THE JOINT CHIEFS OF STAFF
WASHINGTON, D.C. 20301

THE JOINT STAFF

14 September 1969

MEMORANDUM FOR CAPTAIN WILSON

Subject: TAGBOARD

This memorandum provides information requested in a memorandum from the Office of the Secretary of Defense, subject: JCSM 553-69.

1. It is emphasized that the first TAGBOARD mission over South China or North Korea as requested by the Joint Chiefs of Staff is a single mission designed to test the Operational Concept of TAGBOARD in a hostile environment and is not to compete with or replace the SR-71 or 147 H/T drone. The TAGBOARD system is a very costly specialized vehicle designed to collect against objectives of national interest in areas where manned operations are politically undesirable or risky, and it is in this role that the system would normally be employed.

2. Objectives Comparison - In terms of target objectives in South China the coverage capabilities of the TAGBOARD and the 147 H/T are identical, i.e., all objectives would generally be accessible to both platforms. Similarly, coverage of North Korea by TAGBOARD and the SR-71 would be duplicative. Maps showing the location and type of priority targets in both areas are attached.

3. Mission Comparison

a. The initial TAGBOARD mission as proposed would be roughly equivalent to four 147 H/T missions. This ratio is based strictly on target coverage. Usable range for the 147 H/T is roughly 1200 NM with a swath width of 20 NM as compared to a range of 3000 NM and a swath width of 28 NM for TAGBOARD. Coverage by the SR-71 and TAGBOARD on a single mission is essentially the same.

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b. The 147 H/T would operate from Bien Hoa AFB, RVN with an average reaction time of approximately 24 hours. Launch points will be outside the radar coverage of China, but may be within the coverage of NVN. All launches will be of sufficient distance from hostile territory to allow the drone to be at approximately 70,000 feet prior to the desired entry point, allowing approximately 1200 NM of operation over enemy territory.

The SR-71 is presently operating from Kadena AFB for Western Pacific Operations. Reaction time for previous missions overflying North Korea has been 24 hours using Kadena as the launch and recovery point.

TAGBOARD - The B-52 operates from Beale AFB, California with the drone launched from points near the Philippine Islands for a mission over South China and east of Okinawa for a mission over North Korea. The average response time for a TAGBOARD mission is from three to five days, depending on the deployment time and location of the recovery forces - the pacing item. Pre-positioning of recovery forces could reduce this range to one and one-half to two days.

c. PERFORMANCE FIGURES

	147 H/T	SR-71	TAGBOARD
SPEED	430K	1830K	1860K
ALTITUDE	70-72	79-83	80-95
RANGE	1200	3050	3000
*RESOLUTION (DESIGN)	2.5 ft	2.0 ft(OOC) 9 in(TEOC)	2.0 ft
SWATH WIDTH	20 NM	30 NM	28 NM
NAVIGATION ACCURACY	8 NM/hr	.6 NM/hr	1.5 NM/hr
TURN RADIUS	10 NM	90 NM	92 NM
MANNED	No	Yes	No
PROBABILITY OF SURVIVING A MISSION	80%	Near 100%	Near 100%

	147 H/T	SR-71	TAGBOARD
COST/SORTIE	$86,000	$70,000	$2,400,000

*Operational experience over North Vietnam for the 147 H/T drone and the SR-71 aircraft indicates the following camera performance can be expected (expressed in feet of ground resolution at nadir):

147 H/T	SR-71
5 feet	Tech Camera 2-3 feet Main Camera 3-3.5 feet

Results from the TAGBOARD program to date indicate 2-2.5 feet resolution can be expected.

4. a. The 147 H/T and the TAGBOARD are unmanned vehicles; however, the high altitude high speed characteristics of the TAGBOARD make it militarily and politically less sensitive.

b. The TAGBOARD drone will create a sonic boom which has been described as a "soft double boom."

c. The entry/exit difference for all systems is not considered significant as all launches will be outside areas where hostile action is expected to result.

