

29 Jul 58

Arrow Weapon System - Genie

- The attached memorandum at working level is brought to your particular attention on the task involved in fitting Genie to the Arrow.
- You will recall when we analysed Genie versus Sparrow in the CF100 we came to the conclusion that both were of the same kill probability, and that the Sparrow was probably to be preferred because it had no side effects on aircrew, no escape problem and was far better against countermeasures.
- We are now being stampeded into considering Genie as the weapon merely because it makes a big atomic bang. I suggest that it still has the same inadequacies as it did when we considered it for the CF100, and that an analysis of the kill probabilities of the Sparrow versus the Genie on the Arrow may well show that the Sparrow is to be preferred again. Therefore, I urge that we be practical in our decision to use Sparrow or Genie, and base it on our estimate of the kill probability of the Weapon System.
- If the kill probability of Genie is adequate, then we should make a decision to have one weapon only on the Arrow as an interim weapon until a suitable guided atomic headed airborne weapon is available, that the interim weapon should be either Genie or Sparrow II, and the decision as to which it should be, should be made now.

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(MM Hendrick) A/V/M AMTS

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