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FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/14/2003

SUBJECT : SAFETY ADVISORY : King Radio Clam Shell Issues

From James Reim, Assistant Safety Manager from the Pacific Northwest Region:

Please distribute the attached safety alert to supervisors of employees who are using King radios. While replacing the older model battery packs with the new ones is the best solution, several people have checked with the manufacturer, and found that clamshells for the new radios are in short supply. If batteries, and the spacer are properly installed, the problem with overheating is not expected to occur. Supervisors need to follow up and ensure their employees understand and follow correct battery installation practices.



Risk Management Committee

United States Department of Agriculture Forest Service Office of Safety and Occupational Health Safety Alert

No. R6 2003-01

Aug 14, 2003

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Subject: King Radio Clamshell Battery Packs

Area of Concern: R6

Discussion:

Recently we have received reports of the hazard of overheating alkaline batteries in clamshell radio packs. In one instance, three batteries exploded sending out a mist of the corrosive material contained inside the batteries and contacts inside the pack melted from the heat of the batteries. In addition to the potential for injury resulting from such explosion, users of these radios could lose needed ability to communicate in the event of an emergency.

The problem results from use of clamshells, which were designed for older radios that needed 10 AA cells, in newer radio models. This is a common practice because many radio users prefer the replaceable AA batteries, which provide convenience when in the field. Ni-cad batteries have better operational characteristics but they are not easily recharged and maintained during field operations. When adapted for new radios, the older packs use 9 AA batteries and a metal clip in the 10th battery space. In the old-style clamshells with the metal insert, the metal insert can create a circuit within the clamshell, causing it to rapidly overheat. Newer packs come with a spacer already installed. The spacer in the newer packs is not totally metal or is metal with a protective coating.

Supervisors should ensure that employees are provided with radios that have battery packs that are designed for, and are compatible with, the models in use. Where it is not feasible to immediately replace older design battery packs that are used on new radios, supervisors should ensure that the users are trained to properly install the batteries, to check the units for defects, recognize problems before a hazardous condition develops, and to correct them. Users should also be trained to understand the nature of hazards associated with damaged batteries, i.e. corrosive properties, and in use of appropriate protective measures, e.g. protective gloves and safety glasses, when handling them.

Please contact your unit radio technician for assistance. If there are questions about this safety alert, contact either of the parties below.

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