Approved for Release: 2018/11/16 C05114804 TUT DEUNET



(S) NATIONAL RECONNAISSANCE OFFICE

WASHINGTON, D.C.



THE NRO STAFF

15 August 1974

MEMORANDUM FOR GENERAL KULPA

CLASSIFIED BY BYEMAN - 1 EXEMPT FROM GENERAL DECLASSIFICATION SCHEDULE OF EXECUTIVE OPDER 11652 EXEMPTION CATE-

SUBJECT: TAGBOARD Status

At your request I called Gen Marsh, AFSC DCS/Systems, on 5 August 74 and gave him an update on TAGBOARD status. There are 17 TAGBOARD drones and boosters along with B-52H modification kits which went into storage in July 1971. Some of the boosters are as much as 18 months older. was no cannibalization and they were configured for long-term storage, but there have been no operational checks. nominal timeline for activation would be 9 months for B-52H modification and 12 to 18 months for TAGBOARD electronics checkout, booster test, and navigation/guidance check-out and retrofit.

This conversation was unclassified, based on a common understanding, but I also gave him the following nominal TAGBOARD performance parameters over the secure phone in the AFSC vault:

> Mach 3.3 85-95,000 ft cruise 3,000 NM range 400 lbs payload

Gen Marsh had discussed his study with Gen Helson and had concluded even before my call that TAGBOARD was probably not appropriate to his purpose. He was, however, interested in any B-52Hs that may have been modified for TAGBOARD and their present disposition, since they might be more quickly adaptable to another drone. The following





day, I was able to give him the following information on the two aircraft which had been modified:

Tail Number	Assigned To
021	SAC Wright-Patterson AFB
036	SAC Kelly AFB (in work)

Gen Marsh appreciated this information and said that he would follow it up. He did not need any additional TAGBOARD information and I did not give Gen Marsh any cost data. However, in response to my initial question, the program office has made an ROM cost estimate for activation of 19 TAGBOARDS and two B-52Hs. The average cost over the program would be \$3.33M per TAGBOARD and \$2.5M per B-52H, and the first normal availability would be 14-18 months after go-ahead. With TAGBOARD reliability and payload modifications, the total program cost, not including operations and support, would be something like \$80M.

I do not know of any further action required.

HAROLD P. WHEELER JR. Colonel, USAF

cc: L/C Alser



CLASSIFIED BY BYENAN 1 I EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE DI
EXECUTIVE ORDER 11652 EXEMPTION CATE

CONTROL NO INTERNAL COPY 1 OF 2 COPIES PAGE 2 OF 2 PAGES

BY ZMAN CONTROL SYSTEM

TAGBOFID Drone

PRO È 2 a (1)



The TAGBOARD drone is a supersonic, high altitude drone designed for photographic reconnaissance. The drone cruises at a speed of Mach 3.3 and altitudes above 95,000 feet with a range capability of 3000 nautical miles.

Prior to 30 July 1966, three successful drone launches had been made from the Mach 3.2 M-21 carrier aircraft. However, due to the costs and problems associated with acquiring a third launch aircraft, a study was made to determine a new launch platform. The most promising alternative technique is to launch the drone from a B-52 diagonal station. On 30 July, the unsuccessful launch of the fourth drone and subsequent destruction of the carrier aircraft occurred. The prior study and the aircraft accident make it desirable to propose a new TAGBOARD program.

The new program will use the B-52 as the carrier aircraft. The D-21 drone, configured to attach to the B-52 wing pylon, will be fitted with a modified Project Appollo Command Module Escape Rocket. Upon release from the B-52, the rocket, which delivers about 30,000 pounds of thrust for about 70 seconds, will boost the drone from Mach 0.8 at 40,000 feet to Mach 3.0 at 95,000. The drone ramjet will then be ignited for the cruise portion of the reconnaissance mission. Recovery of the payl and critical subsystems of the drone will be with a C-130 much the same as our present satellite systems.

The orimally drone characteristics are:

Weight, empty

5,300 pounds

Weight, launch

10,500 pounds

Weight, rocket

9,530 pounds

HANDLE VIA

TAGBOARD
TO STUDENT

EXCLUDED FROM AUTOMATIC REGRADING
DOD DIRECTIVE 5200.10 DOES NOT APPLY

 CONTROL NO
 COPIES

 PAGE
 OF
 PAGES

Approved for Release: 2018/11/16 C05114804



BYEMAN CONTROL SYSTEM

Cruise speed

3.3 Mach

Cruise altitude

95,000 feet

Range

3,000 nm

Camera

1.5 feet ground resolution

28 x 3000 nm

5600 exposures

Initiation of this program has not been approved. An operational capability will be available approximately one year from program "go-ahead."

STATE CONTROL STATE

TAGBOARD
TO SEONET

EXCLUDED FROM AUTOMATIC REGRADING
DOD DIRECTIVE \$200.10 DOES NOT APPLY

Approved for Release: 2018/11/16 C05114804

CONTROL NO_		
COPY	OF	COPIES
DACE	0.5	