

DESIGNING THE SOCIO-TECHNICAL & ECONOMIC PROTOCOLS
FOR INCLUSIVE OFF-WORLD SETTLEMENT

**Commercial Training and Operational Frameworks for the Human-Robot
Civilizational Shift**

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The Core Socio-Technical Risk

The Unaddressed Risk of Autonomous Pre-Formation

- The Stated Vision: Deploying fleets of humanoid robots to autonomously prepare planetary surfaces for human arrival.
- The Core Danger: Pre-forming infrastructure and autonomous environments without embedded human values or inclusive co-design.
- The Imperative: As the Moon becomes our primary proving ground, we must build a new "Socio-Technical Stack" to ensure hybrid societies are built by a broad humanity, not just automation.

The Fallacy of Autonomous Pre-Formation

Designing Together, Deploying Together


The Industry Consensus vs. The Reality:

- The Old Plan: Sending hundreds of autonomous robots ahead to colonize the Moon or Mars in isolation.
- The Structural Risk: Pre-forming environments through closed automation entirely detached from human operational realities.
- The Strategic Shift: HRI must be co-designed with humans, on-site, at the exact locations where they will live and work together.

Re-Architecting HRI Education & Workforce

Democratizing HRI for the New Economy and Operating at the Speed of "New Space"

- The Workforce Mandate:
- Breaking the Lab Barrier: Transitioning HRI out of isolated academic labs and into active organizational workforces.
- Educational Evolution: Developing immediate, scalable training programs to create entirely new professional titles and career paths.
- The Operational Model: Synergizing on-site physical interaction with distributed, online oversight.



Space Psychology & Hybrid Collaboration

The Human Layer at the Center

Key Frameworks:

- **AI and Robotics as Collaborators:** Machine intelligence acts as an environmental translator and operational assistant—not a human replacement.
- **The Rise of Space Psychology:** Mitigating the unique psychological strains of isolation and deep-space operations through structured machine synergy.
- **Continuity of Remote Work:** As communication topologies and rapid transit systems advance, highly integrated remote teams will serve as the primary lifeline for frontier crews.



The Off World Transition Protocol: Actionable Training & Services

The Off World Transition Protocol (OWP) Framework

The Operational Suite:

- The Athena Initiatives: Elite Orbital Systems Leadership training programs designed to prepare human crews for mission-critical, autonomy-integrated environments.
- Human-Intelligent Systems Architecture (HISA): Our proprietary organizational design service that stabilizes corporate governance and operational protocols before automation expands.
- Frontier Operational Integration Sprints: High-velocity, short-cycle operational sprints (not design sprints) where distributed teams prototype latency-tolerant, resource-aware workflows under real-world constraints.

Orbital Leadership & Planetary Evolution

Orbital Leadership: Navigating the Pattern

Core Tenets:

- Shifting focus away from legacy terrestrial conflicts toward planetary-scale awareness.
- Operating with a grounded mindset that places Humanity at the absolute center.
- Preparing the diplomatic and cultural protocols required for eventual peaceful contact with other civilizations.

Closing & Personal Contact Details

The Future of Work is Orbital

Partner with Emerging Technologies Sweden to train your teams for the hybrid frontier.

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