MRE SHELF LIFE INFORMATION(From Long Life Food Depot – www.longlifefood.com)

A main concern in the development and testing of rations for our armed forces has always been **SHELF LIFE**. An amazing amount of research has been done in the development of the retort pouch and the MRE to determine the exact length of time and the exact conditions under which it is safe to store the entrees and the side dishes. The main thing we have to work with is the shelf life chart (shown below) compiled by the Army's Natick Research labs. This gives a very good overview and summary of all the findings gathered from all the testing of MRE products. However, it leaves many questions unanswered. Here are additional facts and observations we have gathered about MRE shelf life:

The shelf life ratings shown in the chart below were determined by taste panels, panels of "average" people, mostly office personnel at the Natick labs. Their opinions were combined to determine when a particular component or, in this case, the entire MRE ration, was no longer acceptable.

1) The shelf life determinations were made solely on the basis of **taste**, as it was discovered that acceptable nutritional content and basic product safety would extend way beyond the point where taste degradation would occur. **This means that MREs would be safe and give a high degree of food value long after the official expiration of the products as determined by taste.**
2) MRE pouches have been tested and redesigned where necessary according to standards much more strict than for commercial food. They must be able to stand up to abuse tests such as obstacle course traversals in field clothing pockets, storage outdoors anywhere in the world, shipping under extremely rough circumstances, 100% survival of parachute drops, 75% survival of free-fall air drops, severe repetitive vibration (1 hour at 1 G vibration), 7,920 individual pouch drops from 20 inches, and individual pouches being subjected to a static load of 200 lbs for 3 minutes.
3) Freezing an MRE retort pouch does not destroy the food inside, but repeated freezing increases the chances that the stretching and stressing of the pouch will cause a break in a layer of the laminated pouch. These pouches are made to withstand 1,000 flexes, but repetitive freezing does increase the failure rate by a small fraction of a percent.
4) **MRE Storage Life Chart**