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Safety

NUCLEAR WEAPONS AND SYSTEMS SURETY

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This directive implements DoD Directive 3150.2, DoD Nuclear Weapon System Safety Program, 23 December 1996, and establishes the Air Force Nuclear Surety Program. The potential destructive power of nuclear weapons is well known, and all radioactive materials pose hazards if not properly controlled. Nuclear systems require special handling and other protective measures to prevent accidents, unauthorized use, or dangerous exposure. This directive provides policies for managing nuclear weapons and weapon systems, and for protecting personnel, property, and the environment from hazardous exposure to radioactive materials.

SUMMARY OF REVISIONS

Updates the directive to reflect the current Air Force Safety Center organization (para 6.3 and para 7); deletes attachment entitled "Measuring and Displaying Compliance with Policy"; updates attachment entitled "Glossary of References and Supporting Information" (Attachment 1). A bar (|) indicates revised information.

1. The Air Force will ensure nuclear weapons and weapon systems receive special consideration because of their national policy implications and military importance, their destructive power, and the potential consequences of an accident, incident, or unauthorized act.
2. The Air Force will ensure protection of personnel, the environment, and property from undue risk of damage or harm by maintaining risks as low as reasonably achievable (ALARA) consistent with mission requirements. This policy applies throughout the life cycle of all terrestrial reactors, nuclear energy power and propulsion systems, or radioactive sources intended for missile or space use.
3. The Air Force will keep personnel exposures to intrinsic ionizing radiation from nuclear weapons ALARA consistent with mission requirements.
4. The Air Force will establish and conduct programs to maintain the surety of nuclear weapons and weapon systems in Air Force custody; of terrestrial reactors the Air Force owns or operates; and of all nuclear energy power and propulsion systems, or radioactive sources intended for missile or space use.

5. The following responsibilities and authorities are to be derived from this policy:

5.1. SAF/MI will, in accordance with the Secretary of the Air Force Order 103.1, provide guidance, direction, and oversight of all matters pertaining to the formulation, review, and execution of policies, plans, programs, and budgets relative to environment, safety, and occupational health (ESOH) matters. SAF/MI coordination is required before this document is changed, reissued, or rescinded.

5.2. The Chief of Safety (HQ USAF/SE) will oversee nuclear weapons and weapons system surety throughout the Air Force.

5.3. Headquarters Air Force Safety Center (HQ AFSC) will prepare instructions to implement and support this directive.

5.4. Commanders at all levels with a mission related to nuclear weapons and weapon systems will:

5.4.1. Implement and comply with these policies and implementing instructions in their planning, decisions, and operations.

5.4.2. Incorporate maximum nuclear surety, consistent with operational requirements, in their planning, decisions, and operations.

6. Major commands, field operating agencies, and direct reporting units, if applicable, will not issue instructions that complement this policy directive without HQ USAF/SE approval.

7. These policies apply to all Air Force personnel, equipment, and facilities involved with nuclear weapons, nuclear weapon systems, and radioactive materials-related programs, except for Air Force Reserve or Air National Guard units or members, unless they are specified in implementing instructions. Personnel involved with nuclear weapons, nuclear weapon systems, and radioactive materials are responsible for compliance.

F. WHITTEN PETERS
Secretary of the Air Force

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 21-2, Nonnuclear and Nuclear Munitions

AFPD 31-1, Physical Security

AFPD 32-70, Environmental Quality

AFPD 91-2, Safety Programs

AFPD 91-3, Occupational Safety and Health

AFMAN 10-206, Operational Reporting

AFI 11-204, Operational Procedures for Aircraft Carrying Hazardous Material

AFI 36-2104, Nuclear Weapons Personnel Reliability Program

AFI 90-201, Inspector General Activities

AFI 91-101, Air Force Nuclear Weapons Surety Program

AFI 91-201, Explosives Safety Standards

AFI 91-204, Safety Investigations and Reports

Terms

As Low As Reasonably Achievable (ALARA)—A major philosophy of current radiation protection practice which requires that every reasonable effort be made to keep radiation exposures as far below the dose limits as practical when technical, economic, and social factors are taken into account.

BEELINE/FADED GIANT—A reporting flagword used to identify a nuclear reactor system or radiological incident that poses a hazard to life, health, or property.

BENT SPEAR—A reporting flagword that identifies a nuclear weapon significant incident.

BROKEN ARROW—A reporting flagword that identifies a nuclear weapon accident that could not create the risk of war, but meets the following criteria:

Nuclear detonation of a nuclear weapon.

Nonnuclear detonation (no nuclear yield) or burning of a nuclear weapon, nuclear warhead, or nuclear component.

Radioactive contamination from a nuclear weapon or nuclear component.

Jettison of a nuclear weapon or nuclear component.

Public hazard (actual or perceived) from a nuclear weapon, nuclear warhead, or nuclear component.

Custody—The responsibility for the control of, transfer and movement of, and access to nuclear weapons and components. Custody also includes maintaining accountability for nuclear weapons and nuclear components.

NUCFLASH—A reporting flagword that identifies a nuclear weapon system accident that could create

the risk or war. This includes accidental, unauthorized, or unexplained events meeting any of the following criteria:

Accidental, unauthorized, or unexplained actual or possible nuclear detonation by US forces or US-supported allied forces.

Accidental or unauthorized launch of a nuclear-armed or nuclear capable missile by US forces or US-supported allied forces.

Unauthorized flight or deviation from an approved flight plan by a nuclear-armed or nuclear-capable aircraft of US forces or US-supported allied forces that could be perceived as a hostile act.

Nuclear Surety—All functions and activities accomplished to ensure Air Force nuclear systems are designed, developed, operated, maintained, transported, and controlled to provide maximum safety to the public and operating personnel while protecting the environment and maintaining reliability to support mission accomplishment.

Nuclear System—Nuclear weapons, nuclear weapon systems, terrestrial nuclear reactors, and radioactive sources or nuclear energy, power and propulsion systems for space and missile applications.

Nuclear Weapon System Safety Rules—Secretary of Defense-approved procedural safeguards governing all operations with nuclear weapons or nuclear weapon systems.

Nuclear Yield—A nuclear explosion with the equivalent force of 4 pounds of TNT or greater.

PINNACLE/FADED GIANT—A reporting flagword that identifies a nuclear reactor system or radiological accident that poses a serious hazard to life, health, or property.