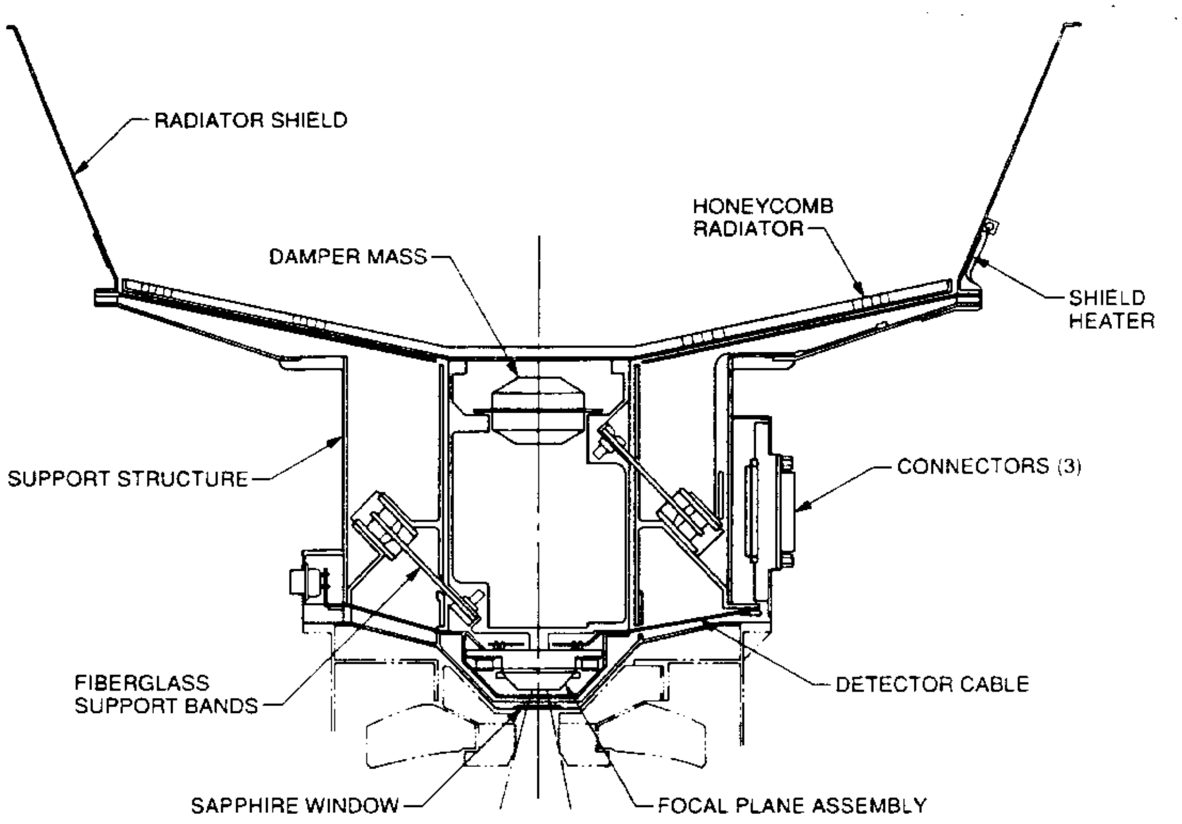

Fig. 6. Radiative Cooler Assembly.

The Focal Plane Assembly (FPA) is thermally coupled to a honeycomb radiator. Operating temperatures of 64 kelvins are achieved by radiation and by minimizing thermal loads to the FPA-radiator stage through use of low thermal conductivity fiberglass support bands and low emittance surfaces. A shield surrounds the radiator plate to block thermal emission from the scan platform and other portions of the spacecraft. The shield can be heated to 300 kelvins in order to avoid contamination of the low-emissivity inner surface of the shield. The outer surface, on the side facing away from the scan platform, is painted with high-emissivity paint to allow the shield to radiatively cool, while the surface facing the platform is thermally blanketed to reduce scan platform radiative loads to the shield. The outer diameter of the shield periphery is ~ 40 cm.