

Appendix A. TPS Technology Readiness Level (TRL) Guidelines

TRL	Guidelines
TRL-1	Basic principles observed and reported.
TRL-2	Technological concept and/or application formulated, lab samples made, environment for possible application defined.
TRL-3	Analytical and experimental critical function and/or characteristic proof-of-concept, initial test; i.e., arc jet, thermal cycling demonstrate proof-of-concept.
TRL-4	Component and/or breadboard validation in laboratory environment; detailed testing of materials at temperature and under appropriate atmosphere.
TRL-5	Component and/or breadboard validation in relevant environment, such as arc jet for thermal and structural test at temperature environment.
TRL-6	System/subsystem model or prototype demonstration in a relevant environment (ground or space) subjected to adequate testing to demonstrate flight readiness.
TRL-7	System prototype demonstration in a space environment.
TRL-8	Actual system completed and "flight qualified" through test and demonstration (ground or space).
TRL-9	Actual system "flight proven" through successful mission operations.