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## HEADQUARTERS STRATEGIC AIR COMMAND Offutt Air Force Base Nebraska

27 February 1959

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General Thomas D. White Chief of Staff United States Air Force Washington 25, D. C.

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Dear Tomay:

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Your letter of 18 February which stated your strong personal interest in the area of nuclear safety practices and your concern for complacency due to familiarity, is positively recognized. I certainly agree with your comments, and share your concern. I am taking this opportunity to outline the steps we have taken and are proposing to take to reduce the possibility of inadvertent nuclear explosion.

In the area of aircraft release systems and weapon controls we have made several modifications which require a sequence of positive steps before a weapon can be released either armed or safed.

A positive locking device is provided which mechanically inserts into the mechanism of the U-2 rack. No release system will override this lock. The lock is inserted by the weapon loading crew and the aircrew will not unlock the rack until near enemy territory on a strike mission, or until over a designated ocean weapon jettison area in case of emergency. Protective guards have been installed over exposed cables associated with the weapon release system.

All mechanical and electrical controls in the cockpit that are associated with weapon arming or release are safety wired and sealed in the "off" or "safe" position. Thermonuclear weapons are equipped with a lanyard for extraction of the ground safing pin so that the pins are removed only on a strike mission when the aircraft nears enemy territory.

Aircrew procedures have been changed so that the release system remains locked, with controls safetied, until committed to a strike mission or confronted with an emergency. In case of an emergency, the rack will be unlocked only over a designated ocean weapon jettison area. Weapon jettison over friendly land masses is prohibited.

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Controlled emergency release in a safe configuration is restricted to designated ocean safe salvo areas subsequent to both visual and radar clearance of the impact area. Appropriate crew members certify in writing that they understand and will comply with these policies, and further acknowledge that they understand their moral obligation to dispose of the weapon without endangering life or property. The controls for fuzing option selection and weapon arming also remain safetied until near enemy territory on a strike mission.

In addition to mechanical and aircrew procedure changes, we have established a policy known as the "SAC Two-Man Policy". This policy establishes a requirement that no less than two authorized percons will attend a nuclear weapon when the weapon is in other than secure storage.

The aircraft/weapon configurations I have described are now in use but are not the most desirable from an operational standpoint; therefore, the following proposals have been submitted to replace some of the present mechanical devices.

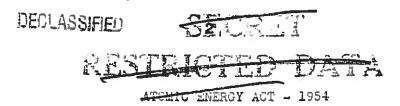
A switch arrangement has been proposed which either permits or prohibits fuzing option selection and arming. This switch requires the aircrew to accomplish two separate functions to arm the weapon. It is our desire that this switch permit the deletion of the requirement for airborne retention of the ground safing pins and lanyard.

Another proposal is to place a system in the unpressurized section of the aircraft for mechanically controlling the rack lock plus a simple connect/disconnect device for all electrical release circuitry.

The missile weapon systems are also being equipped with switch arrangements in the launch circuitry that will provide additional control and safety.

I feel that we are searching every avenue toward reducing the possibility of an inadvertent nuclear explosion, and have taken positive action in all areas of safety where an immediate fix could be taken, without materially degrading our reaction capability, and will continue to do so.

I have personally emphasized to my senior commanders their responsibility for personnel control, particularly crew members and other key personnel. I have also established a study group within this headquarters to define and evaluate the human factors associated with nuclear weapon safety. With the constant emphasis we are placing on nuclear safety and





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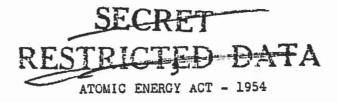
to General Thomas D. White, Chief of Staff, United States Air Force, Ashington 25, D. C.

the excellent work being done by the USAF Nuclear Weapon Systems Study Group, I believe the possibility of an inadvertent nuclear explosion is extremely remote. It is also my belief that we must not lose sight of the need for weapon reliability and quick reaction time in our pursuit of safety but must maintain a point of balance between the two important considerations.

Sincerely,

THOMAS S. POWER General, USAF Commander in Chief

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