THE WHITE HOUSE
WASHINGTON

7 May 1962

MEMORANDUM FOR MR. GILPATRIC

Enclosed herewith is copy of a memorandum which I have forwarded to the
President.

MAXWELL D. TAYLOR

Attachment
7 May 1962

MEMORANDUM FOR THE PRESIDENT

Subject: Work Being Done on the Permissive Link

In my visit to AEC installations last week, I looked into the status of the work in developing devices (the "permissive link") to prevent the unauthorized use of atomic weapons. There are two centers of activity, one at Sandia Corporation, the other at the Livermore Laboratory.

Sandia Corporation is presently concentrating on a limited but relatively simple solution directed primarily at protecting Jupiter missiles deployed in Europe from unauthorized use. The Sandia people have developed a simple combination lock device which will be ready for installation in Jupiters next fall and could be used in other -- but not all -- existing weapons systems. While it appears a feasible way to guard against deliberate misuse, it does not undertake to protect against tampering or sabotage -- it merely imposes a two to four hour delay on an intruder capable of disassembling the warhead.

The Livermore Laboratory scientists have been working on a much more sophisticated, long-range solution which will protect against both misuse and tampering. It takes into account many contingencies -- an ally seizing a weapon, the action of a psychotic attempting to fire one, a saboteur bent on firing the weapon or rendering it inert, the theft of a complete weapon. Obviously, when all these factors are cranked in, the solution must be complex. This complexity is increased by the need for a special communications net to assure that the code gets to the weapon in time. The Livermore system will take several years to perfect, after which it can be built into new weapons but is not adaptable to retrofit old weapons.

I mentioned in another memorandum the apparent need for more precise guidance in the weapons field for the AEC installations. This need exists also with regard to the development of this permissive link. The work thus far is being done at the initiative of the scientists at Sandia and Livermore who have set their own objectives.
and criteria. To work with maximum effectiveness they need to know such things as the performance desired of their permissive devices, the time available to produce them, the weapons systems to be protected, and the point in the chain of command where the permissive code is to be held in custody.

I am passing this memorandum to Secretary McNamara.

MAXWELL D. TAYLOR