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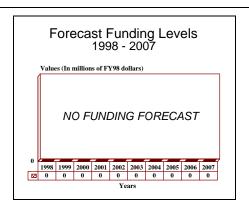
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Intelligence Engineering - Archived 1/99

Outlook

- Foreign material acquisition program to keep abreast of electrooptical developments
- Known funding ended in FY1995
- Most details classified
- THIS REPORT WILL BE DROPPED NEXT YEAR, 1999



Orientation

Description. This Intelligence Engineering program supports US Navy electro-optical development efforts to keep up with foreign systems of interest.

Sponsor

US Navy

Naval Air Development Center

Warminster, Pennsylvania (PA)

USA

(Projects R0809, Z0772)

Naval Ocean Systems Center

San Diego, California (CA)

USA

(Project R0809)

Naval Research Laboratory

Washington, DC

US A

(Projects R0809, Z0772)

Naval Ship Research and Development Center

Carderock, Maryland (MD)

USA

(Project Z0772)

Naval Surface Warfare Center Silver Spring, Maryland (MD) USA

(Project R0809)

Naval Surface Weapons Center

Dahlgren, Virginia (VA)

USA

(Project Z0772)

Naval Underseas Systems Center

Newport, Rhode Island (RI)

USA

(Project Z0772)

Naval Underwater Weapons Systems Engineering Station

Keyport, Washington (WA)

USA

(Project Z0772)

Naval Weapons Center

China Lake, California (CA)

USA

(Projects R0809, Z0772)



Naval Weapons Support Center Crane, Indiana (IN) USA (Project Z0772)

Pacific Missile Test Center Point Mugu, California (CA) USA (Project Z0772)

Contractors

Vought Aircraft Co 9314 Jefferson Street Dallas, Texas (TX) 75211 USA Tel: +1 214 266 2011 (Project Z0772) **Status.** Specific publicized program funding appears to have ended in FY95. As this program is classified, it is likely that much of the work is hidden within various other programs.

Total Produced. Not applicable as this is a technology development and evaluation program.

Application. This US Navy program develops unique equipment packages capable of collecting and analyzing information about foreign-employed electro-optic hardware, as well as the acquisition and exploitation of other foreign weapons and sensor systems.

Price Range. Indeterminate due to the developmental and evaluatory nature of this program.

Technical Data

Operational Characteristics. In the past, this program, PE#0604761N Intelligence Engineering, has consisted of two projects.

Project R0809 Sensor Development. This project develops unique equipment packages capable of collecting and analyzing information about foreign-employed electro-optic hardware. The purpose is to obtain finegrained intelligence information and scientific and technical data for use in developing countermeasures against electro-optical threats. Project R0809 assists in the development of the Tactical Optical Surveillance System (TOSS) and in work on a family of laser detector/interceptor systems. It appears to be related to efforts designated as CLUSTER LION and CLUSTER MERMAID.

Originally, the project was titled Electro-Optical Sensor, but changed beginning in FY95. This may coincide with the fact that funding for Project R0809 had ceased for a number of years only to start-up again in FY95. Prior to this reactivation, FY90 was the last major funded year and appeared to have marked the completion of this particular project. While FY91 listed US\$21,000 in funding, such an amount was really too small for this project to be considered still active. Most likely the funding in FY91 was used to complete some minor loose ends. No further funding had been authorized until FY95. After FY95, funding again ceased to be listed.

<u>Project Z0772 Foreign Material Acquisition/Exploitation.</u> This project provides high-leverage cost benefits through the acquisition of foreign weapon and sensor systems and the subsequent evaluation of those systems to determine potential vulnerabilities and countermeasures. Program descriptions are very heavily sanitized, but technology areas of interest appear to include micro-electronics, lasers and computers. Earlier budget documents stated that this project deals with developing specialized equipment and purchasing such foreign devices and manuals as are appropriate and available, to exploit ex-Soviet and other foreign weapons, sensors and countermeasures.

While this project was known to be still active up through FY94, and showed a jump in funding for FY91 (possibly as a result of the Persian Gulf War and the US's need to acquire foreign military equipment in order to learn how to combat it), its contents have become highly classified with no detailed program descriptions, accomplishments, or plans being published for FY91 through FY97.

However, judging from the funding authorizations, this project looks like it came to an end in FY94 with only US\$341,000 allocated that year. No funding has been requested or allocated for FY95. As in other projects, this low amount was probably for tying off a few loose ends. If the foreign material acquisition/exploitation concept is to be kept alive, it will most likely be absorbed into other existing programs. The only other information available on funding is the change in project number from T0772 to Z0772.

