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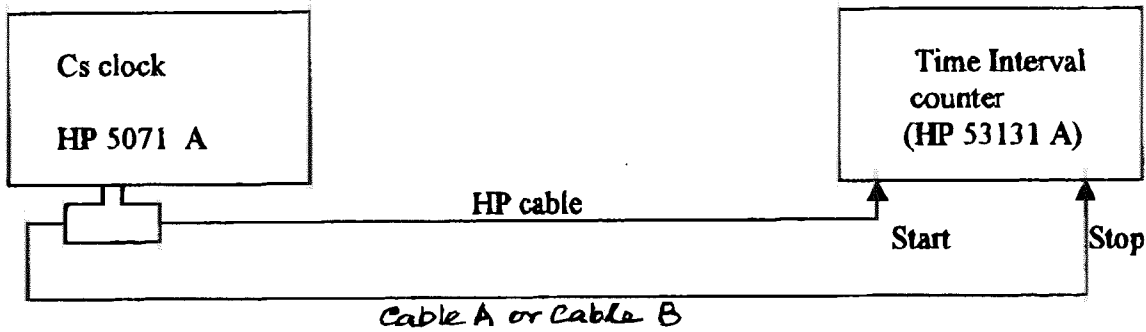
BIPM GPS calibration information sheet

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Laboratory:	NPL, New Delhi, INDIA	
Date and hour of the beginning of measurements:	1 June 2001 (52061 MSD), 0800 UTC	
Date and hour of the end of measurements:	11 June 2001 (59071 MSD), 0530 UTC	
Receiver setup information		
	Local:	Portable: NML
• Maker:	Allen - Osborne	Allen-Osborne
• Type:	TTR 6	TTR6
• Serial number:	464	467
• Receiver internal delay (GPS):		
• Receiver internal delay (GLO):		
• Antenna cable identification:	NPLI IF	NML IF
Corresponding cable delay:	250 ns	234.5 ns \pm 0.5 ns
• UTC cable identification:		
Corresponding cable delay:		
Delay to local UTC:	53.8 ns \pm 0.5 ns	20.8 ns \pm 0.5 ns
• Receiver trigger level:		
• Coordinates reference frame:		
Latitude:	28° 38' 13.28942	} 175 cm - Range 20° - Azimuth from LOCAL
Longitude:	77° 10' 17.76541	
Height:	192.3746 mts	
Antenna information		
	Local:	Portable:
• Maker:	Allen-Osborne	Allen Osborne
• Type:	TTR 6	TTR6
• Serial number:	685	572
If the antenna is temperature stabilised		
• Set temperature value:		
Antenna cable information		
• Maker:	Supplied by AOA	
• Type:	Coaxial RG58A/U	
• Is it a phase stabilised cable:	No	
• Length of cable outside the building:	60 feet approx.	
General information		
• Rise time of the local UTC pulse:	< 5 ns	
• Is the laboratory air conditioned:	YES	
• Set temperature value and uncertainty:	20°C \pm 1°	
• Set humidity value and uncertainty:	52%	
Cable delay control		
Cable identification	delay measured by NML	delay measured by local method
NML-IF Antenna cable	234.5 ns \pm 0.5 ns	

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CABLE DELAY MEASUREMENT



1PPS from HP 5071A
 50 Ω / Rise Time < 5ns

Trigger level
 0.2V, 50Ω

HP cable delay is known.
 Cable A - for local GPS Rx
 Cable B - for Travelling GPS Rx

National Physical Laboratory,
 New Delhi India
12/6/2001

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