

NSF 257

PLAN FOR CHAMBER INGRESS DUE TO
EQUIPMENT FAILURE

Purpose:

This supplemental plan is designed to protect test subject health and maintain the necessary existing environmental conditions within the chamber during the SMEAT time frame in the event NASA or contractor personnel must enter the chamber due to equipment failure.

Scope:

This plan pertains to all NASA and contractor personnel.

Justification:

The introduction of pathogens by persons entering the chamber could cause crew illness and result in aborting the SMEAT. Further, the success criteria for the microbiological and IMSS DTO's are partly dependent on maintaining a closed ecology simulating the Skylab conditions.

Objective:

To prevent the introduction of foreign microorganisms especially those of a pathogenic nature into an established closed ecology.

Procedures:

The following procedures must be followed when entering the chamber:

1. No person shall enter the chamber within 72 hours of an illness of an infectious nature.
2. Prior to ingress the person will have a physical exam which will include a nasal and throat culture.
3. Personnel will shower using phisohex.
4. Personnel will dry using a clean, sterile, lint-free towel.
5. Personnel will don sterile, lint-free class 100 clean room apparel. This includes a cap, absolute filter mask (this filter will be so designed to filter air going into the chamber from the personnel wearing the mask), coveralls, gloves, and booties. No portion of the skin can be exposed except that portion of the head not covered by the cap and mask.
6. Steps 1-3 shall be accomplished as near as possible to the chamber.

7. Personnel will enter the air lock and remain until two (2) complete air changes, using sterile air, have taken place.
8. Personnel will enter the chamber and go directly to the failed equipment. Repair personnel will not have access to any area in the chamber except that area necessary to repair or remove equipment. Personnel will not touch any equipment or area except those necessary for repair or removal of equipment.
9. Crewmembers will remain as far away as possible from personnel repairing or removing equipment.
10. As soon as the equipment repair is finished the repair personnel will exit the chamber by the same route as used on entering.
11. If equipment removal is necessary the out going equipment will be removed by the same route used by the repair personnel.
12. If repair personnel exit the chamber with the equipment they must remove the clean room clothing and repeat steps ~~3-7~~ before reentering the chamber.
13. Any equipment entering the chamber must be decontaminated as much as possible and go through step ~~A~~ ⁷ prior to entering the chamber.
14. Under no circumstances will any personnel remain in the chamber with the crew more than four (4) hours without egressing and repeating steps ~~3-7~~.