5. The probability of loss of the TAGBOARD drone without complete destruction of camera and other sophisticated equipment is minimal. The high explosive destruct package is located as near the camera as possible to insure destruction of the hatch with its equipment and camera. There is a remote possibility that film would still be available even after destruction. Even if this remote possibility did occur there would be no compromise of advanced technologies.

MERRIWELL W. VINEYARD
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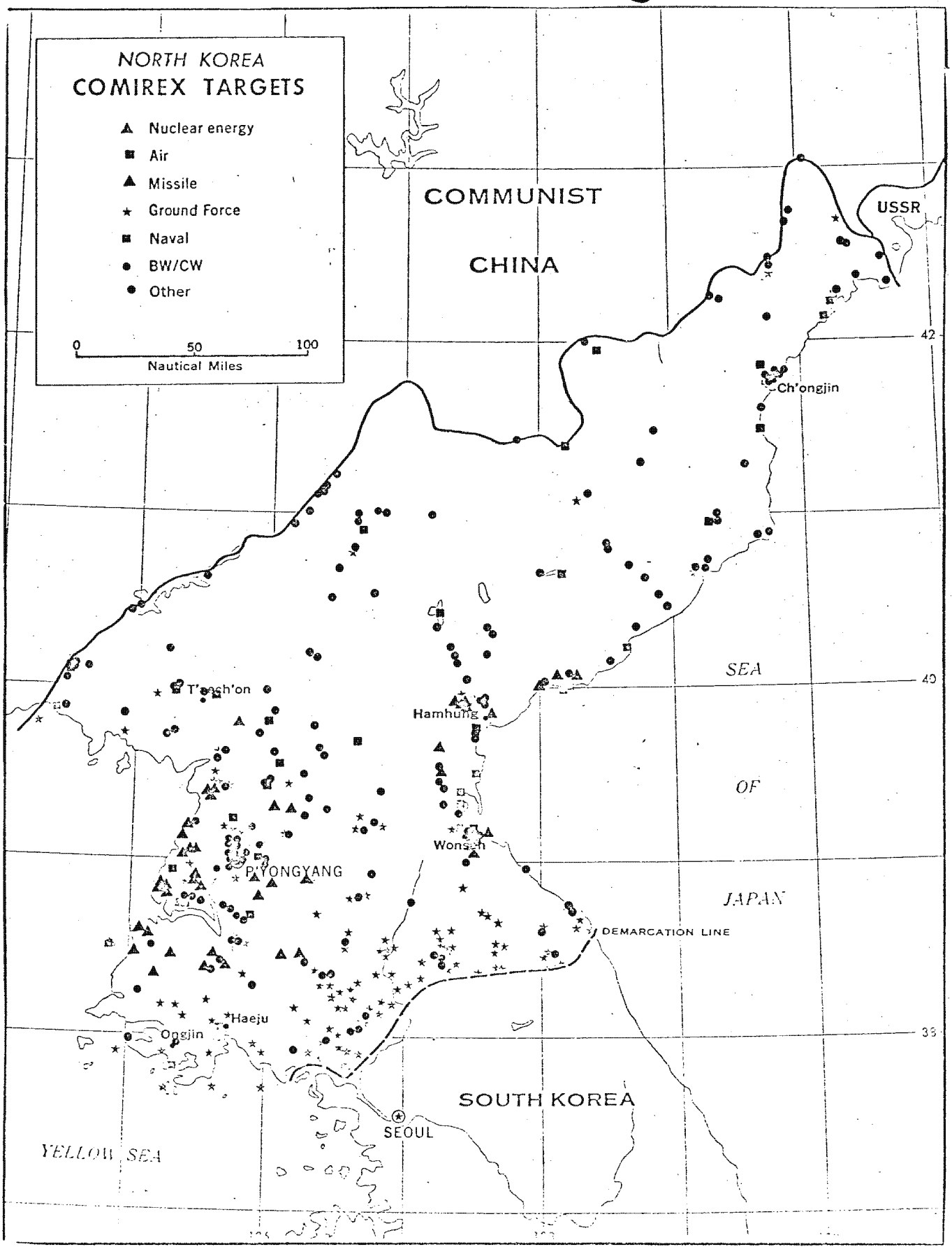

