



W. W. Hansen Experimental Physics Laboratory
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Gravity Probe B Relativity Mission

**QUARTZ BLOCK NO. 3
TRANSPORTATION PLAN**

P0363 REV.-

February 25, 1998

Approved by: T. Langenstein
Contracts & Procurement Manager

Date

Approved by: Mark Sullivan
Design Engineering Manager

Date

Approved by: B. Taller
Quality Assurance

Date

Approved by: J. Turneure
Hardware Manager

Date

QUARTZ BLOCK NO. 3 TRANSPORTATION PLAN

Procedure Description:

QB #3 Transportation Plan from Machining Vendor (Speedring) to Stanford.

Procedures:

1. Packaging:

QB #3 will be bagged and packed in a specially fabricated shipping container. The container is a hard-shell plastic (military style) ~ 2' x 2' x 4' case with multiple locking clamps. The inside is foam pre-cut to form-fit the QB. There is a minimum of ~ 2" of foam from the inner case to the part.

2. Shipping:

Shipping will be performed by Robert's Express (Tel: 1-800-255-2421). Robert's will provide their exclusive 'door-to-door, constant surveillance' service. The unit will be specially strapped into an air ride van and driven directly to Stanford by a team of two drivers. Travel time is expected to be a little over two (2) days. No other cargo will be transported with the item.

3. Inspection:

The QB #3 will visibly be inspected by Stanford's on-site QA inspector, Mr. Joe Hayden, at time of packaging and strapping into the van to ensure appropriate precautions have been taken into account. The unit will be inspected at Stanford upon its arrival.

A 24 hour notification to Tony Lyons of MSFC should be made in case he would like to participate in the inspection.

4. Pick-Up and Delivery Dates:

Shipment is expected to take place the first week in March '98 upon completion of the final inspection verification documentation.

Robert's Express is to contact Ben Taller, at 650-725-6403 or Mark Sullivan at 650-723-3367 so that they will both be available at the time the air ride van arrives at Stanford.

The shipping container is to remain strapped in the truck until they have verified that the shipping container remained in a strapped position upon delivery.

4. Pick-Up and Delivery Dates: (Continued)

Ben Taller shall arrange for removal of the shipping container from the van and inspect the container for damage.

The container shall then be immediately opened and Quartz Block No. 3 shall be visually inspected for gross damage. After these inspections are complete, the delivery receipt shall be signed and delivered to the operators of the van. The quartz block shall then be secured in the shipping container and then placed in flight stores.