

## REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" \_\_\_\_\_

Hion, New York  
February 21, 1978

TO: J. W. BROOKS  
FROM: E. J. YOUNG  
SUBJECT: TRIP REPORT - BIATHLON RACE

-----

OBJECTIVES

Determine the technical problems involved in designing a Remington Biathlon rifle.

Get a rough estimate of the potential Biathlon rifle market.

REMINGTON PROTOTYPE BIATHLON RIFLE

The Remington prototype Biathlon rifle was generally well received by the competitors. The only major complaint was its inability to group in cold weather - more on that later. All other comments were suggestions for small improvements:

Bolt handle 1/2" longer with a larger knob (approximately the diameter of a quarter) for gloved hands.

Room for a gloved hand behind the trigger guard.

Roughened trigger guard for nonslip thumb rest.

One hand clip operation, the spring ejecting clip was well received.

Externally adjustable trigger.

To: J. W. Brooks  
From: E. J. Young  
Subject: Trip Report - Biathlon Race

Feb. 21, 1978  
Page 2

-----  
REMINGTON PROTOTYPE BIATHLON RIFLE (Cont'd.)

Easy access to firing pin for removal because of prolonged dry firing in practice.

Sight cover to keep snow and debris out of bore and front sight in case of a fall.

Orange clips for easy spotting in the snow. (Plastic clips are desired in this sport because they are light in weight).

Roughened wood at the pistol grip and under the forearm for sure handling in wet or icy weather.

Oil type finish because of the rough handling this rifle receives.

Receiver machined for either Redfield or Anschutz target sights.

Possibly an optional butt hook.

The side of the rifle opposite the bolt handle must have smooth contours to avoid "rub" spots on the skier's back.

COLD WEATHER PROBLEM

The only major technical problem is cold weather accuracy. The rifle appears to foul very fast at below 10°F. Within twenty shots accuracy has deteriorated to 6" groups at 50 meters. Interior barrel finish and dimensions are suspect. There is a solution to this problem. The Anschutz and Winchester 52-C models used by the biathletes were not nearly as susceptible as the Remington prototype to cold weather. They gave good performance to 0°F and only slightly increased groups below that.

To: J.W. Brooks  
From: E. J. Young  
Subject: Trip Report - Biathlon Race

Feb. 21, 1978  
Page 3

-----  
CURRENT RIFLE SITUATION

The growth of this sport is hindered because of lack of rifles. The only rifles available specifically for Biathlon are European. They are expensive (\$500.00+) and difficult to locate. The best U.S. competitors use Anschutz rifles when they can get them. However most of them use old Winchester 52-C's and Remington 513's. One top junior competitor used a converted Mossburg. The market is wide open for a good rifle designed specifically for Biathlon. The Remington name is well respected by biathletes because they used to use 40X CP's when center-fires were used. It was considered the best rifle by far.

POTENTIAL MARKET

I believe the current market is limited by Remington standards. Initially fewer than 250 rifles per year would probably be sold. However there is a fairly large potential market. Cross country skiing is experiencing a large growth. If rifles were available, there may be some increased interest in Biathlon on a local level. Also the National Guard is sponsoring some Biathlon teams. With rifles available the National Guard may take increased interest. There may also be a sizeable European market.

Most competitors felt that \$250.00 would be a fair price for a Biathlon rifle.

I think Remington should consider producing a Biathlon rifle. It would increase our 540 line volume. But even more important, here is a chance to increase Remington 22RF target rifle acceptance, and maybe go Anschutz one better!

EJY:s