



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

7 June 2016

MEMORANDUM FOR Administrator, NRC Region IV
ATTN: Mr. Dapas

FROM: AFMSA/SG3PB

SUBJECT: Report, Damage of Radioactive Material – Two SNIPER Pods, Event No. 51946

1. IAW 10 CFR 20.2201(b) (2) (ii), we are providing a written report for the damage of radioactive material. The loss of material was reported on 20 May 2016 telephonically to NRC Operations Center, Event No. 51946 and via E-mail to NRC, Region IV (Ms. Simmons). The following information addresses the reporting requirements:
 - a. Description of the licensed material: The subject devices contained Am-241, two sources, each at 6 micro curie.
 - b. Description of circumstances for damage/loss: On 19 May 2016 at 0830, Bioenvironmental Engineering (BE) was notified of a B-52 aircraft carrying a SNIPER Pod crashed on the flight line of Andersen AFB. A site survey determined that the SNIPER Pod with Serial # 10389, was still intact, but damaged.
 - c. Statement of disposition: The SNIPER Pod was surveyed for radiation, but all readings were at or below background levels. The crash site is cordoned off and patrolled by Security Forces, but no other actions have been taken to secure or abate the hazard. The pod is currently still partially under the B-52 wing and the Safety Investigation Board has not completed their investigation.
 - d. Exposures to individuals: Based on radiological monitoring of similar sources/devices, the estimated level of radiation exposure would be negligible. The NUREG/CR-1156 (Nov 1979) performed analyses of Am-241 foil sources contained in Ionization Chamber Smoke Detectors (ICSD) at three micro curies each. The report stated "Analysis shows that the manufacture, distribution, normal use, and disposal of 14 million Am-241 ICSD's each containing three micro curies of Am-241 will result in a collective total body dose of 1100 person-rem. Disposal is by either sanitary landfill or incineration." Further, the report stated, "Analysis of potential accidents with Am-241 ICSD's showed the dose commitments received by maximally exposed individuals to be significantly within the safety criteria standards required by the Nuclear Regulatory Commission." A comparative review would indicate that exposure from 12 micro curies Am-241 plated sources would not likely exceed public dose standards.
 - e. Actions taken: Once the Safety Investigation Board has completed their investigation and removal of the aircraft has begun, the SNIPER Pod will be moved from the site to a secure location. We will then take additional swipe samples to better determine if it is leaking. It will then be packaged and transferred for repair or disposal IAW all applicable regulations. The POD is belonging to Minot AFB ND under the Permit # ND-00693-00/02 and the inventory would be updated accordingly.

- f. Procedures/measures to rectify future loss: Safety Investigation Board report will be implemented to avoid such future aircraft accidents.
2. If you have any questions, please contact me at 703-681-6871 or E-Mail at ramachandra.k.bhat.civ@mail.mil.

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Senior Health Physicist
USAF Radioisotope Committee Secretariat
AF Medical Support Agency
Office of the Surgeon General

cc:

NRC Region IV (Ms. Simmons)
NRC Operations Center (Mr. Norwood)
PACAF 36 MEDICAL OPERATIONS (Capt Lathbury)
PACAF 36 MEDICAL OPERATIONS (SSgt Lowe)
HQ PACAF/SGPB (Col Caravello)
Minot AFB (Maj Judy)