

M9A1 MULTI-PURPOSE BAYONET SYSTEM (MPBS)

SPECIFICATION SHEET

The M9A1 Bayonet is similar in concept to its predecessor, the original M9 MPBS; however, it incorporates a number of refinements which make it tougher, lighter and stronger. The sheath has been completely redesigned and the entire bayonet is made of stainless steels or Dupont ZYTEL.

GENERAL SPECIFICATIONS

Weight (Bayonet & Scabbard):	1 lb. 10 oz.
Length of Blade:	7.125 inches
Width of Blade:	0.230 inches
Overall Length of Bayonet:	12.125 inches
Finish:	Black Oxide
Accessories:	M9 Pistol Mag. Pouch

In conjunction with its scabbard, the M9A1 Bayonet can be employed as a wire cutter; as such it is very effective on barbed wire and steel banding. The fit, or tension, between the wire cutter plate on the scabbard and the bayonet can be adjusted by tightening one of the two screws which secure the plate to the scabbard's body. The wire cutter plate has a screwdriver tip machined on its end for general purpose use. The bayonet has a 2.82 inch saw broached along its spine which is designed for cutting light sheet metal, such as the aluminum skin on an aircraft. The handguard has a pair of cuts machined on its front flat which are designed for use as bottle cap openers. All of the metal parts of the M9A1 MPBS are manufactured of different types of stainless steel, each carefully selected so its properties match the intended function of the part. All of the exterior metal parts of the bayonet, except the blade, have been given a black oxide finish to make them non-reflective. The M9A1 Bayonet will fit any small arm with a standard NATO 22mm outside diameter flash hider and M16 bayonet attaching lug.

The M9A1 Bayonet's blade is forged from 425 modified stainless steel and hollow ground. 425 modified is a hardenable martensitic stainless steel, specifically developed for use in the highest quality cutlery, as well as other cutting applications. This alloy has a very high chromium and molybdenum content, which give it superior corrosion and pitting resistance. In its annealed condition, 425 modified has a yield strength of 55,000 PSI and tensile strength of 94,000 PSI. The blade is 7 1/8 inch long, 1 7/16 inch wide and 0.230 inch thick. It is shaped like the traditional Bowie, except that it has a straight false edge, a 3.24 inch fuller on its right side and a saw broached along its spine. The saw is 2.82 inch long, 0.40 inch wide and has 46 teeth set 0.60 inch apart. The blade has been heat treated to a maximum of 57 Rockwell on the "C" scale, and the tang area annealed to 40 on the same scale. It has also been bead blasted to give it a dull, non-reflective finish.

The M9A1 MPBS scabbard and handle are made of Dupont ZYTEL. This material is a very tough and expensive nylon derivative which resists cracking and deformation between -50 degrees F and +150 degrees F. It is also impervious to solvents, oils, fuels, fungus, rot, etc. The handle is provided with knurling and a series of annular and horizontal grooves to give it a secure grip. The scabbard has a versatile swivel feature, which allows it to be worn comfortably in any position. The belt loop is 2 1/2 inches wide and designed to fit snugly on a military issue web pistol belt. The scabbard has a large flat internal stainless steel spring which presses the blade up against its rear wall and also pushes the bayonet's handguard under a substantial lip molded into the scabbard's mouth. This system holds the bayonet firmly in place and keeps it from rattling, it also allows the bayonet to be drawn with one hand. The scabbard has a drain hole in the end and a sharpening stone inletted into its back. Large slotted lugs are formed on the sides of the scabbard which allow for the attachment of the accessory pouch or auxiliary straps. The unique features of the sheath are protected by United States Design Patent Number 301,396 issued on 6 June 1989.

The manufacture and quality assurance on the M9A1 MPBS are held to rigid standards as outlined in Military Specification MIL-K-70606, a document written specifically for the original M9 Bayonet procurement. These guidelines, inspection and test procedures ensure that the M9A1 MPBS exhibits consistently superior quality in materials and workmanship.

Phrobis III, Ltd.

2310 Faraday Avenue, Carlsbad, California 92008
(619) 931-6935 FAX: (619) 931-6943

October 21, 1988

Lt. Col. George B. Davis
USMC
Program Manager
Ground Weapons
MCRADAC (Lucas Hall)
Quantico, VA 22134

COPY

Dear Col. Davis:

The tool and die work for the new scabbard has been completed, and we are now fine-tuning it.

The M-9 bayonet is now being assembled with all metal parts made of stainless steel.

We plan to make shipment of fifty (50) units of the improved bayonet system to you during the week of October 31st. I will be out of town during the week of October 24th, and will contact you on October 31st if there is any change in current plans.

