

~~TOP SECRET~~

~~(S)~~ NATIONAL RECONNAISSANCE OFFICE
WASHINGTON, D.C.

THE NRO STAFF

26 January 1968

MEMORANDUM FOR COLONEL WORTSMAN

SUBJECT: Paper Mapping from Satellite Photography by Dr. Doyle

I believe this paper should not be released for publication because it indicates the present National Reconnaissance Program programs much too accurately. There are only a few items which are clearly derived from classified information, such as the fact that [REDACTED] from aircraft (page 3). There are other facts which only a person who is thoroughly acquainted with the NRP would be aware of to the degree this paper shows. For example:

- (1) The discussion of resonant altitudes on page 5.
- (2) The fact that the minimum practical altitude is 80 NM, as mentioned on page 5.
- (3) The fact that stellar photography is necessary and feasible.
- (4) The fact that the Mark 5 recovery vehicle can be used to return film from orbit is clearly indicated.
- (5) The present practice of deboosting spacecraft from orbit is indicated on page 15.
- (6) The climatology problems are accurately described on page 18.
- (7) The use of thin base film is also mentioned on page 18.

There are several other incidental comments such as the fact that the proposed EROS system would have a resolution of 5.4×10^{-7} to 1.08×10^{-6} radians. This exceeds the definition of a reconnaissance sensor. The justification, while concentrating upon North America, also indicates that

~~TOP SECRET~~

EXCLUDED FROM AUTOMATIC DOWNGRADING
AND DECLASSIFICATION SCHEDULES

1002
12591/68
COPIES OF 2 OF 2
PAGE 1 OF 2 PAGES

~~TOP SECRET~~

~~CONTROL SYSTEM~~

the economic analysis should consider coverage of South America (page 19), and it is pointed out on page 21 that 1:24,000 control can be obtained anywhere in the world by the use of the proposed system.

[REDACTED]

ALBERT W. JOHNSON
Major USAF

[REDACTED]

~~TOP SECRET~~

EXCLUDED FROM AUTOMATIC DOWNGRADING
AND DECLASSIFICATION UNLESS INDICATED OTHERWISE

1002-12599/68
CONTROL NO. [REDACTED]
COPY 2 OF 2 COPIES
PAGE 2 OF 2 PAGES