SALS CAR. \$7.95 U.X. £3.45 EUFO 5.95

WWW.SMAHARMSFEVIEW.CO.

August, 2002

REPLEM

Vol. 5 No. 11

PLANTED SUBJECT CO.

PLANTED SUBJECT

The Silencer Issue

Interviews
Products • History
Tests





OSS SILENCED PISTOL

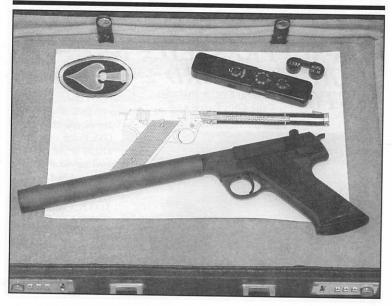
Text and photos by Peter G. Kokalis

During the American Civil War, Abraham Lincoln approached the scientific community and asked their support in the development of new weapon systems. It was for this purpose that the American Academy of Sciences was established. Subsequently, the National Defense Council of World War I continued efforts to work with the military in the development of military technology. As a consequence of inadequate funding and leadership at the highest levels, the results were minimal.

Prior to our involvement in World War II, the NDRC was established to complement the research of the Army and Navy in "the development of the instrumentalities of war." Eventually the NDRC was

Right: The Arms Tech Ltd. OSS Silenced Pistol, shown here with a black Minox Model C spy camera, is a faithfully executed re-creation of a historically important clandestine weapon.

To fully understand the development and history of the OSS HiStandard silenced pistol a knowledge of two organizations is essential: the National Defense Research Committee (NDRC), under whose aŭspices it was developed, and Office of Strategic Services (OSS), for whom it was developed.

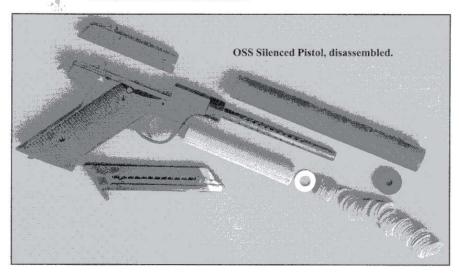


The Small Arms Review - Vol. 5 No. 11 - August, 2002

made a branch of the Office of Scientific Research and Development (OSRD). Throughout the war, the British - who had extensive knowledge of the German arsenal and appropriate countermeasures - cooperated with the NDRC and shared both research and experience. The final organizational structure of the NDRC included nineteen divisions and several special committees and panels. The divisions covered research in a wide range of topic areas, including. Ballistic research, Effects of Impact and Explosion, Rocket Ordnance, Ord-

nance Accessories, New Missiles, Subsurface Warfare, Fire Control, Explosives, Chemistry, Absorbents and Aerosols, Chemical Engineering, Transportation, Electrical Communication, Radar, Radio Coordination, Optics and Camouflage, Physics, War Metallurgy and Applied Mathematics and Physics. Most mysterious of all was Division 19, which covered "Miscellaneous Weapons." Formed to solve "special problems," few of which ever came from the Army or Navy. Almost all of Division 19's activities were devoted to the problems of the OSS and their British counterparts.

Just six months after the United States entered World War II, the Office of Strategic Services (OSS) was established on



13 June 1942. Under the leadership of Col. William J. "Wild Bill" Donovan, it was an operating agency the U.S. Government under the control of the Joint Chiefs of Staff and intended to be of worldwide scope. Donovan, who had previously held an important intelligence position and reported directly to the president, quickly patterned OSS activities after those practiced by the British Special Operations Executive (SOE), with whom the OSS worked closely throughout the duration of the war. Donovan envisioned two major roles for the OSS: gathering intelligence and waging clandestine warfare.

To execute this dual role, Donovan created a number of branches with specifically defined objectives. The Research and Analysis Branch used the academic community to devise strategy for invasions. The Morale Operations Branch generated propaganda using professional advertising copywriters and Hollywood screenwriters. The Labor Branch promoted subversive activity with labor unions in German-occupied Europe. The Research and Development Branch, whose first director, Stanley P. Lovell, was taken from the NDRC staff, was in continual liaison with Division 19 of the NDRC.

These latter branches supported the three main functional branches of the OSS. They were Special Operations (clandestine warfare), Secret Intelligence (worldwide gathering of intelligence through four geographical desks), and Counterintelligence (X-2).

By October 1943 the Research and Development Branch had evolved into four divisions. The Technical Division was responsible for project liaison between both the NDRC and British SOE. The Documentation Division created all of the documents required to protect an agent's cover. The Camouflage Division was established to camouflage the personal accessories and devices required for special operations. The Special Assistants Division provided items for agents not within the purview of the other three divisions.

