

```

<link rel="stylesheet" type="text/css" href="http://www.remingtonle.com/rle.css">

<div align="center"><a href="#top"></a>
<center>
<table border="0" cellspacing="0" width="710" id="AutoNumber1" cellpadding="0">
  <tr>
    <td width="755" height="235">
      <table border="0" cellspacing="0" width="751" cellpadding="0" height="270">
        <tr>
          <td width="9" valign="top" height="256">
            <br>
            </td>
            <td width="749" valign="top" height="256">
              <table border="0" cellspacing="0" width="100%" id="AutoNumber3" cellpadding="0" height="295">
                <tr>
                  <td width="27%" bgcolor="#DADCD4" height="233" valign="top">
                    <table border="0" cellspacing="0" width="100%" id="AutoNumber4" cellpadding="0"
height="5498" style="border-collapse: collapse; bordercolor: #111111">
                      <tr>
                        <td width="34%" height="5503" bgcolor="#015826">
                          </td>
                        <td width="196%" height="5498" rowspan="2" valign="top">
                          <table border="0" cellspacing="0" width="100%" id="AutoNumber6" cellpadding="0"
height="7">
                            <tr>
                              <td class=txtnav height="18" bgcolor="#A2A7A3">
                                <span style="font-size: 9pt"><font color="#EFEFE7">&nbsp;</font><font
color="#DADCD4" face="Verdana"><b>ARMORY</b></font></span></td>
                              </tr>
                              <tr>
                                <td class=txtnav height="5">
                                  </td>
                                </tr>
                                <tr>
                                  <td class=txtnav height="18">
                                    <font face="Verdana">
                                      <span style="font-size: 9pt">&nbsp;</span></font><font face="Verdana" style="font-size:
9pt">
                                      
                                      <a href="default.aspx">Home</a></font></td>
                                    </tr>
                                    <tr>
                                      <td class=txtnav height="5">
                                        </td>
                                      </tr>
                                      <tr>
                                        <td class=txtnav height="18">
                                          <font face="Verdana">
                                            <span style="font-size: 9pt">&nbsp;</span></font><font face="Verdana" style="font-size:
9pt">
                                            

```

```

        <a href="http://www.remingtonle.com/armory/school.aspx">
        Armorer's School</a></font></td>
    </tr>
    <tr>
        <td class=txtnav height="5">
        </td>
    </tr>
    <tr>
        <td class=txtnav height="18">
        <font face="Verdana">
        <span style="font-size: 9pt">&nbsp;</span></font><font face="Verdana" style="font-size:
9pt">
         </font>
        <font face="Verdana">
        <span style="font-size: 9pt">
        <a href="technical_updates.aspx">Technical Updates</a></span></font></td>
    </tr>
    <tr>
        <td class=txtnav height="5">
        </td>
    </tr>
    <tr>
        <td class=txtnav height="18">
        <span style="font-size: 9pt">&nbsp;</span><font face="Verdana" style="font-size: 9pt">
        
        <a href="parts_svc.aspx">Parts & Service</a></font></td>
    </tr>
    <tr>
        <td class=txtnav height="5">
        </td>
    </tr>
    <tr>
        <td class=txtnav height="18" bgcolor="#C8CABF">
        <span style="font-size: 9pt">&nbsp;</span><font face="Verdana" style="font-size: 9pt">
        
        <b>Product Information</b></font></td>
    </tr>
    <tr>
        <td class=txtnav height="5">
        </td>
    </tr>
    <tr>
        <td class=txtnav height="18">
        <span style="font-size: 9pt">&nbsp;</span><font face="Verdana" style="font-size: 9pt">
        
        <a href="downloads.aspx">Downloads</a></font></td>
    </tr>
    <tr>
        <td class=txtnav height="5">
        </td>
    </tr>

