

*Mother GHOST  
launch improvement*

23 December 1970

Dear Marcel:

Vin has asked me to work out a few details for improving the next launch which may be of use to you. These are as follows:

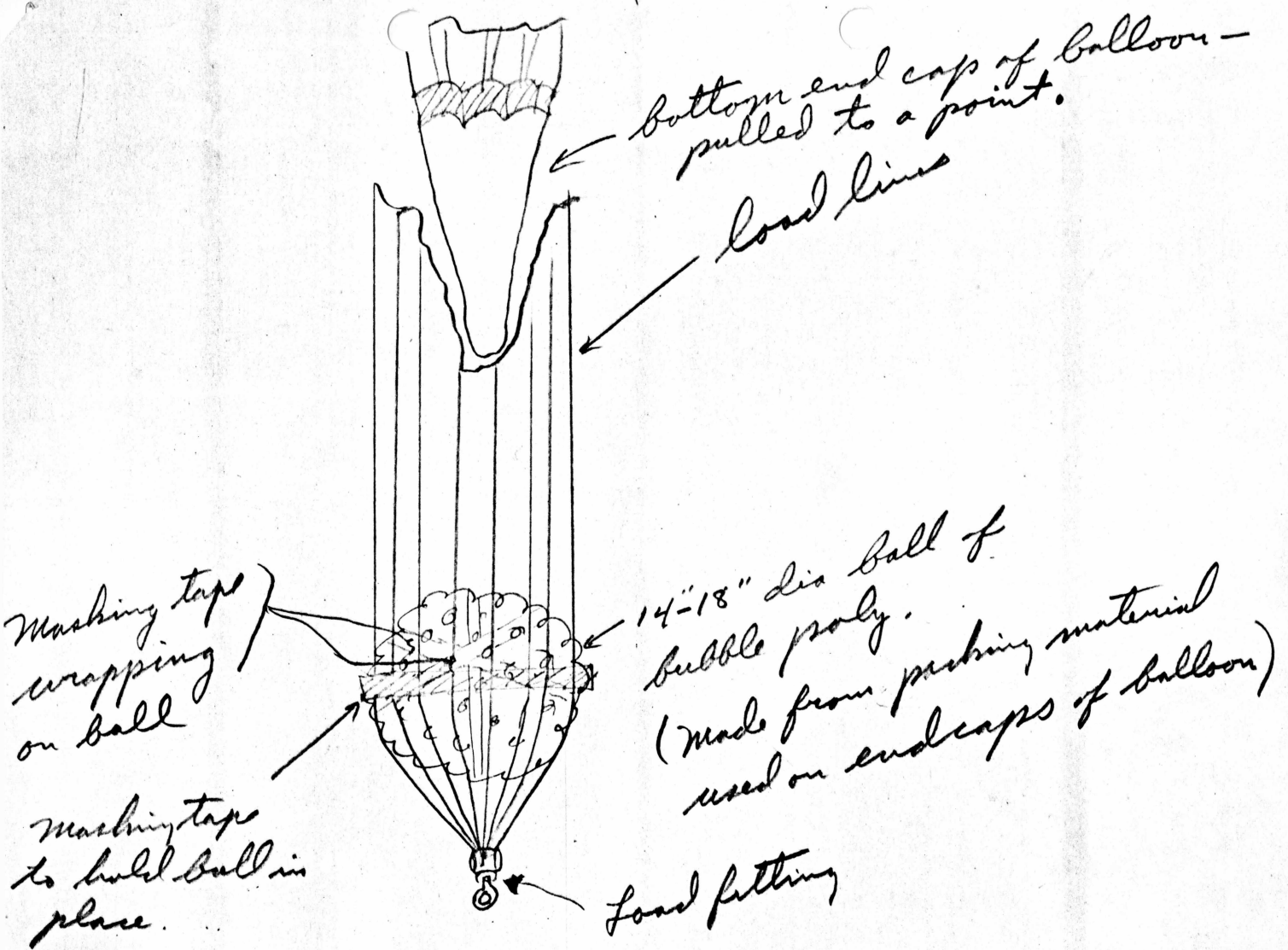
- o An extra inflation fitting has been put on the balloon closer to the top. (One at 45 ft from the top and one at 35 ft.)
- o An end cap restraining hoop has been added to the load lines to prevent the base end from blowing out between the lines.
- o A load line spreader (see sketch 1 attached) has been designed. It is intended to prevent crushing the base end cap during inflation and early ascent. It is a "do-it-yourself" model, so allow a few extra minutes in your pre-launch schedule.
- o A compact anchor block for the balloon bottom anchor has been designed (see sketch 2). It is intended to replace a bulky car and some men you required last time. You might consider using a heavy lift truck as launch collar anchor on the balloon top end. (The increased weight is comforting if the wind comes up a bit.)
- o The flight train may have a different configuration than last time, but Vin will fill you in on it. I suspect a hole may have been caused by abrasion of the tow balloon against the tight load line. This could have caused a descent like the Nimbus balloon that almost hit the water last summer at Ascension Island.

If any of these ideas sound good, go ahead and use them, otherwise this letter will self-destruct in time. HYAA? If you have any questions, please contact me. Good luck.

Sincerely,

Sig Stenlund

Enclosures



### Balloon layout & rigging:

1. Save bubble poly to make into a ball.
2. Place ball in cone of load lines to prevent lines from crushing end caps.
3. Pull end caps to a point & center in cone of load attachment.