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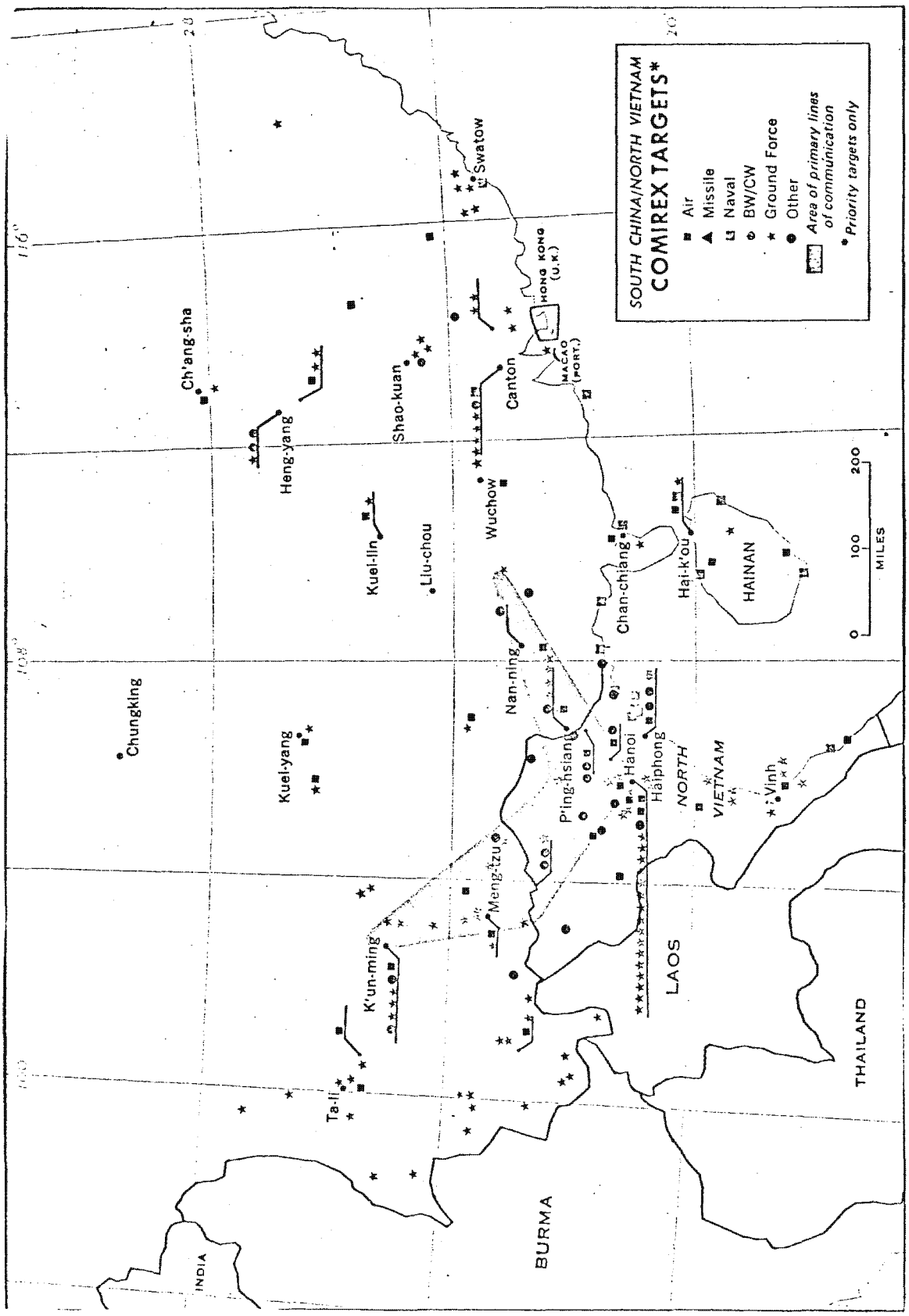

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