```

```

<tr>
  <td class=txtnav height="18">
    <span style="font-size: 9pt">&nbsp;</span><font face="Verdana" style="font-size: 9pt">

    <a href="contact.aspx">Contact Information</a></font></td>
</tr>
<tr>
  <td class=txtnav height="5">
    <font face="Verdana">
    </font></td>
</tr>
<tr>
  <td class=txtnav height="1">
    </td>
</tr>
</table>
</td>
</tr>
<tr>
  <td width="34%" height="1" bgcolor="#FFFFFF">
    </td>
</tr>
</table>
</td>
<td width="72%" bgcolor="#E7E7E7" height="233" valign="top">
<div align="center">
<center>
<table border="0" cellspacing="0" width="536" id="AutoNumber5" cellpadding="0" height="151"
style="border-collapse: collapse" bordercolor="#111111">
  <tr>
    <td width="9" height="151" rowspan="2">
      </td>
    <td width="534" height="1">
      </td>
    <td width="6" height="151" rowspan="2">
      </td>
  </tr>
  <tr>
    <td width="534" height="156">
<table border="0" cellspacing="0" width="100%" id="AutoNumber8">
  <tr>
    <td width="50%" bgcolor="#DADCD4"><b>Product Information</b></td>
    <td width="50%" bgcolor="#DADCD4">
      <p align="right"><font face="Verdana" style="font-size: 9pt">
<a href="javascript:history.go(-1)">
      </a></font></td>
  </tr>
  <tr>
    <td width="100%" colspan="2"><font face="Verdana">

```


 Remington Sniper Rifles

 THE M24 SNIPER WEAPONS
 SYSTEM (SWS)

 by Joe Poyer and
 Roy Marcot

<TABLE cellpadding="0" width="184" align="right" border="0" cellspacing="0"
 height="121">
 <tr>
 <td width="184" bgcolor="#636562" height="2" colspan="2">
 </td>
 </tr>
 <tr>
 <td width="4" bgcolor="#DADCD4" height="117">

 </td>
 <td width="180" bgcolor="#DADCD4" height="117">

 "<font
 face="Verdana">The
 probability of One Round - One Kill had been proven in the jungles of an alien
 country half a world away.<span style="font-size:
 11pt">"</td>
 </tr>
 <tr>
 <td width="184" bgcolor="#636562" height="2" colspan="2">
 </td>
 </tr>
 </TABLE>

 <IMG src="http://www.remingtonle.com/images/letters/T.gif" align="left" border="0" width="29"
 height="36">The successful employment of Marine Scout-Snipers and U.S.
 Army Sniper teams in Vietnam taught a valuable lesson to
 those responsible for Americas tactical warfare doctrine
 in the 1970s, 80s and 90s. The probability of One
 Round - One Kill had been proven in the jungles of an
 alien country half a world away. Sniper training and
 employment was here to stay, with the establishment of the
 U.S. Army Sniper School at Fort Benning, Georgia.Equipping the modern day military
 sniper with the best
 possible weapon is as important as training the soldier
 who pulls the trigger. The sniper rifle used by the U.S.
 Army in Vietnam was the M21, a match-grade M14 that was
 originally equipped with a Redfield 3X-9X ART scope. The
 Marines choice was the venerable M40, a Remington M700

sniper rifle also fitted with a Redfield scope. Both sniper weapons performed well in the late 1960s, but by the late 70s, both the Army and Marine Corps needed a better weapon to engage targets out to and beyond 1,000 meters. In 1977, the Army began comparative testing at the Aberdeen Proving Ground and at Fort Benning of a number of precision rifles, including the French FRF1, the AR10, the Marine Corps M40A1, the Winchester 70 Match, the Canadians Parker-Hale 1200TX, and a heavy-barrel M14.

These rifles were tested against the Army M21, which was used as the control weapon. Despite extensive trials, the U.S. Army decided that the M21 was still adequate to the task. By the early-1980s, the Army began taking a second look at the drawbacks of the M21, especially its inability to maintain a zero when dropped during airborne operations. The original M21s were wearing out, and suitable replacement parts were hard to come by. U.S. Army Training Circular TC 23-14 stated:

During operation Urgent Fury in 1983, U.S. Army Rangers employed snipers in Grenada. Target reductions were successful against enemy mortar positions at ranges up to 800 meters. The reduction of fires from these positions was critical to the mission's success, and illustrates the continuing value of sniper employment.

