ANKHET STATION BRIEF

The underground lunar station Ankhet, located on the dark side of the moon, opposite Earth, has the following overview and notations:

1. **Location**: Ankhet is situated underground on the moon's far side, providing natural protection from solar radiation and micrometeorite impacts. Its position opposite Earth ensures minimal interference and enhanced privacy for operations. It is covertly positioned to make it difficult to view from lunar orbits, based within an unspecified crater.
2. **Stability**: The base is designed on a pattern of hydraulic and magnetically anchored pieces that allow for adjustment of modular pod elements in the case of lunar quakes and orbital and station event anomalies.
3. **Capacity**: Designed to accommodate a team of fifty individuals, Ankhet includes living quarters, workspaces, laboratories, recreational areas, and emergency shelters, all optimized for long-term habitation.
4. **Environmental Systems**: The station features fully contained environmental systems, including advanced air filtration and recycling, water purification, and waste management. These systems are integrated into a closed-loop system, allowing for indefinite operation without resupply from Earth.
5. **Gravitational Systems**: Artificial gravity is generated throughout the station using sophisticated gravitational control technology, ensuring that the crew experiences a stable, Earth-like environment.
6. **Self-Sustaining Operations**: Ankhet is equipped with self-sustaining systems, including hydroponic and possibly aeroponic gardens for food production, renewable energy generation (likely combining nuclear and advanced solar technologies), and robust life support systems, making it entirely independent.
7. **Energy Containment Center**: The station's energy containment center stores and manages power generated from various sources. The system is designed to handle the fluctuating energy demands of a remote, self-sustaining station on the moon's far side.
8. **DELTA System**: The station is managed by the newly designed DELTA system, which provides centralized control over all operational aspects, ensuring efficient and reliable functionality.
9. **GILEAD Station Integration**: The Ankhet station incorporates the recently annexed GILEAD station, which includes critical AI systems like Oracle. This integration enhances the station's capabilities, particularly in research, communication, and security.

These features collectively make Ankhet a highly advanced and autonomous lunar station capable of supporting human life and operations on the moon's far side for extended periods.

Technical Specifications

Base Mass: 768,750 tons

Base Size: 127,640 meters squared of usable space

Living Quarters: Each person has quarters of a minimum of 5 square meters, averaging 12 square meters for personal space, including sleeping, storage, and personal hygiene facilities.

Workspaces and Laboratories: Allocated 2,000 square meters allocated for research labs, control centers, and work areas.

Recreational and Common Areas: Allocated 1,750 square meters (10,764 square feet) for dining, exercise, and social interaction.

Life Support Systems: Around 580 square meters for water, air recycling, and waste management systems.

Hydroponic and Atmosphere Foliage: Around 2,750 square meters for agricultural and atmospheric support.

Storage and Equipment: Approximately 1,625 square meters for food reserves, supplies, equipment, and spare parts.

Energy Management and Power Generation: Approximately 525 square meters for the HOURGLASS energy generation pods and power control facilities.

Artificial Gravitational Network: Allocated 300 square meters for the deployment of three artificial gravity wells which utilize mass density accelerators to create a effect of approximately 98% Earth gravity.

Power Requirements

- **Daily Power Consumption**: Estimated to be 1,950 kW, accounting for life support, lighting, heating, communication, and operational systems.
    - **Life Support**: Approximately 200 kW to maintain air, water, and temperature control systems.
    - **Research and Laboratories**: Approximately 200-400 kW for scientific equipment, data processing, and experimental setups.
    - **Energy Generation**: The base would likely need a robust combination of limited fission and HOURGLASS quantum reactors.
        - **Solar Power**: Supplemented by covertly place reflectors and solar panels on the lunar nexus, generating an additional 200-300 kW during the lunar day.
    - **Energy Storage**: Advanced battery supercapacitor networks capable of storing several MWh of energy to ensure constant power supply during lunar nights or emergencies.

Life Support Systems:

  - **Air Recycling**: Oxygen production via electrolysis of water or chemical methods, with carbon dioxide scrubbers to maintain air quality.
  - **Water Management**: Closed-loop water recycling systems that filter and purify water for drinking, hygiene, and food production.
  - **Waste Management**: Advanced waste processing to minimize waste and recycle materials as much as possible.
- **Radiation Shielding**: The underground structure provides natural radiation protection, but additional shielding using regolith (lunar soil) or specialized materials may be required for particularly sensitive areas.
- **Thermal Control**: Active and passive thermal management systems to regulate temperature, using radiators and heat exchangers to dissipate excess heat into underground channels.
- **Communication Systems**: High-bandwidth communication arrays for close communications, while ANSIG quantum channel through ORACLE for Lunar-to-Earth communications.
- **Structural Integrity**: The base must withstand moonquakes and potential impacts, requiring reinforced structures and possibly adaptive dampening systems. Magnetically channeled loci throughout the base allow it to shift with lunar ground movements without damaging attached modules.
- **Transportation and Access**: Airlocks and EURYPODES Suits allow extra atmospheric and externally based movement.
- **Autonomous Systems**: The DELTA system and AI-driven management to ensure operational efficiency, including maintenance, environmental monitoring, and emergency response.
- **Food Production**: Hydroponic or aeroponic gardens to supply fresh produce, supplemented by stored rations and potentially synthetic food production systems.

Governance and Administration

The Ankhet base is a private facility operated with the support of AEGIS and Ferrotech Corporation. Commander Simon Dawkling is the base administrator and direct control of subsections and duties assigned to those subsections is handled through regular meetings of the administrative leadership group.

- **Staff Composition:** Staff has been comprised of specific members hired through the Daedalus Foundation and from Ferrotech technical groups. AEGIS has members assigned for support and to provide official oversight and security presence.
- **Staff Responsibilities:** Staff members must all work 52 hour weeks, with additional duties as assigned based on immediate base Red Level requirements.
- **Red Level Duties:** Duties designated as "Red Level" have the highest and most immediate priority, and are only to be designated as such of the base's immediate survival is dependent on them.

Purpose

The Ankhet lunar base, designed by the Daedalus Foundation in collaboration with Ferrotech, serves a dual purpose. It is both a hidden sanctuary for Quasars—individuals with extraordinary abilities—and a strategic outpost to safeguard Earth from threats at the Quasar level, including those posed by rogue Quasars and potentially hostile governmental actions.

Key Purposes of Ankhet:

1. **Haven for Quasars**: Ankhet provides a secure and isolated environment where Quasars can retreat, train, and recover without external interference. This sanctuary is particularly important for those Quasars who are at risk of being targeted or exploited by governments, corporations, or other entities.
2. **Defense and Protection**: The base operates as a command center for monitoring and countering threats that could endanger Earth. This includes not only Quasar-level threats but also any aggressive actions from governments that could lead to large-scale conflicts or abuses of power involving Quasar technology or capabilities.
3. **Research and Development**: Ankhet also serves as a hub for advanced research and development in Quasar-related technologies, including defensive systems, medical treatments, and environmental control technologies that can be used to protect and preserve life both on the moon and Earth.
4. **Strategic Autonomy**: By being located on the far side of the moon, Ankhet is out of direct reach of Earth-based powers, granting it a level of autonomy that is critical for its mission. This isolation allows the base to operate independently, free from external control, while still being able to observe and, if necessary, intervene in Earthly affairs.