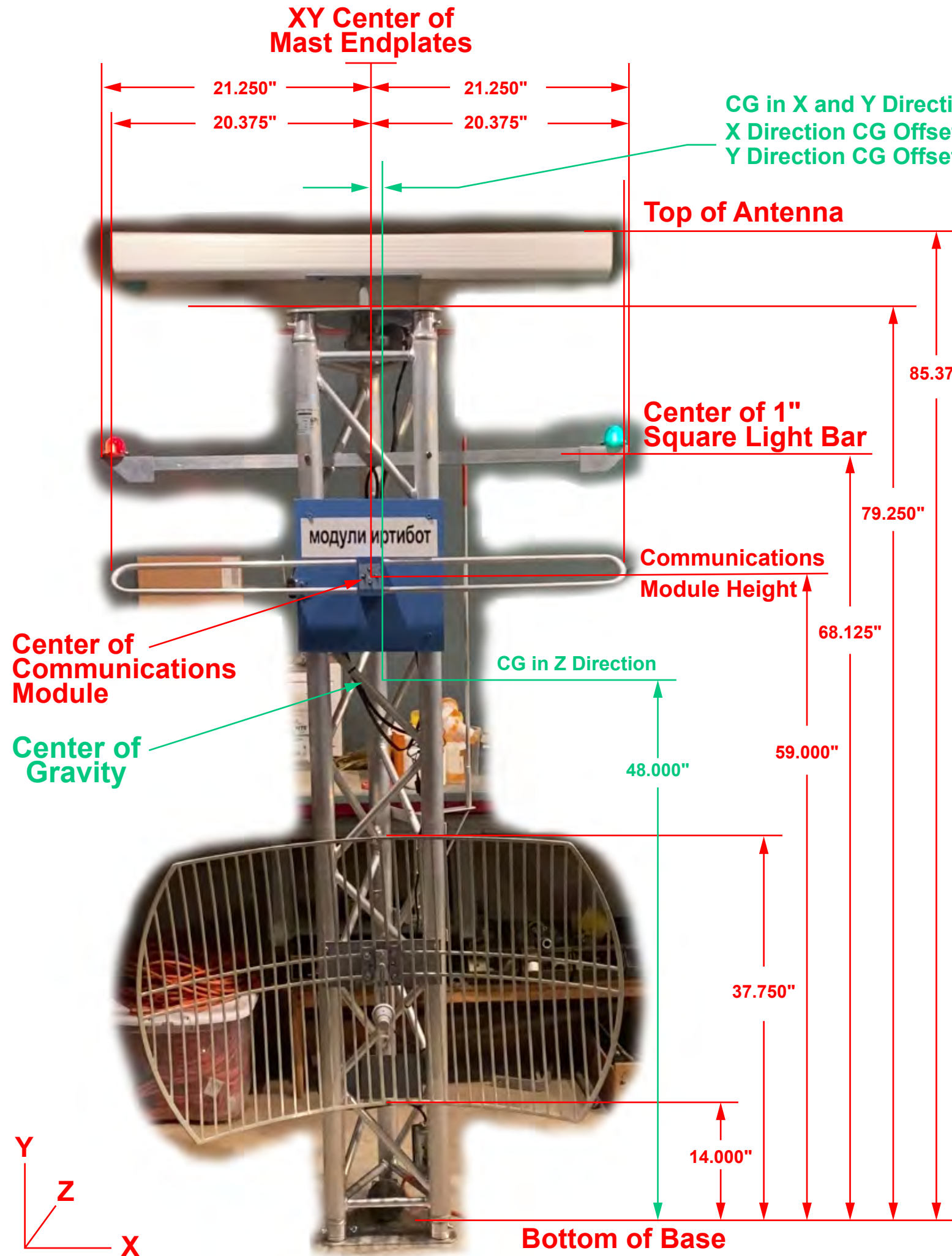


Mast Endplate with Centered Bolt Circle for Mounting



NOTES:

1. Mast-top antenna is hollow PVC gutter pipe of negligible mass rotating on the geometric center of the mast.
2. Vertical mast pole diameter = 1.963 inches
3. Light bar is 1 inch square
4. X Mounting bolts on base are 5/8 inch diameter and on a hole circle of 4-3/8 inch diameter.
5. Total mast weight = 51.0 pounds + 19.8 pounds (to account for an aerial robot that temporarily lands upon the mast (location unknown)).
6. During the extraction of the Communications Module, aerial robots may exert 7.165 lbs of force in any direction.
7. Wind loads are unknown but will be assumed to be 2 pounds applied at the CG in any direction.
8. A maximum motion of Sea State 3 is assumed, although design limitations of the 2-DOF table may dictate less of a pitch and roll excursion based on actual mast weight and inertia.
9. The base of the mast is assumed to be mounted on a boat 10 feet above the CG of the boat, and all motion of the boat induced by wave action is assumed to be sinusoidal and around its CG. No "heave" (Z component of motion) is being simulated. Without translation in the X and Y directions, the motion table will create movement about the base of the mast as opposed to a point 10 feet below. This inaccuracy in the scenario is recognized and acceptable for the purposes of this mission.