

# Artemis Moonbase Simulation One c/o The Moon Society

P.O. Box 940825 Plano, TX 75094-0825

MissionWeb: http://www.moonsociety.org/moonbasesim/

## MoonSkin™ Mechanical Counter-Pressure Suit Principal Investigator: William Fung-Schwarz

#### Goals:

- 1. Create a realistic analogue simulation of a Mechanical Counter-Pressure (MCP) suit [first described by: Webb (1967, 1968); Annis & Webb (1971); Hargens et al. (1987); Aratow et al. (1993)] and currently being developed by F.A. Korona and D.L. Akin (at the University of Maryland) and Dava Newman (Massachusetts Institute of Technology).
- 2. Collect descriptive and subjective data from 1-2 users of the MoonSkin MCP about comfort, utility of manual dexterity, and temperature of suit.

## **Suit Description**

- 1. Body: Mens 3/2mm Tilos Titanium Skin Chest Full Suit Jumpsuit Wetsuit (Model #J3020, size 3XL)
- 2. Hood: Standard/Unisex 6/3 Scuba Diving, Snorkeling, Water Sports Hood w/ Vent (Model #H6010BK, size XL)
- 3. Inner Footwear: NRS HydroSkin® Neoprene Socks (Black, Large, Item 722203)
- 4. Outer Footwear: La Sportiva Latok (TRK) Boots (US size 12)
- 5. Hydration: Camel Pack Rogue (70 oz/2 litres, Item 720121)
- 6. Protection: Black Diamond Bod Climbing Harness (size XL)
- 7. Helmet: BMW/Shoei RF-1000 Helmet (large, with clear visor)
- 8. Forced Air Apparatus/Ventilation: Coleman Quickpump Rechargeable (Model 5999C400)

#### **Estimated Suit Cost**

- 1. Body: \$67.99 (purchased from all3sports.com)
- 2. Hood: \$19.95 (purchased from all3sports.com)
- 3. Inner Footwear: \$33.00 (purchased from REI)
- 4. Outer Footwear: 250.00 (purchased from Campmor.com)
- 5. Hydration: \$45.00 (purchased from REI)
- 6. Protection: \$60.00 (purchased from Black Diamond)
- 7. Helmet: (borrowed) estimated cost \$200.00
- 8. Ventilation: \$32.00 (purchased from Gart Sports)

### **Future Upgrades**

- 1. Helmet: Reevu Rear-view mirro helmet (http://www.reevu.com/)
- Ventilation: 3M™ Belt-Mounted Powered Air Purifying Respirator (PAPR) GVP-Series

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