



DEPARTMENT OF THE ARMY

UNITED STATES ARMY MISSILE COMMAND

REDSTONE ARSENAL, ALABAMA 35898-5000

REPLY TO
ATTENTION OF

AMCSF-P/86-0078
AMSMI-SF

10 June 1986

SUBJECT: Application for Nuclear Regulatory Commission License

51085
6/13/86

THRU: ~~Commander~~
U.S. Army Materiel Command
ATTN: AMCSF-P
5001 Eisenhower Avenue
Alexandria, VA 22333-0001

Stans 12 June 86

TO: U.S. Nuclear Regulatory Commission, Region II
Material Radiation Protection Section
101 Marietta Street, Suite 2900
Atlanta, GA 30323

1. Reference:

a. Meeting conducted at the Safety Office, AMC, on 4 Jun 86, at 1600 hours, with representatives of AMC, MICOM, and Raytheon present. Subject, Krypton 85 Spark Gap.

b. Meeting conducted at the Nuclear Regulatory Commission (NRC), Silver Spring, MD, on 5 Jun 86, at 0900 hours, with representatives of the NRC, AMC, MICOM, and Raytheon present. Subject, Krypton 85 Spark Gap.

2. NRC Form 313, Application for Material License, is forwarded for your review and submission to the Region II Nuclear Regulatory Commission Office. MICOM is seeking a license for the receipt, possession, use and transfer of a spark gap tube which contains a maximum of 250 microcuries of Krypton 85.

3. As discussed in the referenced meetings, this radioactive spark gap was placed in the PATRIOT radar without the knowledge or consent of MICOM. Eighty-two of these spark gaps have been delivered to the Army installed in Driver Tank Assemblies. In addition, there are thirty-one installed in these assemblies which are due to be delivered to the Army in the near future.

4. MICOM has notified Raytheon that the radioactive spark gaps are not acceptable and must be removed and replaced with a non-radioactive substitute. Raytheon is in the process of procuring and testing a non-radioactive spark gap and plans to introduce this spark gap into the production line in Jul 86. Raytheon has stated that it will take up to three years to remove the radioactive spark gaps from the fielded Driver Tanks as well as those due for delivery in the near future. A more definitive plan of the proposed replacement operation will be forwarded to AMC within thirty days.

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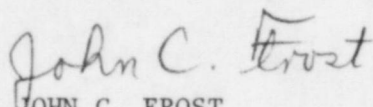
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5. It is MICOM's intention to vigorously pursue the removal of the radioactive spark gaps from the field and replace them with a non-radioactive substitute. A new part number and NSN will be assigned to the non-radioactive spark gap as well as the Driver Tank in which it is installed.
6. A total of 113 spark gaps have been fielded or are in Driver Tanks due to be delivered. In the license application, the total quantity of spark gaps to be possessed at any one time was identified as 125. This number was chosen to allow the Army to continue to accept and use these radioactive spark gaps in the event a non-radioactive substitute cannot be found until the end of Aug 86.
7. The NRC has barred the Army from accepting any more Krypton 85 spark gaps until a license is obtained. This has a significant impact upon national defense. It is requested that this license application be forwarded in an expeditious manner.
8. MICOM - Providing Leaders the Decisive Edge.

FOR THE COMMANDER:

Encl


JOHN C. FROST
Acting Chief, Safety Office