- 1. We have a management arrangement in the CORONA program which calls upon LMSC to provide system engineering and technical direction as a service to the government. In this sense a group of LMSC employees are placed in a position of technical cognizance and authority over all associate contractors in the program, their parent employer included. I am not condeming this arrangement as unworkable, but I believe this group has been unaware of or have failed to implement an area of investigation which to me is of considerable significance.
- 2. Disregarding any divergence of views due to test facility limitations it seems to me that CORONA experience so far has shown that best results have been achieved less than 1% of the time and that quality achieved most of the time is but 1/3 to 1/2 that of the absolute best demonstrated.
- 3. The factors which degrade peak quality are in some cases uncontrollable and in others subject to manipulation through design and operational procedures. Factors in the latter category are similarly divided between those influenced by vehicle characteristics and those ascribable to the optical recording elements. It seems to me that as a matter of some urgency a sensitivity analysis of these factors ought to be made by a body of technical experts. This should show the relative importance of each of these degrading factors on system performance. A concurrent analysis of parameters under

their control should be made by each contractor to define Declassified and Released by the NRC

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their ability to improve their control over each of these factors. Out of such analyses can fall a program for systematic improvement in quality.

4. I believe such analyses are necessary and long overdue. Only by such an approach can we, for example, make a sound decision to proceed to a 40 inch focal length camera in this program. Such a design, viewed parochially, promises quality improvement in the order of 50%; however, we have no firm assurance that nearly all this increment would not be masked by present limitations on such things as vehicle stability. I understand that the contractors have done some work of this sort rather independently of each other as exemplified by the Itek proposal. To be worthwhile this should be a cohesive unbiased analysis.

E.P.Kiefer

