

474 - CARTRIDGES474.1 IMACS Classification:

(AM) Ammunition

(AW) Ammunition with maker's marks

474.2 Cartridges and Dating: "A wealth of information on dates of cartridges occurs and is very useful. Only the initial dates of cartridges and guns are useful (when present), however, since guns were used for many years after their original purchases. Cartridges are discrete sources of information of bewildering complexities, part of which is related to 'wild cat' (off-brand or modified cartridges) and to great varieties in cartridges which have been available. One factor to be considered is reloading of centerfire cartridges which has been very common. Rimfire cartridges, conversely, are not normally reloaded (Barnes 1972:271). Both rimfire and centerfire cartridges owe their mass produced geneses to between 1856 and 1858 (although they had been produced earlier in very limited amounts), according to Barnes (1972:69 and 271). Standard centerfire cartridges with self-contained primers were innovations of approximately 1868 mass productions and continue to the present" (Buckles et al. 1978:445-446).

"Most cartridge identifications must be made from measurements, as few had identifying head stamps. For identification purposes we refer to Cartridges of the World (Barnes 1972), American Centerfire Cartridges, 1892-1963 (Bears 1966) and Cartridges - A Pictorial Digest of Small Arms Ammunition (Logan, 1959). Unidentifiable cartridges can be referred to local gunsmiths who are often eager to aid" (Buckles et al. 1978:430).

"Cartridges, or rather metallic cartridge cases, are usually prevalent in southwestern historical sites, particularly those of the nineteenth century. The headstamp markings provide a convenient means of dating the cases" (Berge 1980:219).

"The flat part of the head is usually stamped with the caliber type, manufacturer's name or initials, and sometimes trade names. American military cartridge case heads usually have the initials of the arsenal or ordinance plant where manufactured, plus the last two numbers of the year the particular cartridge was made. For example, a head stamp that reads 'F 87 R 3' indicates that the case was made at the Frankford Arsenal (F) in March (3), 1887 (87) for a rifle (R)" (Berge 1980:223).

Logan (1959:189-192 and 204) identifies the following manufacturers of headstamps found in the southwest: (Berge 1980:223-224)

DM	Des Moines Ordinance Plant
DWM	Deutsche Waffen & Munitions Fabriken (Germany)
F; F.A.	Frankford Arsenal (U.S.)
F. (impressed)	Federal Cartridge Co. (rimfire cartridge cases)
F.V.V. & Co.	Fitch, Van Vechten & Co., New York City. G. Jacob Goldmark, New York (Metallics)

H.	Winchester Repeating Arms (rimfire cartridge cases). In 1866, the New Haven Arms Co. was reorganized into Winchester (1867-present).
H. (raised)	Winchester Repeating Arms (rimfire--early manufacturing).
P. (raised)	Phoenix Cartridge Co.
P. (impressed)	Peters Cartridge Co. (1887-1934 absorbed by Remington).
PC CO.; PETERS	Peters Cartridge Co.
RA: RaUMC; REM-UMC	Remington Union Metallic Cartridge Co. (1902-present).
RW	Winchester Repeating Arms Co. (rifle).
U;UMC	Union Metallic Cartridge Co. (before the merger with Remington--1867-1902).
U	Utah Ordnance Plant
U HiSpeed	Remington UMC (on rimfires since WWII)
U.S.; USC Co.	United States Cartridge Co. (1868-?)
US (raised)	United States Cartridge Co. early.
US	United States Cartridge Co. (intertwined like a \$ sign).
WRA: WRA CO; Super Speed	Winchester Repeating Arms Co.
W; W Co.; WCC; WESTERN Super-X	Western Cartridge Co. (1898-present).
1901 NEW RIVAL; 1901 LEADER; 1901 REPEATER; 1901 PIGEON	Winchester Repeating Arms Co.

474.3 Pertinent Notes for Recording Cartridges:

If cartridge cases are observed with a stamp on the flat part of the head, then these markings (i.e., stamps) should be described and drawn. These stamps can then be identified upon return to the laboratory by comparison with various references (especially those noted in this section). Dating of cartridge cases is based on the time length of manufacture by a specific company (e.g., Peters Cartridge Co. (1887-1934), or upon the date on the cartridge case. If the observed cartridge cases do not have stamped heads, then general dates can be ascribed from the technique of manufacture. The development of the various cartridge types is outlined in Berge (1980).

474.4 Measurement of Cartridge Calibers:

"The Americans and British measure the cartridge caliber in 100th's or 1000th's of an inch, the caliber being designated by any one of the following criteria (Bears 1966:15):

- 1) Bore or diameter of the barrel.
- 2) Barrel-groove diameter.
- 3) Bullet diameter.
- 4) Inside diameter of cartridge case mouth.
- 5) Arbitrary figure, determined by manufacturer.

The caliber may be designated by many means, as listed, and may include the case length or case type. The measuring of a cartridge case with calipers in order to determine specific measurements of given places on the metallic case may prove to be of more value than cartridge-type collections. Many books such as Barnes (1965) give detailed listings of cartridge case measurements which identify a cartridge case very accurately" (Berge 1978).