

From senior.ken@usno.navy.mil Fri Mar 16 10:32:07 EST 2001  
 Received: from naiad.USNO.NAVY.MIL (naiad.usno.navy.mil [10.1.1.7])  
     by maia.usno.navy.mil (8.9.3 (PHNE\_18979)/8.9.3) with ESMTTP id KAA18518  
     for ; Fri, 16 Mar 2001 10:32:06 -0500 (EST)  
 From: senior.ken@usno.navy.mil  
 Received: by naiad.usno.navy.mil with Internet Mail Service (5.5.2653.19)  
     id ; Fri, 16 Mar 2001 10:31:38 -0500  
 Message-ID: <008369CA8EDAD311BE9500A0C9D854B46ACB84@naiad.usno.navy.mil>  
 To: jimr@usno.navy.mil  
 Subject: FW: TSA-100 antenna  
 Date: Fri, 16 Mar 2001 10:31:38 -0500  
 MIME-Version: 1.0  
 X-Mailer: Internet Mail Service (5.5.2653.19)  
 Content-Type: text/plain  
 Status: RO

Jim,

I thought you might include this information in your vast archive of GPS information on maia.

-----Original Message-----

From: Senior, Ken  
 Sent: Friday, March 16, 2001 9:05 AM  
 To: 'Jon Clarke'  
 Cc: Powers, Edward  
 Subject: TSA-100 antenna

Jon,

Below is the response I received from the NGS guys regarding the test of the TSA-100 antenna. The data from the test is preceded by a key for reading it.

Ken

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Dr. Senior,

Below are the calibration numbers for the TSA-100 antenna. About a year ago we had a chance to test one as it was enroute to England. However, we have not received any other TSA-100s to corroborate the results from the first one.

If USNO happened to purchase more than one, we would appreciate the opportunity to test any not presently on-line. It should not take more than a week to do so.

The ARP is the base of the antenna.

Best Regards,

Mike Morrison  
 Geosciences Lab, National Geodetic Survey

ANTENNA ID	DESCRIPTION	DATA SOURCE (# OF TESTS)
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YR/MO/DY

average

[north] [ east] [ up ]

(mm)

[90]	[85]	[80]	[75]	[70]	[65]	[60]	[55]	[50]	[45]
[40]	[35]	[30]	[25]	[20]	[15]	[10]	[ 5]	[ 0]	

(mm)

[north] [ east] [ up ]

(mm)

[90]	[85]	[80]	[75]	[70]	[65]	[60]	[55]	[50]	[45]
[40]	[35]	[30]	[25]	[20]	[15]	[10]	[ 5]	[ 0]	

(mm)

TSA-100

00/05/08

| AVE = # in

| L1 Offset

| L1 Phase at  
| Elevation

| L2 Offset

| L2 Phase at  
| Elevation

NGS ( 1)

	1.7		3.6		272.5					
.0	.0	.2	.5	1.0	1.5	2.0	2.5	2.9	3.3	
3.6	3.9	4.2	4.5	4.9	5.4	6.0	0.0	0.0		
	.8		4.2		291.6					
.0	.1	.3	.4	.6	.9	1.1	1.5	1.8	2.2	
2.5	2.9	3.3	3.6	3.9	4.2	4.3	0.0	0.0		