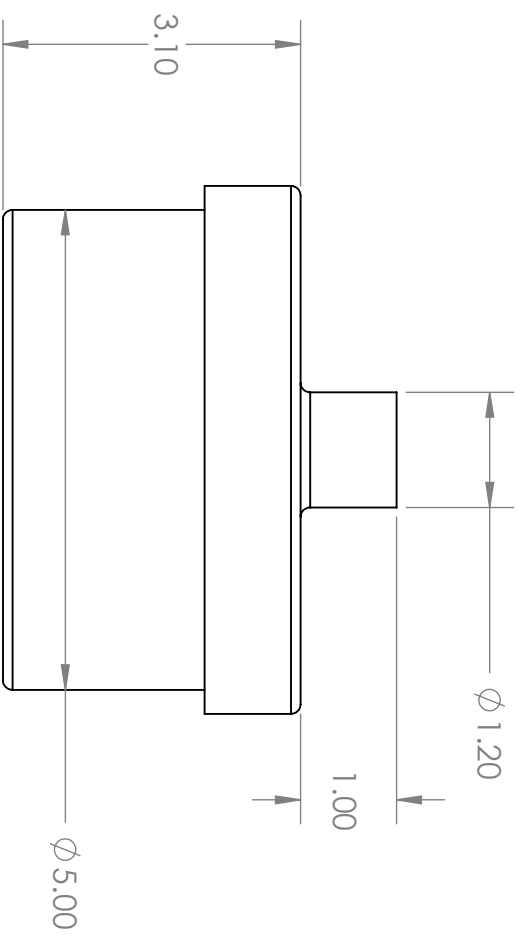
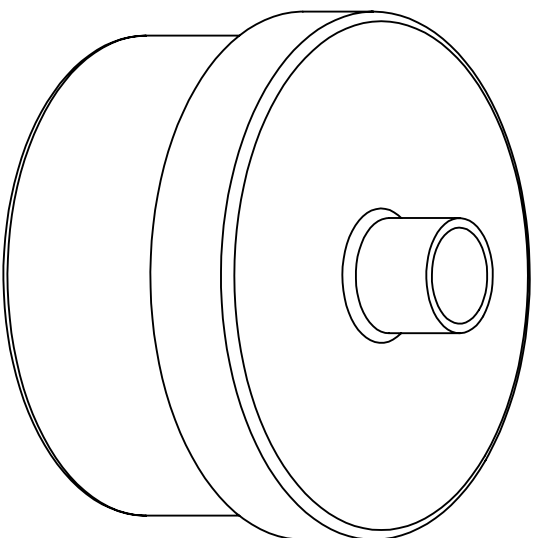


Secondary MF Shielding Designs for Hypomagnetic Fields. The two secondary containment enclosures provided in this file are an additional option (in place of the 4 in x 4 in x 4 in cardboard shipping box suggested in the protocol) for testing hypomagnetic ($< 10 \mu\text{T}$), near-zero field effects.

Circular Hypomagnetic Box Design:



3D printed circular containment option of dimensions: 3.1 in (h) x 5 in diameter, with a 1.2 in diameter opening for cable access. Photos show container with lid prior to foil (left), in the process of having the mu-metal foil added (middle), and the completed container. The black lettered tape (optional) was added to cover the sharp edges of the mu-metal foil for safety (any type of non-conductive tape can be used).

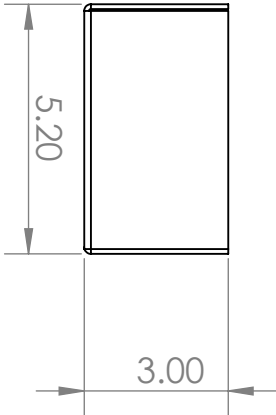
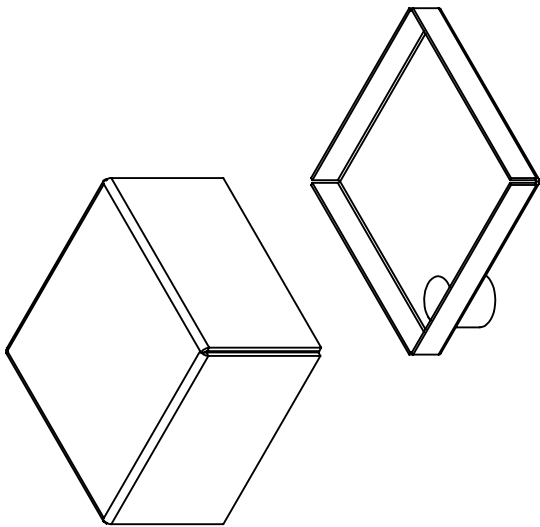
[illegible]

Square Hypomagnetic Box Design

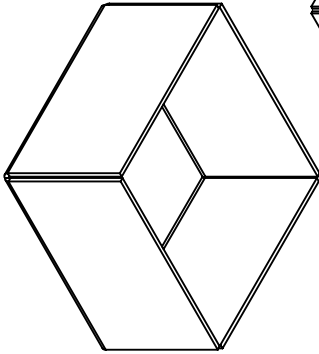
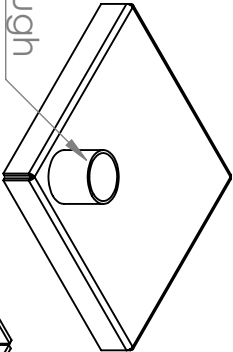


3D printed square containment option of dimensions: 5.2 in x 5.2 in x 3 in, with a 1 in diameter opening. Photos show lid and inside of container prior to foil (left), lid and inside after adding mu-metal foil to both outside and inside surfaces (middle), and the finished container (right). The black lettered tape (optional) was added to cover the sharp edges of the mu-metal foil for safety (any type of non-conductive tape can be used).