Items developed for the OSS, in addition to the HiStandard Silenced Pistol included the Liberator (not originally an OSS weapon) .45 ACP single-shot pistol, the .22 caliber Stinger, the silenced .45 ACP M3 submachine gun, edged weapons to



include the Stiletto and Smatchet, crossbows, matchbox camera, lockpicking knife, suicide capsules, knockout drops and sabotage equipment consisting of incendiary, demolition, contact firing, delayed action firing and harassing devices of many types.

One of the most successful and highly regarded weapons ever developed for the OSS was the HiStandard Silenced Pistol. Surely a silenced firearm must rate as the highest possible priority for any clandestine operative.

Very soon after the OSS was established, agents used a .22 LR Colt Woodsman equipped with an off-center sound suppressor patterned after the Maxim. The unit had a unique barrel extension in front of the suppressor with a front sight band that permitted use of the pistol's standard rear sight. The barrel extension purportedly enhanced the weapon's accuracy potential as well. The offset design permitted a larger suppressor for greatly improved reduction of the sound pressure level.

In addition, specimens of the original Maxim sound suppressor were obtained and tested. Both the Savage Arms Company and the Sedgley Manufacturing Company offered to produce them for the OSS as manufacture had been terminated in 1926 as a consequence of federal legislation restricting their use and further reinforced by the National Firearms Act (NFA) of 1934. However, it was obvious that technology in this area had moved forward and a completely new design was required. Thus on 27 October 1942 sent twelve proposals to the planning board of the NDRC, the first of which concerned the procurement of a weapon meeting the following parameters: 1) silent, 2) no flash signature, 3) a minimum muzzle velocity of 1,000 fps, 4) preferably .50 caliber and 5) a reloading of less than 30 seconds. A contract for this research was given to the Western Electric Company in New Jersey. They were directed to develop a sound suppressor with a) a sound pressure level low enough to disguise the point of origin a distance of 30 feet, b) minimum flash signature, and adaptable to .45 ACP pistols, the .30 M1 Garand and Enfield rifles.

Three weeks after the contract was signed on 6 April 1943, Western Electric delivered a silenced Colt Woodsman to the OSS that was very little more than a copy of the Polish Kulikowski sound suppres-

sor. Tests at Aberdeen Proving Ground several months later comparing this unit with prototypes of a sound-suppressed .45 ACP pistol, .30 M1 Carbine and British .22 Welsilencer were not satisfactory. The Colt Woodsman would fire in the semiautomatic only with high velocity rounds. The noise level was also quite disturbing. Projectiles made of gold and tungsten were then tested with a drop in the sound pressure level, but an increase in pressure to excessive levels and an objectionable increase in slide clatter. Attempts to obtain longer barrels for the .32 ACP and .380

ACP Colt "pocket" pistols were unsuccessful, as Colt could not provide them.

During this same time frame, designers at the Bell Telephone Laboratories developed a sound suppressor attached to a HiStandard pistol. Tests on this design were very positive and Bell Telephone Laboratories was provided with a contract to silence 110 pistols of various makes. These included sixty six Colt Woodsman and Match Target pistols and forty four HiStandard pistols in Models A, B, D and E. Both short and long barreled types were included in the testing. Deliveries com-



Silenced HiStandard HDM Disassembly Procedures

Disassembly and reassembly of the HiStandard HDM pistol is not entirely straightforward. First, remove the magazine and retract the slide to make certain the chamber is empty. With the slide fully to the rear, press down on the small, knurled plunger on top of the slide. This locks and compresses both the recoil spring and its guide rod. Allow the slide to move forward under control until you can rotate the takedown latch - on the right side of the frame and to the rear of the hold-open button - downward, while maintaining pressure on the plunger on top of the slide. Keep holding the latch down while you retract the slide completely to the rear and off the frame.

Depress the spring-loaded rear detent on the barrel until it clears the suppressor tube. Rotate the suppressor tube to the right until it has been removed from the barrel. Withdraw the rear screen roll from the suppressor tube. The operator should attempt no further disassembly of this system. Clean and lubricate lightly.

Reassembly of the pistol is not possible unless the recoil spring and guide rod remain locked and under compression. If the recoil spring and guide rod slip out of the locked and compressed position, a small drift must be used to push them back into their hole in the slide and then plunger pressed downward to make sure they stay locked in place.

