TO: M - Mr. Merchant
FROM: ARA - Mr. Rubottom

In response to your request for a talking paper for your JCS meeting on March 11 on the strategic importance of the Panama Canal or other Isthmian Canal the following points suggest themselves:

1. A revised concept of the strategic importance of the Panama Canal seems to be required in view of the new military technology since 1945 (i.e. nuclear weapons and missile systems).

2. The present lock canal appears to be indefensible in the nuclear weapon/missile system age, or, for that matter, indefensible against a concerted effort at sabotage.

3. The present lock canal appears to be rapidly approaching its traffic saturation point. Many ships, commercial and naval, are too large for transit.

4. A sea-level canal to replace it appears to be the best solution to the obsolescence of the present lock canal. A sea-level canal (1000 feet wide, 60/200 feet deep) would be less vulnerable to nuclear attack or sabotage, more readily recoverable following attack, and could accommodate any ship afloat or forescably planned.

5. Studies have been made of the feasibility of a sea level canal connecting the Atlantic and Pacific oceans. The best route appears to be in Panama, estimated 6 to 10 years construction time, cost approximately $750 million, using nuclear earthmoving techniques, and could be operated by about 350 to 400 people. Three political problems present themselves: (1) negotiation with Panama for right of way; (probably impossible to obtain same rights we now hold in Canal Zone); (2) use of nuclear artifacts during earth-moving part of construction, psychological impact on local populations; (3) possible treaty limitations on use of nuclear explosives for peaceful purposes.

Attached are three short expositions as follows:

Tab A-Commercial and Economic Significance of Panama Canal.
Tab B-Strategic Significance of Panama Canal.
Tab C-Sea-Level Canal versus Panama Canal.