TO: DDCI
DCI

Read by the DCI March 28

Attached is a letter to the DCI from General Carroll, who describes current work under way in DIA to refine and consolidate intelligence requirements from each of the service RD&E components.

DIA's work in this stems from the DCI's visit to the Air Force Systems Command last fall and the DCI interest in learning of RD&E requirements.

Copies of this letter and the attachment have been sent to DD/S&T, the DD/I Collection Guidance Staff, and the DD/P [redacted] all of whom have responsibilities in this field. An info copy has gone also to the IG as it relates to the current requirements survey. 25X1

It will be useful to you and the Agency to be in receipt of a single DOD document, prepared by DIA, as promised by General Carroll.

DIA review(s) completed. [redacted] 25X1

for L. K. White
24 March 66

DEFENSE INTELLIGENCE AGENCY
WASHINGTON, D. C. 20301

23 MAR 1966

TS-83/ST

Honorable W. F. Raborn
Director of Central Intelligence
Washington, D.C. 20505

Dear Mr. Raborn:

(U) During your visit to Air Force Systems Command in late October 1965, it is understood that you asked for a statement of the most pressing intelligence requirements in support of U.S. research and development expressed in specific terms which could form a basis for improved collection on a long term methodical basis.

(C) There is an unquestionable need for long-range and sufficiently precise intelligence on Soviet and Communist Chinese R&D objectives, programs and projects of the type which could precipitate far-reaching changes in balance of power relationships. While our present production and collection efforts address this problem, further improvements are needed both in terms of collection and production.

(C) DIA is assigned overall responsibility within the DOD to assemble, integrate, validate and assign priorities to DOD intelligence production and collection requirements. Accordingly, action is underway with DDR&E, JCS, Army, Navy and Air Force to review intelligence requirements in this area and to explore ways to improve fulfillment of these requirements.

(C) As a result of your October visit to AFSC, the Air Force has prepared a list of priority intelligence items. These requirements stated in a different form are generally reflected in the existing DOD S&T production program and are reflected in various collection actions by the intelligence community. Pending the completion of action indicated above, the Air Force statement of requirements is forwarded (encl. 1). As soon as the overall DOD review is completed an integrated and validated list of intelligence requirements in support of the R&D need, together with suggestions for improved collection action, will be forwarded. It can provide a basis for further discussion and action by the intelligence community.

Sincerely,

TS 188809/1

Joseph F Carroll

JOSEPH F. CARROLL
Lieutenant General, USAF
Director

1 Enclosure (AF Requirements TOP SECRET)

TOP SECRET

PRIORITY INTELLIGENCE ITEMS

(FOREIGN TECHNOLOGY)

1. SYSTEM DEVELOPMENT ITEMS AND APPLICATIONS WHICH COULD TRANSFER MILITARY AEROSPACE SUPERIORITY TO THE USSR.

   a. Multiple Independently Targeted, Boosted, and/or Maneuverable Re-entry Vehicles. ✓

   Initial Intelligence Requirement: Determine existence or non-existence of R&D programs for advanced missile or booster re-entry vehicles. Conclusions based solely upon capability estimates or lack of indications are not acceptable. Supplemental Requirements: Concept of operation and use; operational availability date; key technical parameters (size, weight of vehicle and/or warhead).

   b. Unique Nuclear Effects Applications.

   Initial Intelligence Requirement: Determine the existence or non-existence of unique effects data available to Soviet strategists as a result of high altitude testing or tests of very large nuclear devices. Conclusions based solely upon data derived from US tests are not acceptable. Supplemental Requirements: Existence or non-existence of stockpile very large yield warheads (60 - 100 MT or more); concept of use of these warheads; the intended delivery vehicles; the gain or advantage the Soviets believe they would acquire through their use in war.

   c. Follow-on Strategic Aircraft.

   Initial Intelligence Requirement: Determine the existence or non-existence of research, design, and/or development programs specifically directed toward future availability of manned strategic aircraft. Supplemental Requirements: Operational availability date; key performance parameters (unrefueled range, payload, speed) and/or key technical parameters (size, weight, planform, type of propulsion).

d. Military Applications of Space.

Initial Intelligence Requirement: Determine existence or non-existence of R&D programs specifically oriented toward military utilization of orbital or suborbital flight. Conclusions based upon capability estimates or lack of visible indications are not acceptable. Supplemental Requirements: Concept of operation and use; advantages the Soviet strategists believe could be gained; time of operational availability; technical and/or performance parameters key to the particular methods of intended utilization.

e. Hypersonic Aircraft.

Initial Intelligence Requirement: Determine the existence or non-existence of R&D programs established for the development of manned hypersonic vehicles (sustained flight Mach 5 to 20). Supplemental Requirements: Operational concept (straight flight or combined aero-orbital); intended applications; key technical parameters (size,weight, configuration, type fuel).

f. Advanced Nuclear Weapons.