Hold the hammer to the rear to clear the slide as the slide is placed on its cuts in the frame. Hold the hammer rearward again as you push the slide fully forward. This will release the recoil spring and its guide rod. Retract the slide to insure that it's functioning properly. Re-insert the suppressor's rear screen roll. Push in the spring-loaded detent and thread the suppressor tube to the left until it's fully seated against the frame.

menced in late October 1943. On 22 November 1943, the OSS Procurement Branch requested that the Ordnance Department award a contract to the High Standard Manufacturing Company of New Haven, Connecticut for 1,500 sound-suppressed caliber .22 LR Model H-D pistols (the U.S. Government designation for this pistol was HDM). Deliveries on this contract began 20 January 1944. The contract was completed on 10 October 1944. Reaction to the pistol by agents in the field was entirely favorable. One Thousand more were ordered on 18 August 1944. That contract was completed by 10 October 1944. Pistols completed in the first contract featured a blued finish while those of the second contract had a phosphate ("Parkerized") finish. The suppressor tube had a phosphate finish on both contracts.

In July 1944 someone noted that according to The Hague Accord Regulations (Article 23e) military personnel were not permitted to employ small arms ammunition with unjacketed lead bullets. General Donovan ordered uniformed military personnel to stop using the OSS silenced pistols until jacketed ammunition was devel-

oped and issued. Civilian personnel were permitted to continue deploying with the weapon and most of the military personnel either ignored or did not hear about the order not to employ them. By 8 February 1945 20,000 rounds of jacketed T-42 .22 LR ammunition was made available. However, standard velocity Remington ammunition with lead projectiles continued to be issued and employed.

The HiStandard Model H-D .22 LR pistol is a conventional blowback-operated target pistol very much reminiscent of the Colt Woodsman. Its main component groups are: 1) the frame which forms the grip and mounting required to receive the fixed barrel. It is machined to accept the trigger mechanism and fitted with guides for the reciprocating slide. 2) The barrel is pinned to the frame. 3) The slide extends rearward from the breech and holds the firing pin, extractor and recoil spring assemblies. 4) The trigger group consists of a pivoting trigger with a side bar connecting it to the sear, together with the appropriate springs and plungers, and an exposed hammer attached to the mainspring and plunger. 5) A sheet-metal 10-round,

single-line, detachable, box-type magazine, which is interchangeable with that of the Colt Woodsman.

Pushing the magazine catch/release on the butt of the frame permits the magazine to be withdrawn. A loaded magazine is inserted and pushed in until it locks in place. Subsequently pulling the slide to the rear forces the hammer back and down which compresses the mainspring. The sear catches and holds the hammer back at full cock. Releasing the slide allows the compressed recoil spring to drive the slide forward. The face of the slide is machined to strip a round from the magazine and drive it into the chamber. The extractor, located on the right side of the breech face then snaps over the cartridge case's rim. When the breech is completely in battery, the sear bar, running from the trigger to the sear on the left side of the frame, is brought into contact with the sear.

When the trigger is pressed, it pivots and causes the sear bar to release the sear from the hammer. The mainspring then drives the hammer forward to impinge upon the firing pin, which then passes through a hole in the breechface to strike the rimfire primer and also compress the firing pin spring. As this spring rebounds, it draws the firing pin back into the breechblock. Rearward thrust of the propellant gases forces the slide to the rear. The slide in turn rotates the hammer back to the cocked position and compresses the mainspring as the sear holds the hammer in the cocked position. The slide also depresses the sear bar so that another shot cannot be fired until the trigger is released and the slide is once again in the battery position. During the recoil stroke, the extractor draws the empty case rearward until it strikes the ejector.

The pistol is equipped with a framemounted, manual thumb safety on the left side. Rotating the serrated latch upward both blocks the sear and engages a notch in the slide to prevent its rearward movement.

The forward-sloping, fixed front sight blade is serrated on its rear face. The open square-notch rear sight is adjustable for both elevation and windage zero. An index line milled into the slide is used for alignment of the windage marks on the rear sight housing.

Overall length of the OSS HiStandard Silenced Pistol 13.815 inches. The weight, unloaded is 47 ounces. The barrel length, including the chamber, is 6.75 inches The height of this pistol, with the magazine in place, is 5 inches.

