

MI NATIONAL RECONNAISSANCE OFFICE

WASHINGTON, D.C.

THE NRO STAFF

1 September 1971

MEMORANDUM FOR DR. MCLUCAS

SUBJECT: Evaluation of Project TANGIBLE and Plans for Project

ROPEVAL

Evaluation of Project TANGIBLE

Our initial NRO evaluation of Proj TANGIBLE showed that satellite ELINT intercepts could be reported to the Navy Fleet Ocean Surveillance Information Facility (FOSIF) with an average time from observation to report of two hours and five minutes. After compiling this statistical data on the performance of the NRO satellites, we planned to make, in collaboration with First Fleet and other Navy staff elements, an operational evalua-The satellite reports were to be compared with tion of TANGIBLE. the actual locations of ships in the maneuver as compiled by the This operational evaluation has encountered difficulties. There is simply not enough fine structured data for rigorous correlation of the satellite reports with the ship locations. Neither is there sufficient data to permit comparisons of the timeliness and accuracy of the satellite inputs versus other sensors which participated in the exercises. For these reasons and after considerable effort by the NRO Staff, I believe we should discontinue our efforts at further evaluation of the TANGIBLE data.

			re	port	on t	he ev	aluat	ion	work	so f a r	is a	at
Tab	A. V	Vorking	with	plot	s of	the	ship	loca	ations	(about	20	out
of 4	₊0 pai	rticipat	ing	ships) pr	ovide	ed by	the	First	Fleet,	we	have
made	e the	follow:	ing f	indin	gs:							

a. Of 158 reports of Navy emitters made by the satellites 122 reports were correlated with ship locations.



TOP SECRET

EXCLUDED FROM AUTOMATIC REGRADING
DOD DIRECTIVE 5200.10 DOES NOT APPLY

CONTROL NO	· · · · · · · · · · · · · · · · · · ·	
COPY	OF	COPIES
PAGE	ΛE	04050

(b)(3)

~Approved for Release: 2022/11/18 C05142193



- b. Individual ships were not successfully tracked from day to day. This was probably caused by the relatively low frequency of observations (about two per day over the 10-day period of the maneuver).
- c. There were more ships in the area than were reported by the satellites; however, the Navy did not maintain detailed ship's logs of radar operating time, so there is no way to be sure whether we saw all the radars that were on the air.
- d. Similarly we cannot account for emitters reported by the satellites but uncorrelated with the ship locations furnished by the Navy. These "extra" reports may be real ships in the maneuver which were not plotted by the Navy.

Plans for Operation ROPEVAL

The next First Fleet exercise, Operation ROPEVAL, begins	
the second week of September and lasts for two weeks. The	
maneuver area extends from Midway across the Pacific to the	
West Coast. Of interest to us, the Fleet Staff will be ashore	
in the FOSIF at Treasure Island. We have direct communications	
from to the FOSIF. Our expectations for this	(b)(1)
exercise are somewhat different from, and shaped by, our exper-	(b)(3)
ience in TANGIBLE, as follows:	

- a. TRIPOS/SOUSEA will cover the Pacific Coast portion of the maneuver area with wide-swath rapid reporting by direct transpond to Vandenberg Tracking Station. No TRIPOS/SOUSEA reports will be available farther West, because we have no rapid reporting capability from Hawaii or Guam for TRIPOS/SOUSEA. We will not be demonstrating the capabilities of URSALA, scheduled for launch next Spring, will have the wide swath with rapid reporting for the entire area.
- b. STRAWMAN IV will participate, but its 200 mile wide swath will not give very comprehensive coverage of the large maneuver area. We can double the number of STRAWMAN accesses by calling up STRAWMAN III from caretaker status for the duration of Operation ROPEVAL at a budgetary increase of \$27,000 per month. Assuming we would need the equivalent of one month's



TOP SECRET

EXCLUDED FROM AUTOMATIC REGRADING
DOD OIRECTIVE 5200.10 DOES NOT APPLY

CONTROL NO	······································	
COPY	OF	COPIES
PAGE 2	OF	PAGES



operation to support this two-week exercise, that would be a small price to pay to show we are interested and doing our best in a good cause.
c. The POPPY site in will have some (b)(1) coverage of the northern part of the maneuver area and will be of use during the operation. In TANGIBLE, POPPY could not see the maneuver area at all.
d. Our initial post-mission evaluations will, like TANGIBLE, emphasize timeliness of reporting as a prime measure of our performance. Our main attention must be on POPPY, which will be in the inventory for some time rather than on TRIPOS/SOUSEA and STRAWMAN, which will not.
e. The First Fleet is planning to maintain a much better data base on ship locations and radar operations. At this stage, however, I am not confident that the post-mission operational evaluation of the satellite data will be very conclusive. We will do our best.
I would like your concurrence on these two recommendations:
First, that we consider the evaluation of TANGIBLE to be complete on the basis of memorandum. (b)(3)
Second, that we call up STRAWMAN III temporarily to participate in ROPEVAL. The attached message from you to Gen Allen implements this decision.
David D. Bradburn Colonel, USAF
Concur MA
Nonconcur
See me

BYEMAN CONTROL SYSTEM

TOP SECRET

EXCLUDED FROM AUTOMATIC REGRADING
DOD DIRECTIVE 5200.10 DOES NOT APPLY

COPY_____OF____COPIES

PAGE____3__OF___3__PAGES