Initial Intelligence Requirement: Establish the existence or non-existence of advanced weapons in-being and/or design programs specifically directed to the development of advanced nuclear weapons (enhanced or suppressed radiation, "pure" fusion, shaped/directed energy weapons or other nuclear devices based upon uncommon methods of energy release). Conclusions based solely upon capability estimates not acceptable. Supplemental Requirements: Concept of design and initiation; effects objectives; concepts of employment; date of operational availability; size, weight, and materials used.

g. Directed Energy Devices.

Initial Intelligence Requirement: Determine the existence or non-existence of R&D projects specifically directed toward ascertaining the feasibility and requirements for development, or actual development, of devices for the transfer of destructive levels of energy at relativistic velocities (electromagnetic energy at RF, optical, or near-optical frequencies; accelerated plasmoids or particles). Supplemental Requirements: Concept; intended employment; energy levels involved; power supply utilized; method of energy coupling at the target; attenuation and propagation data.

h. Time of Optimum Warfare Capability - Integrated Systems and Applications

Initial Intelligence Requirement: Determine the existence or non-existence of a planned time of peak operational readiness to be acquired through multiple systems development for combined application in the attack and in defense against retaliation. Supplemental Requirements: The reasons for priority, near-simultaneous development of multiple types of aerospace weapons; the Soviet concept for the conduct of aerospace warfare and the offense-defense interrelationships to special nuclear effects, precise targeting, and "pin-down" tactics using strategic systems, and active intercept using area and point defense systems; the extent of acceptance of a continued position of US military aerospace superiority among key Soviet military and political leaders.

i. Anti-Ballistic Missiles

Initial Intelligence Requirement: Determine the existence or non-existence of a planned exoatmospheric area defense system. Conclusions based solely upon capability estimates from current evidence are not acceptable. Supplemental Requirements: Exoatmospheric and atmospheric discrimination capabilities and techniques. Concept of operation, acquisition and tracking distances, launch and intercept altitudes. Initial operational capability date.

j. Antisubmarine Warfare

Initial Intelligence Requirement: Determine the existence or non-existence of R&D programs for advanced systems and techniques for ASW. Supplemental Requirements: Sensor type (Sonar, IR, etc.), range and depth, airborne capability, initial operational capability date.

2. CHINESE COMMUNIST DEVELOPMENT ITEMS WHICH COULD SIGNIFICANTLY ALTER LOCAL BALANCE OF POWER AND LEVELS OF INFLUENCE

a. Nuclear Weapons.

Intelligence Requirements: (1) Determine actual production rate of nuclear bombs and/or warheads. (2) Determine the existence or non-existence of weapon development assistance programs to other countries. (3) Determine the existence or non-existence of foreign nuclear weapon assistance (materials, equipment, technology) to the Chinese Communists.

b. Ballistic Missiles.

Intelligence Requirements: (1) Determine intended date of operational availability of fixed-launch and sub-launch offensive missiles. (2) Determine key performance and/or design parameters of offensive missiles. (3) Determine actual production rates of surface-to-surface and surface-to-air missiles. (4) Determine existence or non-existence of foreign assistance for missiles development or production.

c. Aircraft.

Intelligence Requirements: (1) Determine actual status of combat aircraft production. (2) Determine the existence or non-existence of foreign assistance for aircraft development or production.

3. SYSTEM DEVELOPMENT ITEMS & PROCESSES CRITICAL TO CAPABILITY/VULNERABILITY PROJECTION

a. Tactical Nuclear Weapons in the USSR.

Intelligence Requirements: (1) Determine the extent of development of subkiloton nuclear weapons. (2) Determine the nature of Soviet low-yield nuclear weapons as concerns desired effects (intended use of secondary, persistent radiation; development of "clean" weapons).

b. Establishing Advanced System Development Programs in the USSR.

Intelligence Requirement: Determine the processes for establishment of aerospace system development programs (influence of military; influence of political bodies; influence of scientific and technical community; identity of deliberation bodies for advanced weapon development and the decision-makers).

c. Aerospace System Development Costs in the USSR.

Intelligence Requirement: Determine the Soviet method of estimating costs and resource requirements for the development of major aerospace systems.

d. Soviet Applications Intentions in Cybernetics.

Intelligence Requirements: (1) Determine the extent of Soviet involvement in advancing cybernetic processes for warfare applications, and for organizing and controlling action/reaction socio-economic processes related to subversion. (2) Identify the methods invisioned which pertain to control of weapons and forces, and to human behavior control. (3) Determine the predicted gain, as calculated by Soviet planners, which could be acquired through support of concentrated research in the field of military cybernetics.

e. Advanced System Design & Development in Communist China.

Intelligence Requirements: (1) Determine the extent of efforts directed toward indigenous development of advanced systems from original designs. (2) Identify the systems projects established for native design and development.

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