pistol under this condition is safer than the M/700 series of rifles.

The other situation which Earl mentioned (2) was the fact that the safety presented a lock system which when in the ON position would lock the bolt handle down. This of course is the same basic design as the M/700 rifle and was initiated in the early M/721 line of guns, for the protection of the shooter in making certain that the bolt handle is in a locked down position so that when fired, when the safety is put in an off position, the firing pin would deliver a full blow to the primer. If the lock system is not in existence, the bolt handle can be in an

P. E. Morgan

-2-

March 25, 1962

upward position, and when the safety is put in an OFF position and the trigger pulled the firing pin would deliver a light blow which in some instances could cause a hang fire or misfire. This in my opinion would be very dangerous. Therefore, I do not believe that the suggestions of either redesigning the safety or removing the block is in order, and therefore suggest that we drop this suggestion and continue our design as they have been in the past.

These features and design problems were discussed thoroughly with Jack Williams and Earl Larson and I believe upon their departure they were in agreement with me that we would leave the design as it is in its present form.

Wayne E. Leek
W. E. Leek,
Chief Designer - Firearms
Hion Research Division

WEL:T