The necessity of fielding a state-of-the-art sniper rifle came to light in Grenada and in other police actions of the 1980s. The U.S. Army Rangers echoed the same need. Soon the chief military threat to NATO would no longer lay across the North European Plain with rolling hills and thick forests that shortened sniper engagements to from 300 to 500 meters. Future engagements would now emanate across flat, open desert terrains of the Middle East, with potential sniper engagements exceeding 1,000 meters. The responsibility of solving this problem was given to the government's Armament Research, Development and Engineering Center (ARDEC) at Picatinny Arsenal in New Jersey. ARDEC quickly decided that it would be far too costly for the Army to develop its own sniper weapon, but should adopt a commercially available system.

The Marine Corps M40A1 was also dismissed, as the short-action of the Remington M700 would not permit insertion of a round larger than the 7.62 NATO. The pre-production chronology of events includes:

In March 1985, the U.S. Government issued a survey, requesting proposed specifications for a new sniper

rifle.

An initial marketing investigation on a new sniper rifle was initiated by Remington Arms Company on April 25,

A U.S. Government Market Investigation questionnaire was sent out on April 25, 1986.

An official Request For Proposal (DAAA21-86-R-001) was issued on October 1, 1986.

Remington Arms Company, Inc. submitted bid samples forty-five days later on November 14,

Remingtons "best & final offer" was submitted on May 1,

bsp;

The
U.S. Government contract was awarded to Remington Arms
Company on July 22, 1987

Developmental work in tion was conducted by Remington's
R & D Group. The design section was called the SWS Team,
which eventually fabricated a total of 25 SWS systems
for testing.

Six
Initial Production Test (I.P.T.) Guns were submitted on
October 13th, 1987. Nineteen First Article Test (F.A.T.)
Guns were submitted at the same

U.S.
Governmental approval was given to Remingtons SWS on
July 27, 1988 </p>
</blockquote>
<p>
REMINGTON DEVELOPS THE SNIPER WEAPON SYSTEM

In 1988, John Rogers, a Senior Marketing Specialist for
Remington Arms Company, Inc., gave the following report

p; nbsp;

apon
estigation
to the
on to

formed a SW principle design Douglas was Team, which employees.<p><font face= team defined rifle action; the the system; in retrofit to .30 requirement a long-action b synthetic stock on Remington which were e stocks. manufacturers Kevlar-graph block and adj on ruggedness.<p><font face= Several rifle were considered familiar with a scope on the scope in the case. of competitive constrained t</p><p><font face= Ammunition Grade 7.62 N consumption manufacture resources of ammunition t<p><font face= first carrying not find this o misinterpretat almost prove later date to o discussions.<p><font face= that we were selections, w

on
ction. The
T.C.
VS Project
ngton

pt">The
he

s based
rifles
r type

major
ding
ased
</p>
pt">
ver
is with people
ne
power
ing
the number
on is
n>
pt">
118 (Match

entage, as we
listed the
ole
pt">The
nbsp; We did
sp; This
t a
al
pt">Now
onent
eapon

system for design conformation. At this point, we reached another major hurdle. The ammunition would not give us acceptable accuracy. We then tested barrels of various configurations until we arrived at a rifling design and twist that would stabilize the 173 grain bullet at all ranges. With this problem behind us, we built and tested three performance models. Decision time was upon us. Do we continue or stop?

You have to remember that Remington has not actively participated in government contracts of this scale since World War II. All of the people that participated in that effort had long since retired. All of us that participated in the SWS effort were neophytes. But we learned a lot. We spent far more money up front than we originally anticipated. Just to give an example, when we were conducting our trigger pull tests, we found that the equipment that is generally accepted today was not adequate. To accurately measure trigger pull and trigger pull retention, we had to design and build a special machine at a cost of \$35,000. We now have one of the most sophisticated machines available to accomplish this task and accurately measure trigger pull withing 1/10th of 1 ounce.

A pre-solicitation conference was held at Picatinny Arsenal on September 8, 1986. Remington attended, along with a host of other delegates from various companies -- both foreign and domestic. We were a bit dismayed at the formidable competition represented, and knew we faced an uphill battle. At the conference we all received a draft purchase description which detailed the Army's requirements for a Sniper Weapon System. At this point we knew that, except for a few minor modifications needed, we were on the right track.

