Rev	ECO	Description	Author	Approved by	Date
A	37-350	Initial Release	M. Gabutti	RFGoeke	01/25/16
B	37-390	Issued new document title and Technical updates to 3.0, 5.0	M. Gabutti	RFGoeke	04/28/16

Massachusetts Institute of Technology
Kavli Institute for Astrophysics and Space Research (MKI)

Cleaning Procedure for Items Entering the Cleanroom

Dwg. No. 99-03004
Revision B
April 14, 2016

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1.0 Preface

Revision A is the Initial Release of 99-03004.

Revision B issued a new title and technical updates to 3.0 and 5.0

2.0 Scope

This document describes the procedure to minimize contamination when introducing items into cleanroom areas used for flight programs at MKI. The items may include engineering or flight hardware products, tools, equipment, materials, or supplies.

3.0 Materials Required

- Isopropyl Alcohol, 99.5% (IPA)
- Cleanroom grade polyester wipes
- UV Light source UVP Model B100Y or equivalent
- UV Safety goggles UVP Model UVC-503 or equivalent
- HEPA Vacuum
- Cleanroom personnel gowning attire

4.0 Personnel Requirements

- Lincoln Lab "Cleanroom operations" or equivalent

5.0 Item Cleaning Procedure

Procedure to prepare items for introduction into the cleanroom:

1. Perform a gross cleaning of the item using IPA wipes prior to entering the gowning area.
    a. Perform a general cleaning on all exposed surfaces.
    b. Ensure the item has no particulate or fiber debris.
2. Transfer the item into the gowning area.
3. Gown into clean room attire.
4. Repeat the item cleaning using IPA wipes in the gowning area
    a. Wipe items in one direction only.
    b. Replace wipes as needed to ensure cleanliness is achieved.
5. Turn on UV light. Wait approximately 5 minutes until bulb is fully warmed.
    a. Put on UV safety goggles
    b. Caution: UV lens is extremely hot, avoid contact.
6. Turn lights off in gowning area.
7. Perform UV light inspection, particulates will appear white under UV light illumination.
8. If item is clean and free of particulates you can proceed to transfer item into cleanroom.
9. If item needs further cleaning continue to next step
10. Turn on HEPA Vacuum. Use UV light and vacuum off the item while looking for particulates. Remove as many particles as possible. Turn off vacuum and UV light when finished
11. Turn lights on in gowning area.
12. Transfer the item into the cleanroom.
    a. When possible, do not place items on the floor.

6.0 Materials Prohibited Inside the Cleanroom

- Pencils
- Non-cleanroom towels/wipes

- Non-cleanroom paper/notebooks
- Non-cleanroom carts/racks
- Unnecessary personal items, including phones out of pocket
- Excessive cosmetics or perfumes
- Packing materials or containers
- Food and drink
- Particle or fiber generating items