Sheet metal aluminum fabricated box with lid



1.000 Diameter pass through



Lid features a pass through to allow instrument wiring to pass while reducing magnetic fields within the box

		UNLESS OTHERWISE SPECIFIED:					
		DIMENSIONS ARE IN INCHES		DRAWN	NAME	DATE	
		TOLERANCES:		CHECKED			
		FRACTIONAL ±		ENG APPR.			
		ANGULAR: MACH ± BEND ±		MFG APPR.			
		TWO PLACE DECIMAL ±		Q.A.			
		THREE PLACE DECIMAL ±		COMMENTS:			
		INTERPRET GEOMETRIC					
		TOLERANCING PER:					
		MATERIAL					
		FINISH					
NEXT ASSY	USED ON						
APPLICATION		DO NOT SCALE DRAWING					
				SCALE: 1:4	WEIGHT:	SHEET 1 OF 1	

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WITHOUT THE WRITTEN PERMISSION OF
<INSERT COMPANY NAME HERE> IS
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Final MagShield Apparatus Setup Using Secondary Hypomagnetic Enclosure:

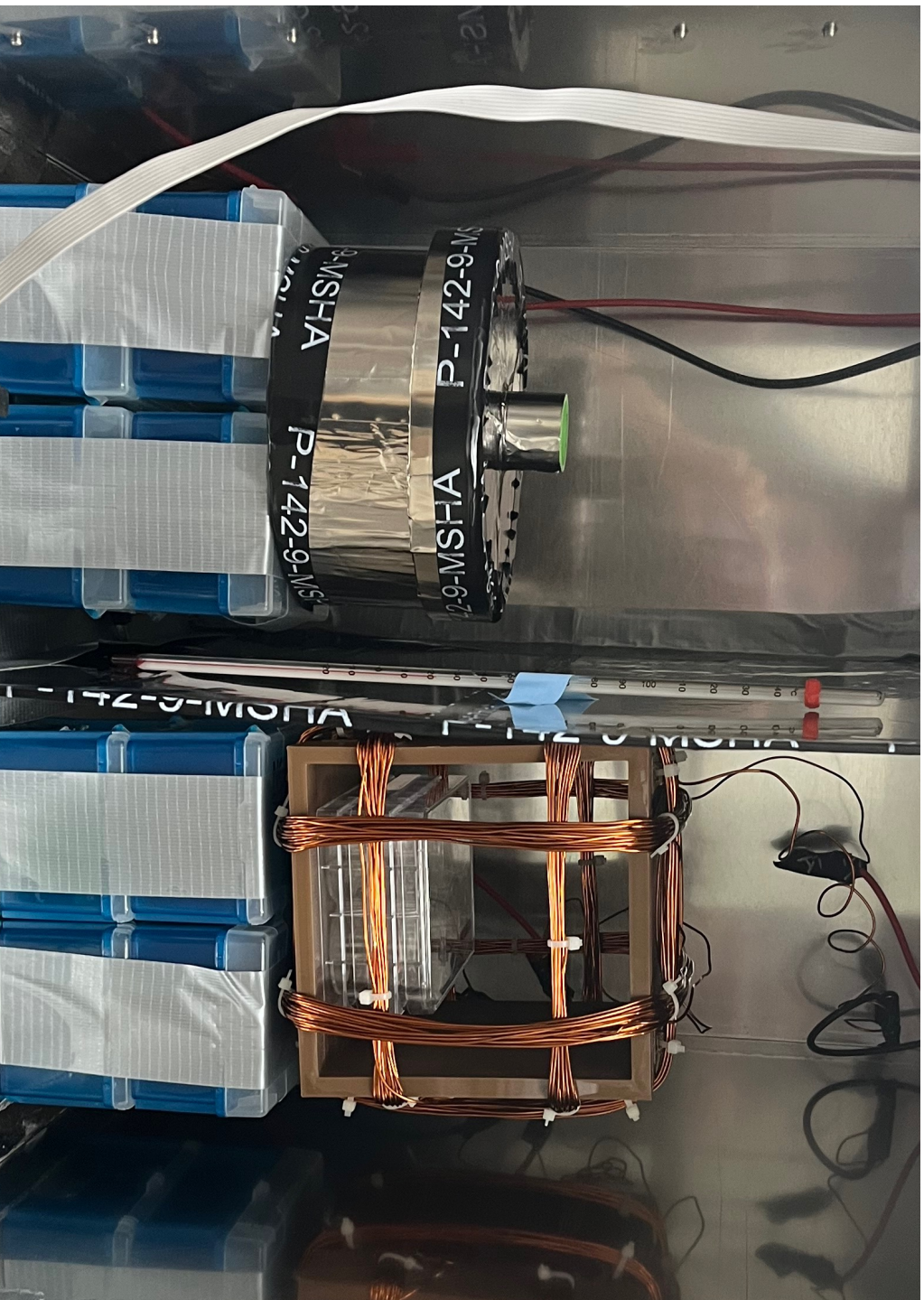


Photo shows MagShield Apparatus ready for hypomagnetic experiment. On the left is the circular secondary container enclosure placed in the center of the left chamber (white cable to the far left is from the milligauss meter). On the right is the control chamber setup with a Helmholtz coil for 45 μ T exposures placed in the center of the right chamber..