DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, D.C. 20350

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MEMORANDUM FOR THE CHAIRMAN, COMPUTER SECURITY WORKING
GROUP, UNITED STATES INTELLIGENCE BOARD
SECURITY COMMITTEE

Subj: Problem Areas in the Automatic Data Processing
Environment

Ref: (a) IBSEC-CSWG-M-2 dated 2 Jul 1968

1. In response to reference (a), the following Navy
problem areas within the ADP environment are identified:

    a. <u>Multi-level, remote terminal ADP installations</u>.

        The ADP security area of greatest concern to the
Navy, and for which the first priority of effort is
recommended, concerns those problems generated by third
generation computer equipment with its online, remote
terminal, time sharing and multi-level capabilities.
Specific problem areas include:

        (1) <u>Protection at Boundaries</u> - to insure that no
information is passed to or accepted from any portion of
the system at a security level not commensurate with the
certification of that portion of the system. (Should
include a determination of the acceptable level of risk
for failure of this security function.)

        (2) <u>Identification of classification</u> - an
adequate means of notifying users of the classification
level of the information furnished to them by the system.

        (3) <u>Receipting</u> - to include a method (i.e., a
log of transactions) indicating that classified informa-
tion provided any user by the system.

        (4) <u>Certification</u> - the procedure for certifying
a multi-security level system and the requirement for re-
certification when changes in the hardware or software
occur.

        (5) <u>Remote devices</u> - the physical security and
access control required at remote input and output device
installations.

(6) <u>Inadvertent dump</u> - the protection necessary against intentional tampering, spurious altering or loss of data.

b. <u>Collateral problems</u>.

Associated with those security problems unique to multi-level, remote terminal ADP installations are security problems also common to earlier computer systems. These problems have already been solved or resolved by the Navy out of necessity, and it is recommended that initially they be examined in connection with the multi-level, remote terminal problem. Policy developed could then be applied to other ADP systems when more effective security is provided or when uniformity in security measures between the various government agencies is desired. These collateral security problems include:

(1) Downgrading and declassification of discs, drums and tapes

(2) Personnel access control

(3) Security identification of stowed data

(4) Contracting for computer services

(5) TEMPEST

(6) Marking of output

(7) Stowage of tapes, drums and discs

Very respectfully,

ROBERT C. ALLEN
Navy Member
Computer Security Working Group

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