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TRENDS AND FEELINGS ON FUTURE  
ARMY, NAVY AND AIR FORCE PROGRAMS

The basic issues on which the future of many Service programs will stand or fall are not new: survivability of nuclear strike forces, hardening vs mobility, offensive vs defensive systems, limited war (general purpose) forces vs general war (single purpose) forces and, as always, immediate readiness vs future capability.

Here are some of the major programs under discussion. First presented are the views of the sponsoring service, then the position and thinking of others.

NIKE ZEUS

The Army view is that an Anti-Intercontinental Ballistic Missile system for defense of continental United States is essential to insure survival should deterrence fail. They believe NIKE ZEUS will possess significant capability against ICBM and Submarine Launched Ballistic Missile in 1965-70 period and that a "first" in this field would give the United States great psychological and strategic advantages. Army firmly believes NIKE ZEUS is indispensable to an integrated force in this missile age and that it is the only AICBM system with assurance and availability

in the period.  
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Air Force believes NIKE ZEUS is incapable of providing effective defense against ballistic missiles of '65-70 era, that it lacks growth potential, that its cost is too high to be absorbed in light of all other requirements. It is the Air Force position that R&D should look toward more sophisticated systems with emphasis on alternates such as orbiting space defense system.

We feel that R&D should continue, that effectiveness should be known prior to the decision to produce. This decision now could cost 1-1/2 billion next year and the total program 9-1/2 billion. Army feels such a system a national responsibility and should be funded outside its budget. We don't. DOD agrees to research, no production.

#### ADVENT

The Army view is that this communications satellite offers promise for reliable, high-capacity, world-wide communications. All Services and NASA are contributing to the program, and all support the program.

#### CARIBOU

CARIBOU is an Army program for a battlefield transport aircraft capable of operations from short unimproved runways to move troops, weapons and supplies. It will increase mobility on atomic battlefield where dispersion must be the rule.

Air Force questions need for this aircraft and recommends JCS examine in detail the justification and requirement. We support a moderate procurement program and DOD agrees to limited production.

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### MOHAWK

This Army combat surveillance aircraft operate from small unimproved airfields in battle zone. Plans call for it to be equipped with radar, infra-red, and photo surveillance gear for operations during darkness and low visibility. Air Force claims MOHAWK duplicates AF equipment, is more vulnerable and has less capability and recommends phase out production as soon as possible. We consider this an expensive but effective replacement for existing Army aircraft. DOD agrees to about 45 units.

### B-52

The B-52 is the heart of the major Strategic Air Command manned bomber systems. The Air Force says it complements the ICBM force by its ability to be launched and recalled and that it may be used also for military missions in limited war. It is the Air Force view that the B-52 provides a positive retaliatory force and it is the most effective system currently programmed which can be employed feasibly in Airborne Alert posture. The Army supports the Air Force level of 15 wings in FY '63. We recommend holding to total of 14 wings as adequate mix of bombers with missiles. DOD recommends close out B-52 line at 14 wings.

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Related to this program is:

HOUNDDOG (GAM-77) vs SKYBOLT (GAM-87)

The B-52 will carry HOUNDDOG, and SKYBOLT if produced, as "stand-off" weapon. SKYBOLT total program cost through '65 estimated at 1.2 billion (which based on past experience of "estimates" is about half enough) for 15 squadrons (46 missiles each) is under fire all around. We recommend terminate development effort. It will come in service too late and cost effectiveness offers no improvement over HOUNDDOG or MINUTEMAN. It is inferior compared with POLARIS, and POLARIS and MINUTEMAN will have replaced manned bomber as primary atomic strike weapons against likely targets for SKYBOLT. HOUNDDOG is satisfactory for the interim. Department of Defense R&E says HOUNDDOG's range can be extended if needed. We recommend limited procurement of HOUNDDOG to complete operational system evaluation with B-52, then re-evaluate.

B-70

The B-70 is the Air Force replacement for the B-47 and follow-on for B-52. It is designed for Mach 3 and Air Force predicts 75% of force can be launched in 3 to 8 minutes. They say it can provide timely battle progress information for planning follow-on strikes, that it has effective penetration capability and that with multiple weapons load, including SKYBOLT, it will provide for accurate delivery. The Army questions

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the B-70 survivability and considers it vulnerable to the SAMs of its era. Army says it is too expensive and recommends funding be limited to prototype for development and test. The Navy doubts that the cost of program (estimated 4.2 billion - again - probably very low) is justified. The task will have been taken over by missiles by its operational date. Its great speed is not required if concept is to employ standoff GAM. Hence, we recommend no funding. DOD goes along with follow-on funds for RDT&E to provide 3 prototype aircraft.

#### ATLAS

A 13-squadron ATLAS program has been approved by SecDef and President with production to terminate in FY '63. It appears that program will be funded.