Overall length of the sound suppressor is 7.75 inches, including the 1/16-inch thick end cap rim. The suppressor tube screws onto the barrel where it emerges from the frame, with detent locks on both the barrel and forward end cap. The suppressor tube has an outside diameter of 1.0 inch. The rear screen roll surrounding the barrel is 4.37 inches in length and 0.795inch in diameter. It is made of twenty-mesh, tin-plated bronze screen soldered into a tightly wound tube. The front screen disks are made of thirty-mesh, tin-plated bronze and include approximately 110 disks 0.828-inch in diameter, with about twenty five having a 0.410-inch hole so they can slip over the front of the barrel and the remainder having a 0.234-inch hole. There is a 1/16-inch thick brass washer between the rear screen roll and the front disk screens that is 0.828-inch in diameter with a 0.410-inch hole. The sound pressure level reduction of this sound suppressor is in excess of 20 dB. This is excellent performance for a silencer designed during this time frame, i.e., six decades ago.

Today, examples of this incredible piece of history are quite rare and there are no more than a handful in private collections. Arms Tech Ltd. (Dept. SAR, 5133 North Central Avenue, Phoenix, AZ 85012; phone: 602-272-9045; fax: 602-272-1922; e-mail: armstech@qwest.net), already well known in the special operations community for their special weapons and tactical equipment development, has recreated this famous pistol in a manner authentic in every detail. Arms Tech Ltd. can supply the entire OSS HiStandard Silenced Pistol package - currently in inventory and ready to ship after ATF transfer approval. The Arms Tech Ltd. remanufacture of the OSS Hi-Standard Silenced Pistol comes complete with a manual, copy of the original U.S. Government test report, replica OSS shoulder insignia and cross-section line drawing of the pistol.

The specimen sent to SAR for test and evaluation was authentic in every detail. The left side of the slide was marked, "HI-STANDARD MODEL H-D MILITARY" and the entire pistol was provided with a milspec phosphate finish. The original, checkered, walnut grip panels were in excellent condition. The trigger pull weight

on our test specimen was a very crisp 3 pounds, which is undoubtedly a great deal lighter than the pistols issued to the OSS in World War II.

Without doubt, the OSS Silenced Pistol was one of the most popular clandestine weapons ever issued to U.S. operatives. One more production run was made for the CIA after World War II. These all had a blued finish and did not have U.S. property markings. It was used throughout the war in Vietnam with considerable effect. One of these pistols was found on Francis Gary Powers when his U2 spy plane was shot down over Russia during the height of the Cold War. Arms Tech Ltd. Is to be highly commended for bringing back an incredibly fascinating piece of history.

References:

Brunner, John W., 1994, OSS Weapons, Phillips Publications, P.O. Box 168, Williamstown, NJ 08094-0168, 206 p., black and white illustrations.

Melton, H. Keith, 1991, OSS Special Weapons & Equipment - Spy Devices of WWII, Sterling Publishing Company, Inc., 387 Park Avenue South, New York, NY 10016, 128 p., black and white illustrations.

Melton, H. Keith, 1996, The Ultimate Spy Book, DK Publishing, Inc., 95 Madison Avenue, New York, NY 10016, 176 p., color and black and white illustrations.

Truby, J. David, 1972, Silencers, Snipers & Assassins - An Overview of Whispering Death, Paladin Press, P.O. Box 1307, Boulder, CO 80302, 210 p., black and white illustrations.

TM-22-HIS, Technical, Operational and Maintenance Manual for .22 Caliber Pistol, Silenced Hi-Standard Model HDM, 2000, Phoenix Publishing Group, 4123 North Longview, Phoenix, AZ 85014, 55 p., black and white illustrations.



OSS HiStandard Silenced Pistol Specifications:

Overall length: 13.815 inches.

Weight, unloaded: 47 ounces.

Barrel length (including chamber): 6.75 inches.

Height: 5 inches with magazine in place.

Magazine: 10-round, single-column, detachable box-type.

Suppressor specifications:

Overall length: 7.75 inches (including the 1/16-inch thick end cap rim). Suppressor tube screws onto the barrel where it emerges from the frame, with detent locks on both the barrel and forward end cap.

Diameter: 1-inch.

Interior suppressor dimensions: rear screen roll surrounding the barrel: 4.37 inches in length and 0.795-inch in diameter; twenty-mesh, tin-plated bronze screen soldered into a tightly wound tube. Front screen disks made of thirty-mesh, tin-plated bronze and include approximately 110 disks 0.828-inch in diameter with about 25 having a 0.410-inch hole so they can slip over the front of the barrel and the remainder having a 0.234-inch hole. There is a 1/16-inch thick brass washer between the rear screen roll and the front disk screens that is 0.828-inch in diameter with a 0.410-inch hole.

Suppression: In excess of 20 dB.

T&E Summary: A faithfully executed re-creation of a historically important clandestine weapon.