Upon receipt of the solicitation, we expanded the SWS Team to include members of Remington's process and industrial engineering departments. Up to now, all work on the SWS had been accomplished by our R & D group and Marketing. One thing we grossly underestimated was the magnitude of preparing a proposal along with building and testing five bid samples and compiling the necessary data. Our proposal consisted of seven sections:

1. Executive Summary
2. Technical Data
3. Contractor Logistical Support
4. Cost Proposal
5. Subcontractor Support
6. Required Government Documentation
7. Exceptions to RFP

An extensive amount of testing was required to generate the

data necessary to support our Technical Data section. For example, one gun was shot 5,000 rounds to support the accuracy requirement. We were pleasantly surprised to find our gun far exceeded the government requirement and showed no degradation of accuracy over 5,000 rounds. The compiling of the data and preparation of our proposal was momentous. Many of us worked 12 to 14 hours per day, including Saturdays and Sundays. One research engineer actually ate and slept at the plant in his efforts to compile the necessary technical data. The proposal was hand delivered on time, a mere three hours before the deadline. After submission of our proposal, we entered into negotiations first on the SWS and then on the Basic Ordering Agreement which would support the SWS. When the negotiations were concluded, we were asked to submit our Best and Final Offer. This was accomplished on May 1, 1987. The period of time between submission of Best and Final and Contract Award was very tense for the SWS Team. Negotiations were concluded and all contact with the government had been terminated. The only thing we could do was sit back and relax and assure ourselves that we had submitted the finest system possible. We knew the government was testing our bid samples along with those of our competition. However, there was no way to find out how we were fairing. Finally, we were notified of the contract award. Everyone at Remington was jubilant. A tremendous amount of pride was generated by everyone at our Ilion plant over the SWS.

They all looked at it as the state of the art in sniper systems, and the finest available in the world. We then set about the task of manufacturing twenty-five systems for First Article Testing and Initial Production Testing. This was accomplished on time on October 13, 1987. Extensive testing then began both at Army locations and Remington. This included:

Endurance Accuracy Function
Nuclear Biological and Chemical (NBC)
Optics
Ruggedness, and others too numerous to mention.

All of this was to assure that the Army got what they paid for. First Article took much longer than originally anticipated and we feel that like us, in the preparation of our proposal, the Army did not realize the magnitude of the required testing. First Article Approval was granted on July 27, 1988. By working together as a team, the Army and Remington had successfully demonstrated that a Sniper Weapon System could be fielded using the NDI principle.

ected any
reflected in
sp; We feel,
effort, and
y

[illegible]

We have learned our strengths... and we have corrected any and all weaknesses. This, of course, will be reflected in the quality of our commercial products, as well. We feel, however, that one of the most important benefits of participating in the SWS project was the pride of workmanship of our people. Through a team effort and full utilization of our resources, we are able to supply the finest sniper weapon system available to the U.S.

The initial contract for Sniper Weapon Systems was awarded to Remington Arms Company, Inc. on July 22, 1987, and the U.S. Government agreed to pay \$3,980 for each SWS, complete with the following components:

<p>
7.62mm M24 Rifle

Deployment case, complete with foam inserts

Deployment Kit, consisting of spare parts

Redfield International front sight and Redfield Palma
Match target rear sight & & &

Case
for day optic sight and fixed sights

Lens
cleaning

[illegible]

Cleaning rod kit

receiver on the SWS is the Remington Model 700 long-action. The short-action receiver can handle the 7.62 NATO cartridge, but the U.S. Government insisted on the long-action in anticipation of an eventual rechambering to a more powerful .300 Win Mag cartridge (or to an even more potent .338 Lapua). For added strength the receiver is fitted with a steel trigger guard and steel magazine floor plate made by Dakota Arms. The trigger mechanism is from the Remington M40X, externally adjustable for pull. The internal magazine holds five rounds with the bolt closed. The state-of-the-art ambidextrous, high-comb stock was a joint design effort by Remington designers and H-S Precision of Prescott, Arizona. Known by H-S as their Pro-Series Sniper, this stock has a palm swell on both sides of the fore-stock and is fabricated from a Kevlar-graphite-fiberglass composite using epoxy-based resins to enhance strength, durability under combat conditions, and warp-free characteristics during adverse environmental conditions (Arctic chill to desert dryness). The stock utilizes an aluminum (7075-T6) bedding block which is molded in with a polyurethane foam reinforced with fiberglass. The stock is then finished with an epoxy-based, high-temperature black coating, which is non-reflective and non-slip. An adjustable, high-strength aluminum alloy butt plate assembly is fitted to the composite stock. The length of pull can be adjusted from 12 to 14 inches to fit the individual sniper's physique.

