

George M. Low
MLL

NOV 6 1969

UNITED STATES GOVERNMENT

Memorandum

TO : *HA/Manager*, Advanced Missions Program

FROM : PA/Chief, Apollo Data Priority Coordination

SUBJECT: VENTIS

DATE: November 6, 1969

69-PA-T-143A

This will either amuse you, waste your time, or just possibly accomplish something great. It is evident that we did not benefit from our Gemini experience in the design of Apollo spacecraft when it came to vents. As a result, they have been a constant source of annoyance to say the least. But worse than that, the water boilers in the CSM and LM now show up among the major error sources affecting our LM point-landing capability.

I don't know what is being done on future spacecraft, but it's evident that once spacecraft are built, the expense of fixing them is prohibitive. Accordingly, I strongly urge that in the basic design specification* and contractual agreements for all future spacecraft, particular attention be given to insuring that we will have no propulsive venting of any sort. At the very least, there should be some requirement stating that if it is impossible or extremely expensive to comply with that specification, some sort of review should be conducted with participation by everyone in the world before a waiver is granted since it may be possible to come up with a design that minimizes the damage. In the past we didn't even know about the damned things til we started searching for the perturbative force that screwed up the flight!

Print

Howard W. Tindall, Jr.

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cc - mls
GILBERT
~~*THOMPSON*~~
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PA:HWT:js

* For example, your "Guidelines and Constraints Document, Space Station Program Definition, Phase B," dated October 31, 1969.

INDEXING DATA

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11-06-69	MSC		M	ADM	(Above)	TINDALL	072-12