Variants/Upgrades

This program provides data that would be used to upgrade the capabilities of US Navy systems.

Program Review

Background. The original mission of PE#0604761N Intelligence Engineering was to develop improved naval intelligence equipment to meet the threat of the expanded then-Soviet (now Commonwealth of Independent States) fleet, including laser detector/interceptors and specialized equipment for exploitation of adversary weapons, sensors and countermeasures. Also supported under this program element were development efforts related to portable document destruction devices, security cabinet destruction devices and microform/microfiche/magnetic tape destruction devices. Since then, the focus appears to have shifted to addressing the full spectrum of possible threats, including the use of equipment manufactured by US allies.

Three earlier projects funded under this heading, Project P0246 Anti-Compromise Destruct System, Project T1459 Foreign Materials Acquisition, and Project X1797 Special

Sensors, have now either been completed or combined with other projects. Project 0246 efforts during FY84-85 included development of two portable document destruction devices, a security filing cabinet destruction device, a microform destruction device and a magnetic tape destruction device, along with a dual solvent manually-operated microfiche destruction system.

US Army and US Air Force developments were monitored for applicability to these efforts. PE#0603522N Advanced Submarine Surveillance Equipment Program and PE#0603792N Surface Electromagnetic/Optical Systems (Advanced) were ongoing advanced engineering development programs related to Project R0809.

Funding

The last mention of the US Navy's PE#0604761N Intelligence Engineering being funded was in FY95 for \$3.941 million. Major funding for Project R0809 appears to have been completed in FY90 with FY91 showing minor funding at US\$21,000 to complete some odds and ends. However, after a few years with no funding, Project R0809 seemed to have been reborn with an allocation of US\$3.94 million in FY95. This reactivation of the project could have been due to the proliferation of quiet diesel-electric submarines being bought by many Third World navies. Unfortunately, after FY95, funding once again disappears, probably back into the realm of "black projects."

Recent Contracts

Due to security considerations of this program, there is very little, if any, detailed and specific contract information available.

Timetable

FY83	Document Destruction Device contract awarded.
FY85	Document Destruction Device entered service.
FY88	Completed CLUSTER MERMAID and CLUSTER LION development. HY-2 and possible C801
	fragments recovered from Persian Gulf and countermeasures developed and provided to
	COMIDEASTFOR.
FY95	Project R0809 reactivated.
FY96	Program reverted to "highly classified" with little public information available.

Worldwide Distribution

While this is a **US Navy** program, there is foreign content in the sense that foreign systems are being evaluated. However, due to the classification of most of the details concerning this program, it is not possible to say whether there is any reciprocity, i.e., feedback from the US Navy to the manufacturer of the system involved.



Forecast Rationale

This program, Intelligence Engineering, tends to come and go with the existing political climate. By FY96, no funding is listed for either Project Z0772 or Project R0809. Most likely they have been absorbed into other existing programs, for three reasons: one, as a result of

budget cuts; two, as a redirection of objectives; and three, as a further means of maintaining secrecy through the time-honored means of burying a program within a program until the time or need is right to once again bring it to the surface as its own line item in the budget. The

information level will continue to be low-key as the need to counter sophisticated foreign systems becomes increasingly critical, thus making secrecy even more imperative.

The classified nature of this program has made it difficult to evaluate. However, its budget funding history does offer a bit of insight, if the usual historic trends hold true. The severe drop in funding from the millions to a paltry few thousand is normally a sign of a program coming to an end. If the concept of foreign material acquisition/exploitation, especially for this specific US Navy project, holds true, it most likely will be relabeled or absorbed into other existing programs.

The reemergence of FY95 funding for Project R0809 was interesting. As there is a need to keep abreast of the latest generation of threats through acquisitions and evaluation of numerous foreign weapons and sensor systems, it is noteworthy that this project would be reactivated at the same time as Russia begins to sell off its submarine fleet to anyone who can come up with hard cash.

Iraq's invasion of Kuwait in 1990 and the Persian Gulf War dramatically underscored the need for the US Navy to keep current with foreign weapon systems and sensors. The Iraqi inventory included weapon systems from a wide range of countries, from the Eastern Bloc/Soviet Union to France and Brazil.

Ten-Year Outlook

The forecast chart has been omitted. THIS REPORT WILL BE DROPPED NEXT YEAR, 1999.

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