GEORGIA TEKTITES: New Shapes Described Harold Povenmire Florida Institute of Technology 215 Osage Dr. Indian Harbour Beach, FL 32937

About 1300 Georgia tektites have been recovered. Of these, about 175 are in two collections where they can be examined. The Fernbank Science Center in Atlanta has approximately 95 specimens and the Florida Fireball Network has approximately 80 specimens. Recently, four new shapes have been recognized as distinct. These include dumbbells, bars, spheres and half disks. These new groups will be discussed individually

(1) Dumbbells - These are fairly common in Australasian tektites but until 1983, unknown in Georgia tektites. At that time a crude dumbbell was recovered. It wasn't until a second slightly less crude dumbbell was found several years later that it could be certain that this classification was real. Now a third specimen has been identified even though it is broken. This is about 1.0 percent of the total.

(2) Bars-In ths 1970's, a spectacular bar shape tektite was recovered. It was not until several years later that two more nearly equally spectacular specimens were found that this new classfication was recognized. Now it is believed that about 3.0 percent of the Georgia tektites would fall into this category.

(3) Spheres-This shape is extremely common in the philippinites. They are common in the half sphere shape in the bediasites. Until recently, they were unknown in the Georgia tektites. There is now one known specimen. This would be about 0.5 percent.

(4) Half Disks-Disk shaped Georgia tektites are common and comprise about 22.0 percent of all finds. Recently, it was noted that these fell into two classes. The first are disk shaped tektites which are broken by the plow or recently on the Earth. These show a fresh break across the center. The second are disks which broke during their entry into the atmosphere and the two halves had time to remelt and fuse over the fresh break. Since this is the way they fell onto the Earth, these represent a separate and distinct group. About 11.0 percent of the georgiaites fall into this classification.

Each tektite strewn field is distinct. One of the important means of comparing the internal characteristics of a strewn field is to know the shapes and their percentages.

References: Albin, Edward F. Morphology and distribution of 92 Georgiaites Ga. Jor. Sci. 50 113-123. 1992 Povenmire, H. Tektites: A Cosmic Paradox (In Press) 1997.