

# **TITLE:** *Thermal protection system of the Space Shuttle's orbiter*

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**Abstract:**

It is the teams view that there is a general lack of awareness of orbiter **tile** susceptibility to **damage** by debris - the same applies to the care and critical nature of the **shuttle** elements and operations process so necessary to minimizing damaging debris - it is essential that all involved employees, both government and contractor, understand that minuscule loose objects or materials coming off the elements will most likely cause some **tile damage** at the speed encountered during ascent. It is recommended that descriptive material, photos, video tape, debris samples and other appropriate matter be assembled and provided to the proper organizations for dissemination to their employees - it should emphasize that the tiles perform outstanding in their debris-free design environment; but, are extremely sensitive to small particle **damage**.

**Major Subject Terms:**

MISSION PLANNING ● SPACE **SHUTTLE** ORBITERS ● SPACE TRANSPORTATION SYSTEM FLIGHTS ● SPACECRAFT SHIELDING ● THERMAL PROTECTION ● TILES

**Minor Subject Terms:**

ASCENT ● **DAMAGE** ● PHOTOGRAPHS ● SPACE DEBRIS ● VIDEO TAPES

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