The precision ten-power telescope is the Leupold-Stevens Ultra M-3A with Mil dot system for range estimation. It is nitrogen filled and was designed for quick ranging on target, as anticipated for sniper ops. The scope has a three-quarter-minute Mil Dot reticle pattern, to assist in target acquisition and ranging. It features an elevation dial with one-minute click resolution that permits adjustments in elevation from 100 to 1,000 yards within a single revolution of the dial.

It has a windage adjustment of one-half-minute click resolution. A turret-mounted focus adjustment eliminates the need for a separate parallax adjustment. All lens surfaces, including a large 42mm-diameter objective lens, are multi coated for optimum brightness in the poor light environment anticipated in some sniper situations. The 30mm-diameter scope tube is machined by Leupold from a single piece of thick-wall aluminum tubing to 0.10 inches, and then coated with a black anodized matte finish. This precision scope was made to be removed and reinstalled with less than one-half MOA change in

zero. The Remington-produced Sniper Weapon System (SWS) is available only to NATO countries and official police and government agencies. Since 1987, these systems have gone to the following entities:

<blockquote>
<p>

The U.S. Army - 2,510 systems; [Contract DAAA21-87-C-0086]

Egypt - 1,000 systems;

Israel - 96 systems shipped on September 30, 1997 and 300 shipped on January 6, 1998.

An undisclosed number shipped to Saudi Arabia

And an undisclosed number to the New York City Police Department.

The current price for a complete SWS is \$6,000. Remington-produced M24 rifles are currently available only in 7.62 NATO, although the so-called Remington SR8 sniper rifle was fabricated for trials for the Italian Army, chambered for the potent .338 Lapua round.

REMINGTONS RE-CONDITIONING CONTRACTS

The U.S. Government gave Remington the first 5-year contract to recondition battle-worn Sniper Weapon Systems in August 1992, and the second 5-year contract in August 1997. Tommy Slagle, the manager in charge of the reconditioning, the SWS for Remington stated that the systems are returned to the factory for any of the following reasons:

Some rifle barrels having been fired in excess of 10,000 rounds

There are damaged, broken or mis-aligned components

Some rifles are missing components

7.62 mm M24 SNIPER WEAPONS SYSTEM (SWS)
RIFLE</td>
</tr>
<tr>
<td width="21%" valign="top" bgcolor="#EFEFE7" height="94">

Action:</td>
<td width="79%" valign="top" bgcolor="#EFEFE7" height="94">
Remington
Model 700 production long action receiver<span
class="MsoFootnoteReference"><sup><![if
!supportFootnotes]>^{[1]}</sup><sup><sup>
</sup></sup><![endif]>
with M/40X custom trigger Bolt
handle knob is smooth. Fire control is externally
adjustable from two to eight pounds pull.<a href="#_ftn2" name="_ftnref2"
title><sup><![if !supportFootnotes]><sup><font
size="1">[2]</sup></sup><![endif]>
Accuracy exceeds the U.S. Government requirement
for a sniper weapon that would retain its zero
under adverse conditions (including airborne
operations) and be capable of attaining 1.3 inches
Average Mean Radius (A.M.R.) at 200 yards.</td>
</tr>
<tr>
<td width="21%" valign="top" bgcolor="#FFFFFF" height="60">
Barrel:</td>
<td width="79%" valign="top" bgcolor="#FFFFFF" height="60">
Round, 24"
free-floating, 416-R stainless steel barrels were
initially manufactured by the Rock Barrel
Company. Remington now makes the barrels
in-house. The bore is especially rifled for the
M118 special ball cartridge. Remington 5-R rifling
has an unconventional five lands and grooves. The
twist is 1 turn in 11.25 inches.</td>
</tr>
<tr>
<td width="21%" valign="top" bgcolor="#EFEFE7" height="60">
Barrel marking:</td>
<td width="79%" valign="top" bgcolor="#EFEFE7" height="60">
The caliber 7.62
NATO is stamped on left side of the barrel,
approximately 10-inches forward of the receiver.
The assemblers mark is stamped next to the
recoil bracket. On the right side next to the
recoil bracket is the MagnaFlux acceptance mark,
proof mark and final inspectors mark.</td>
</tr>
<tr>
<td width="21%" valign="top" bgcolor="#FFFFFF" height="12">
Bayonet:</td>
<td width="79%" valign="top" bgcolor="#FFFFFF" height="12">
None</td>

Subject to Protective Order - Williams v. Remington

MAE00002865

production SWS systems were delivered to the U.S. Government on October 25, 1988.

