Approved for Release: 2019/07/30 C06639865

3.3(h)(2)
6.2(d)

TOP SECRET

2 November 1964

MEMORANDUM FOR: Chief, Special Operations Division

SUBJECT: Project OXYGAS

1. This report is submitted for information only. Per attachments 1 and 2, the nature of the Project and its progress to date are such that broad spectrum attention to it may be indicated at a later date.

2. Project OXYGAS was conceived for the purpose of exploring feasibility of utilizing the bottle-nose dolphin (Tursiops truncatus) in underwater attacks against enemy shipping. SOD/NE and ORD/LS (DDS&T) are co-sponsoring OXYGAS with ORD/LS having contracted ($97,870) through [redacted] for the exploration plus providing technical guidance and SOD/NE providing the necessary operational input.

3. At the outset, the OXYGAS concept and the modest investment were considered more than justifiable providing feasibility could be demonstrated to deliver a simulated weapons package over an open sea distance to a propeller of a moored PT boat. Obviously, if the PT boat attack system can be developed, many spill-over areas of interest will then appear feasible such as: attacks on varieties of ship types; harbor and coastal reconnaissance through photographic means; specialized ELINT functions; certain types of resupply operations; placement of sonar, acoustic, and seismic buoys; placement of rocket detection units, and RF, UV, BW, CW sensors and trace element collectors.

4. As is known, the Agency and the Navy have spent considerable time and money developing swimmer delivery systems to accomplish these same purposes with the end-product being of marginal effectiveness at best.

5. As a matter of interest, it is estimated that the combined Agency/Navy annual costs in maintaining marginally effective swimmer attack systems run in excess of five million dollars for the swimmers and specialized equipment alone. This estimate does not include support shipping or outfitting costs. Not an inconsiderable factor in a manned system is the physical danger to the man in exposing himself to an unnatural environment with or without the additional hazard of enemy action.

132245 - Series B

TOP SECRET

Copy 2 of 4

GROUP 1
Excluded from automatic downgrading and declassification

XERO COPY

Approved for Release: 2019/07/30 C06639865

Approved for Release: 2019/07/30 C06639865

6. Progress to date with OXYGAS has been so encouraging that it is now deemed appropriate to invite high level attention to the project. If, as expected by both OSD/LS and SOD/MB, feasibility of the use of dolphins in this fashion can be demonstrated, guidance and support of moderate magnitude will be required if the concept is to be transformed from a technical feasibility stage to an operational system.

7. Assuming feasibility is demonstrated, SOD/MB feels the OXYGAS concept should be developed into an operational system. In this context it should be understood that the dolphin cannot be expected to completely replace the man in the water. The dolphin should, however, be expected to obviate the need for a major portion of our man-effort with a resultant considerable short and long-range dollar saving and many other advantages.

Chief, Maritime Branch
Special Operations Division

Attachments:
1. Memo
2. Book

Distribution:
1-3 - C/SOD
4&5 - MB/SOD

182245
3 of 5

XERO COPY XERO COPY XERO COPY XERO COPY XERO COPY

Approved for Release: 2019/07/30 C06639865