Cordially,



Frederick R. Schumacher

FRS:ds

CBD Weekly Release

CBD Issues of May 25, 1990 thru May 31, 1990

Commanding General, Marine Corps Research,
Development and Acquisition Command,
Code CTL, Washington, DC 20380-0001

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10 -- BAYONETS SOL M67854-90-B-0161

POC Carl Newman, Code CTL2C, 202-696-0919, Robin Swatloski, Contracting Officer 202-696-0919. The Marine Corps Research Development and Acquisition Command intends to negotiate with limited sources; Buck Knives of El Cajon, CA and Phrobis International of Carlsbad, CA for 5500 M9A1 bayonets which will be tested by the Ground Combat Elements of the Marine Expeditionary Forces. Level three drawings are not available for this procurement but will be obtained for future competitive requirements. No telephonic requests will be accepted. Make all requests attention contact person listed above. See Note(s): 22

22. The proposed contract action is for supplies or services for which the Government intends to solicit and negotiate with only one source under authority of FAR 6.302. Interested persons may identify their interest and capability to respond to the requirement or submit proposals. This notice of intent is not a request for competitive proposals. However, all proposals received within forty-five days (thirty days if award is issued under an existing basic ordering agreement) after date of publication of this synopsis will be considered by the government. A determination by the Government not to compete this proposed contract based upon responses to this notice is solely within the discretion of the government. Information received will normally be considered solely for the purpose of determining whether to conduct a competitive procurement.

bln/029

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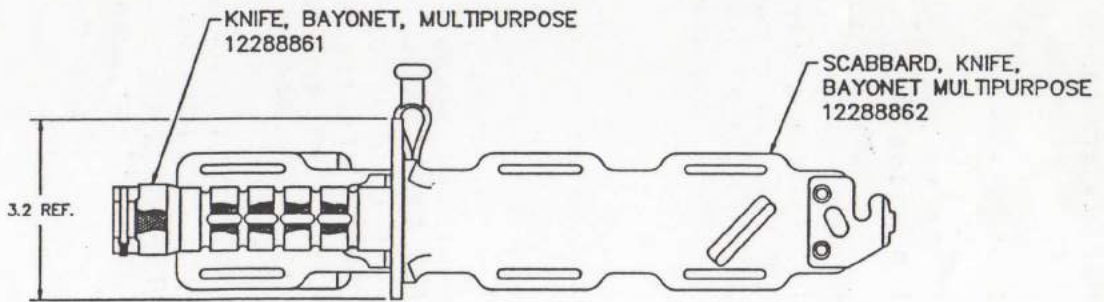
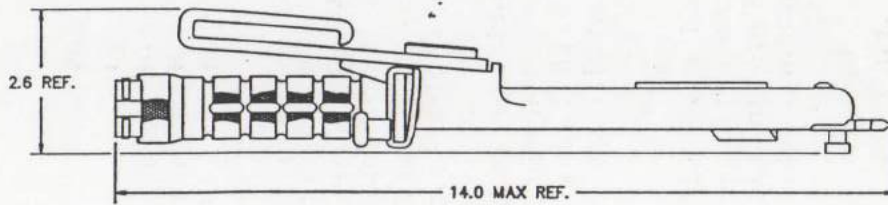
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL

- NOTES:
1. APPLICABLE STANDARDS/SPECIFICATIONS:
 - A. DOD-STD-00100D(AR)
 - B. ANSI Y14.5M-1982
 - C. MIL-W-13855
 2. THIS EQUIPMENT IS IN ACCORDANCE WITH MILITARY SPECIFICATION MIL-K-70605.

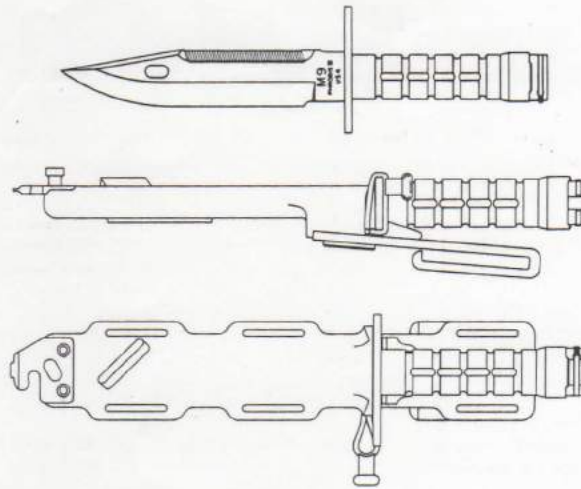
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PART NO. 12288860

PHOBIS III, LTD. CARLSBAD, CALIFORNIA 92008			DECEMBER 2, 1988	
KNIFE, BAYONET, MULTIPURPOSE, M9A1 WITH SCABBARD			CHECKER	ENGINEER
DATE	FIG. NO.	REV. NO.	SCALE	UNIT WT.
D	75081	12288860	1/1	1.8 LB. MAX. 1 SHEET

**PRELIMINARY
OPERATOR'S MANUAL**



MULTI PURPOSE BAYONET SYSTEM (MPBS), M9-A1

**PHROBIS III, Ltd.
2310 Faraday Avenue
Carlsbad, California 92008**

FSCM 75081