Magazine:	Five shots with bolt closed. Floor plate can be opened by a release switch inside the trigger guard to quickly dump ammunition.
-----------	---

Manuals:	Technical manual: TM 9-1005-306-10, dated February 1989. Operator's Manual: 7.62mm M24 Sniper Weapon System (NSN 1005-01-240-2136).
----------	---

Manufacturer:	Assembled in the Custom Shop of Remington Arms Company, Inc., Ilion, NY
---------------	---

Overall length:	43-inches
-----------------	-----------

Price:	Currently, each complete system costs \$6,000.
--------	--

Rear sight:	Detachable Redfield Palma Match open sight provided for emergency usage.
-------------	--

Receiver:	Drilled and tapped for scope mount with #8-40 holes, and #6-48 screw
-----------	--

holes for receiver sight. Steel trigger guard and floor plate are manufactured by Dakota Arms.

	Receiver marking: Remington M700 / M24 and U.S. is stamped on rifles intended for the U.S. Army.
	Safety: Ambidextrous two-position safety modified to give equal on - off safety force
	Scope: Leupold-Stevens Ultra M-3A day optic sight, fixed at 10-power, with Mil Dot system range-finding reticle. Has a bullet drop compensator and is adjustable for parallax (focus). The scope caps are commercially available from Butler.
	Serial number location: Bottom of turret (same as product B.A.C.F.).
	Serial number range: Concurrent with Model 700 production.
	Stock: One-piece Synthetic Kevlar and graphite composite stock manufactured by H-S Precision, (from a pattern submitted by Remington) with an aluminum bedding block throughout. Adjustable length of pull (12 to 14

inches) provided by an adjustable aluminum butt plate assembly. High comb on stock to facilitate the use of telescopic sights. Palm-swell on both sides of grip. The rifle Beavertail-type fore-end. An aluminum channel extends full length of fore-end. The sling swivels, magazine floor plate and trigger guard are attached to the channel for additional strength. Equipped with a Harris (short) bipod.</td>

</tr>

<tr>

<td width="21%" valign="top" bgcolor="#EFEFE7" height="24">

Weight:</td>

<td width="79%" valign="top" bgcolor="#EFEFE7" height="24">

Rifle, bipod and scope weigh 13lbs/13oz. The complete system, including carrying case weighs 56 pounds.</td>

</tr>

<tr>

<td width="21%" valign="top" bgcolor="#FFFFFF" height="60">

Accessories:</td>

<td width="79%" valign="top" bgcolor="#FFFFFF" height="60">

Include a foam-lined, heavy-duty, fiberglass carrying case (manufactured by an outside contractor and costing \$505 apiece) and soft cases for the rifle and scope. Other accessories include iron sights, cleaning equipment, manuals, bipod, sling swivels, M1907 sling and a spare parts kit. </td>

</tr>

<tr>

<td width="21%" valign="top" bgcolor="#EFEFE7" height="60">

Reconditioning contracts:</td>

<td width="79%" valign="top" bgcolor="#EFEFE7" height="60">

The initial contract was awarded to Remington to repair/recondition the U.S. Governments Sniper Weapons Systems between August 1992 and August 1997. The 2nd contract currently runs from August 1997 to August 2002. It was noted that over 10,000 rounds had been shot in some SWS barrels!</td>

</tr>

</table>

</td>

</tr>

</table>

<table border="0" cellspacing="0" width="100%" id="AutoNumber12" cellpadding="0">

<tr>

<td width="100%"> </td>

</tr>

<tr>

<td width="100%" bgcolor="#A2A7A3">

</td>

<td width="12" valign="top" height="256">

</td>
</tr>
</table>
</td>
</tr>
</table>
</center>
</div>