MACHINE SHOP SPECIFICATIONS

TOLERANCES: ALL DIMENSIONS ± 1/64" (Except drill hole diameter)
Use cylindrical stainless steel rod such as #304, which is reasonably
machinable and highly corrosion resistant.

Cut the three grooves. We use a lathe tool 1/8" wide, and make two cuts
per groove. Do not bother to make the base of the grooves really smooth.
Use plenty of cutting oil to prevent chattering during groove cutting.

Cut a bevel on bottom (approx. 45°), and center drill the top end.

Next mill a flat surface onto the lower shank of the pin, and the top
3/8" notch, then rotate roughly 180° and mill the other notch. Mill
down approx. .055" in each case, as shown below.

STAINLESS STEEL PIN FOR USE AS A GEODETEC
REFERENCE MARK. 6" x 1/2" Pin, Version 2

design by Mike Bevis, NCSU April 1992
with suggestions from George Hade (Cornell)
Cash Johnson and Haywood Burnette (NCSU)
James Stowell (UNVÁCO) and Ken Hudnut (Caltech).

Note added in 1998: Tech 2000 now makes these pins with a slightly conical hole to optimize
their use with the Tech 2000 GPS antenna mast (a fixed-height spike mount leveled under tension).