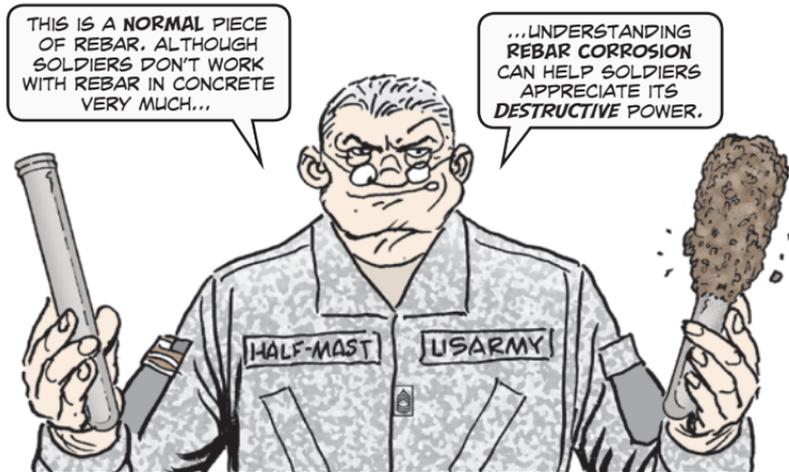


# PROTECTING REBAR IN CONCRETE



Many Army concrete structures use reinforcing steel rods (rebar). But rebar can corrode, especially if water penetrates the concrete.

Corrosion both weakens and expands rebar within the concrete. Eventually the concrete fractures, weakening the structure.

There is new hope for protecting rebar from corrosion. The penetrating corrosion inhibiting system (PCIS) is an inhibitor spray applied to concrete surfaces. It penetrates into concrete, protecting rebar from corrosion.



How well does it work? In Okinawa, Japan, two bridges and a warehouse had significant rebar corrosion. After some patching of broken concrete, PCIS was applied.

Tests showed a reduction of corrosion rates from 61.4 to 14 microns/year, and water penetration was reduced from 0.14 to 0.015 ml/sec.

What will a similar investment of lubrication and appropriate rust inhibitors do to prevent corrosion on your equipment?