

NATIONAL ASTRONOMY AND IONOSPHERE CENTER
ARECIBO OBSERVATORY



To: Sixto Gonzalez
cc: R. Brown, F. Soberal
From: ~~Jose N. Maldonado Torres~~
Date: October 28, 2005
Subject: Gregorian Dome Load

The Platform Dome was weighted during the days' 24 and 25, of October 2005. The Dome trolleys, backup brake and equipment were disconnected and became free to move up and down. The jacks were calibrated by the manufacturer's representative in Puerto Rico as per the manufacturer's recommendation. Several data were taken moving the Dome up and down with jacks.

The corners were lifted at a rate of 1/8" and a reading was taken every time the eight jacks were stopped. The total lift was of half and inch(1/2"). The actual Dome weight is as follows:

A.	Uphill left corner	18,458 Lbs.
B.	Uphill right corner	10,521 Lbs.
C.	Downhill right corner	76,932 Lbs.
D.	Down hill left corner	<u>72,691</u> Lbs.
	Subtotal	178,602 Lbs.

The yoke weight is 19,980 Lbs. Adding the Dome and yoke weight, the grand total became 198,582 Lbs. or 30.6 % of the designed capacity. The net increases from the last Dome weight and now is 8,588 Lbs.

JNMT/cr