The Navy feels the system is highly vulnerable, has long reaction time, and that radio-inertial guidance in the first 4 squadrons is susceptible to ECM. We have recommended cancellation on as many of last six sites as economically feasible, with commensurate reduction in program.

#### TITAN

The Titan ICBM was originally programmed as back-up for ATLAS. Air Force reoriented the program in '55 to provide a sizeable missile force by '63 with a large payload and increased survivability

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(hardening) to surprise attack. The National Security Council has recommended approval of 14 squadrons. It appears a program aimed toward this goal will be funded at about 1.22 billion in FY '62.

We consider the system vulnerable even with hardening as enemy missile accuracy improves. The need for Titan in large number after '63 is superseded by POLARIS and MINUTEMAN. We therefore recommended terminating procurement with those units operational by end FY '63.

#### MINUTEMAN

Air Force is requesting 805 MINUTEMAN missiles by end FY '64 due to Soviet ICBM threat. The major portion of the force will be dispersed in hardened sites, the remainder will be land-mobile to give a supposedly high degree of survivability. According to the Air Force MINUTEMAN is superior from cost effectiveness standpoint to other ballistic missile systems.

Army recommends holding force level to 400 missiles pending complete review of the NSTL and SIOP. We question "cost effectiveness" in absence of supporting data. The missile is still a long way from firing. Its survivability is progressively degraded as Soviet accuracy increases. Further, a large number of these missiles will draw more ICBMs into the United States. We recommend major reliance on systems

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of high inherent survivability, proven reliability and accuracy and that the FY '62 funding be withheld until Air Force furnished complete program, cost, and planning data. The DOD initial markup provided 1.01 billion for the MINUTEMAN program which held production to half the AF planned rate. The mark-up aimed toward a level of 9 hardened and 3 mobile squadrons (540 missiles) at end FY '64.

#### AIRBORNE ALERT

This is the Air Force means of providing rapid reaction and survivability of significant strategic retaliatory force until a reliable warning system is operational. The objective is to provide an "on-the-shelf" capability to fly 1/4 of the B-52 force on a continuous airborne alert for one year. Army feels that since BMEWS will be operational by time Air Force can attain the 1/4 capability (end FY '63), only half of this should be in FY '62 budget. We know that flying a 1/4 alert would accelerate wear on personnel and equipment, increase overhaul and maintenance time, and believe result might be reduced number of ready aircraft and cost \$1 billion per year. The SSBN system was recommended as a more effective way of assuring surviving retaliatory power. DOD favors an airborne alert capability in the order of 1/8 of 10 wings.

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## NUCLEAR PROPELLED AIRCRAFT

The Air Force states a nuclear propelled aircraft (ANP) with essentially unlimited endurance able to carry a large payload has a potential to be used for such missions as AEW, communications relay, ASW patrol, logistics carrier, and as a mobile command post. Army supports RDT&E funding. We support research in this vital field but recommend at this time the airframe be deferred and that research be continued on the indirect cycle engine only, deferring the direct cycle. DOD wants to go ahead, but there just isn't money enough to keep both indirect and direct cycle research going. Indications are that the indirect cycle R&D will be funded and no airframe now.

## POLARIS

There are 5 SSBN's funded in our FY '62 SCN budget with support of long lead time items for 5 more. Army supports the SSBN program rate to give 21 by 1965. Air Force recommends leveling off at a 20 total. We fully recognize that the POLARIS vs MINUTEMAN controversy will be with us and be hot for a long time. Frequent recent articles in the press indicate MINUTEMAN campaign well underway. We must be alert to counter statements undercutting POLARIS. POLARIS is here, it's proved, it's reliable, it's accurate, it's on station. IT'S NOT TARGETED BY THE SOVIETS -- and we can show what it costs. We will go ahead with development of the A-3 missile.

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## MEDIUM RANGE BALLISTIC MISSILE

All the Services have strong feelings on MRBMs. Army proposes that an 1100-mile MRBM is required to counter the Soviet family of SSMs in ranges 700-1100 mile. SACEUR, CINCPAC, and CINCAL have stated requirements for MRBM. And there is the problem of an MRBM for NATO. Army recommends an extended-range PERSHING. They say that POLARIS is all right for sea-based portion, but too large and not suited to operate from land environment. The Air Force feels strike aircraft can perform missions better than PERSHING II. Even so they propose modernization of MACE to give it MRBM capabilities. They maintain that for any 3rd generation MRBM only one Service should be given the job. They named themselves. We submit that development of the A-3 POLARIS could be exploited to provide a small version operational in 1964 as a 3rd generation missile adaptable to both land and sea, at lower cost than any other proposed.

Whether we need a 3rd generation MRBM at all is still undecided, and it is probably too early to make a firm decision. Research is continuing on an extended scale in the missile field so a year from now we will have better information on the capabilities of all our missile programs. Then may be a better time to decide on 3rd generation MRBM's.