



February 4, 2003

#### TECHNICAL NOTE 43: Refinishing AR-15, <sup>TM</sup> M-16, and AR-10 Magazines

**BACKGROUND:** Most AR-15<sup>TM</sup>/M-16 rifle magazines were made of 6061 Aluminum finished with hard-coat anodizing covered with a gray, Teflon-bearing paint-like material called “Dry Film Lubricant,” or DFL. DFL is slick, but is easily worn to the point that the underlying anodizing is exposed. Fortunately, it is easy to remove DFL and refinish the magazine. Later magazines were finished with a Teflon-type hard finish that doesn’t wear as quickly. When it becomes scarred the hard finish cannot be easily refinished. The late magazines can, however, be refinished with DFL in the same manner as the earlier magazines and look like new.

AR-10 magazines benefit from the lubricity provided by DFL, especially when it is applied internally to help the follower slide in the shell. A freshly phosphated surface accepts DFL very well, and is thoroughly protected against rust as long as the DFL is present.

#### MATERIALS REQUIRED:

Dry Film Lubricant, Sandstrom number 27A, black.

Acetone for degreasing.

Latex gloves, lint-free cloth, and newspaper or other backdrop for handling, cleaning, and spraying.

#### REFINISHING INSTRUCTIONS:

First, disassemble the magazine and degrease it with acetone. Complete removal of the old DFL isn’t needed. What *is* needed is complete removal of all grease from the magazine and smoothing out the remaining DFL. Don’t touch the cleaned surface with bare fingers after cleaning, or the new DFL will come off.

Second, spray-paint the magazine shell with DFL in a clean, dust-free area. Shake the DFL well and frequently. Paint the inside of the magazine first, then the outside. A very thin layer is enough. In fact, over-thick coatings can interfere with the fit and reliability of the magazine. It’s easiest to spray-paint one side of the magazine first and let the magazine dry overnight. Repeat on the other side. Degrease and spray-paint the floorplate as well. When finished, tip the canister upside down and clear the spray tip.

Apply DFL to AR-10 magazines in the same manner as described above, with priority to the inside of the magazine.