



TRANSCENDENCE:

the act of rising to a superior state



TRANSCENDENCE... Why?

Global crop and bio-diversity is critical to humanity's ability to survive and thrive. If our food supply collapses, civilization will follow. We must invest the human and economic resources to protect it...

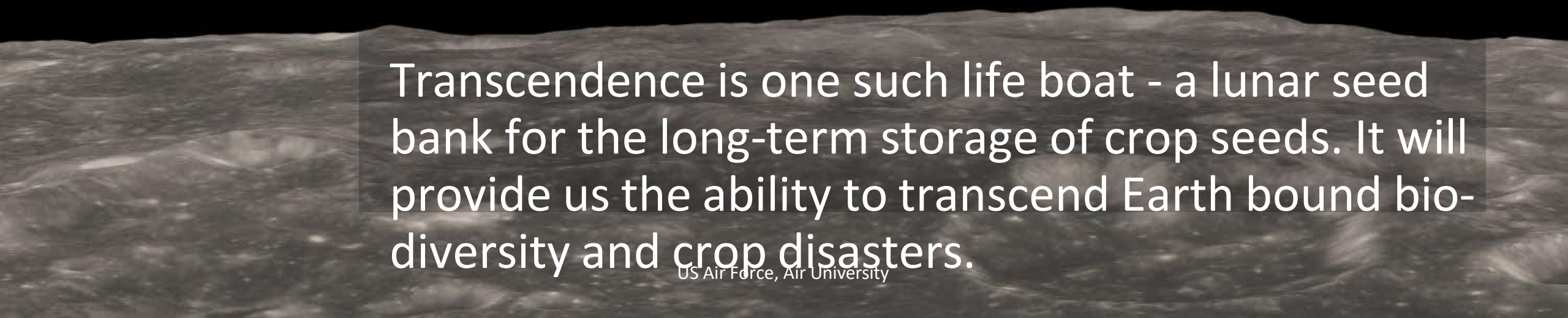
TRANSCENDENCE... How can it be done?

An international partnership of governmental, commercial, non-profit, and academic institutions will leverage available technology, talent, and capital to bring Transcendence to reality...

TRANSCENDENCE... A life boat



Colonization of space can provide the ultimate protection against human extinction. Until we achieve this, prudence requires we strategically place “life boats” for humanity.



Transcendence is one such life boat - a lunar seed bank for the long-term storage of crop seeds. It will provide us the ability to transcend Earth bound biodiversity and crop disasters.

Current crop protection efforts

Global Crop Trust has done tremendous work building a robust system to preserve global crop diversity.

Efforts include crop conservation, gene banks, seed banks, and funding a supporting endowment.



Threats

Terrestrial storage solutions continue to be exposed to Earth bound disasters.

Over a long enough time-line these seed banks are likely to encounter:

- War
- Terrorism or sabotage
- Natural or man-made disaster

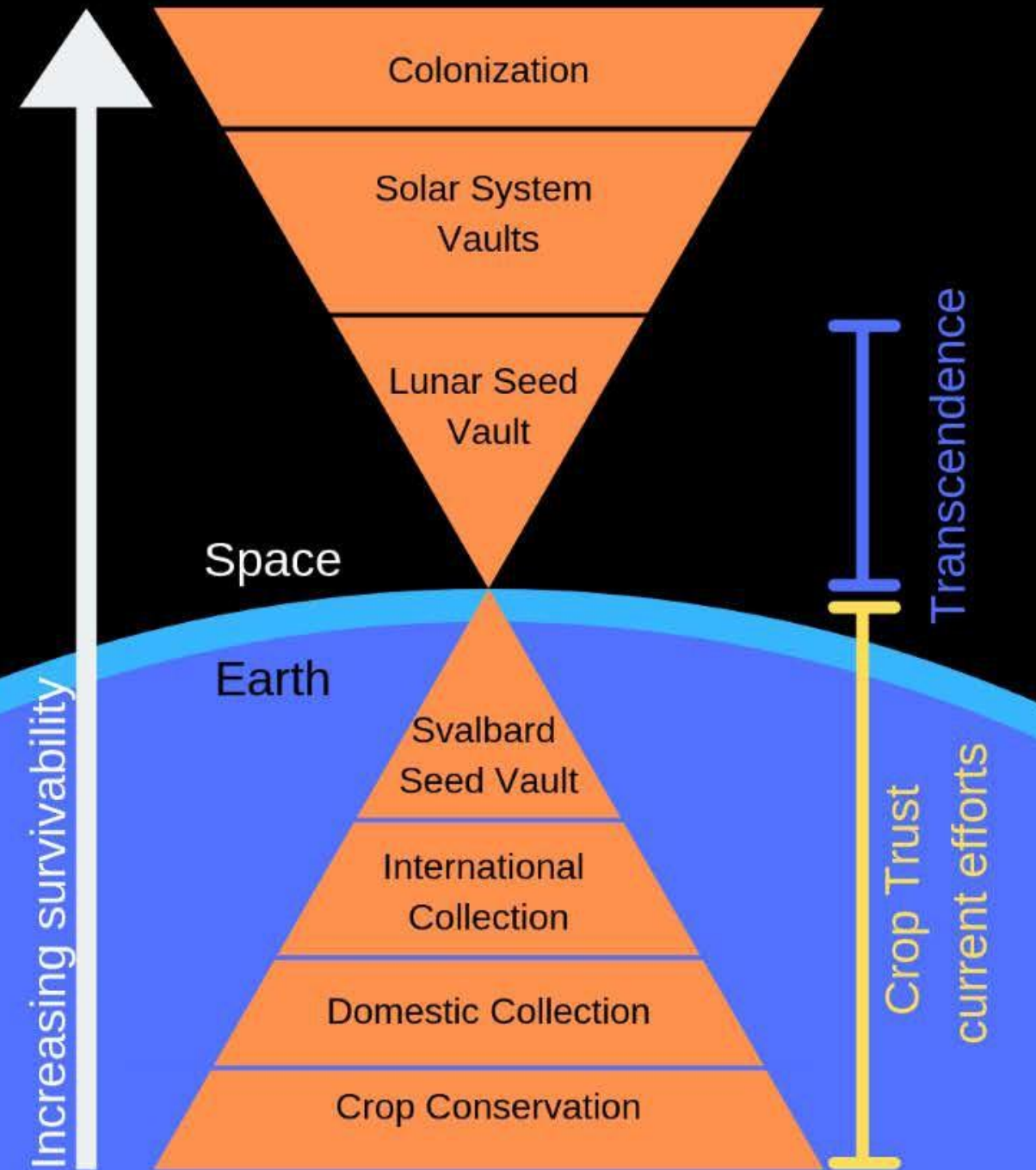
Off Earth seed banks can provide virtually infinite separation from these threats.

Beyond Earth

Transcendence will expand on the work Crop Trust has already done on Earth by placing seed vaults on the Moon.

After establishing lunar seed banks, we can look towards placing vaults throughout the Solar System to provide further protection until we colonize.

US Air Force, Air University



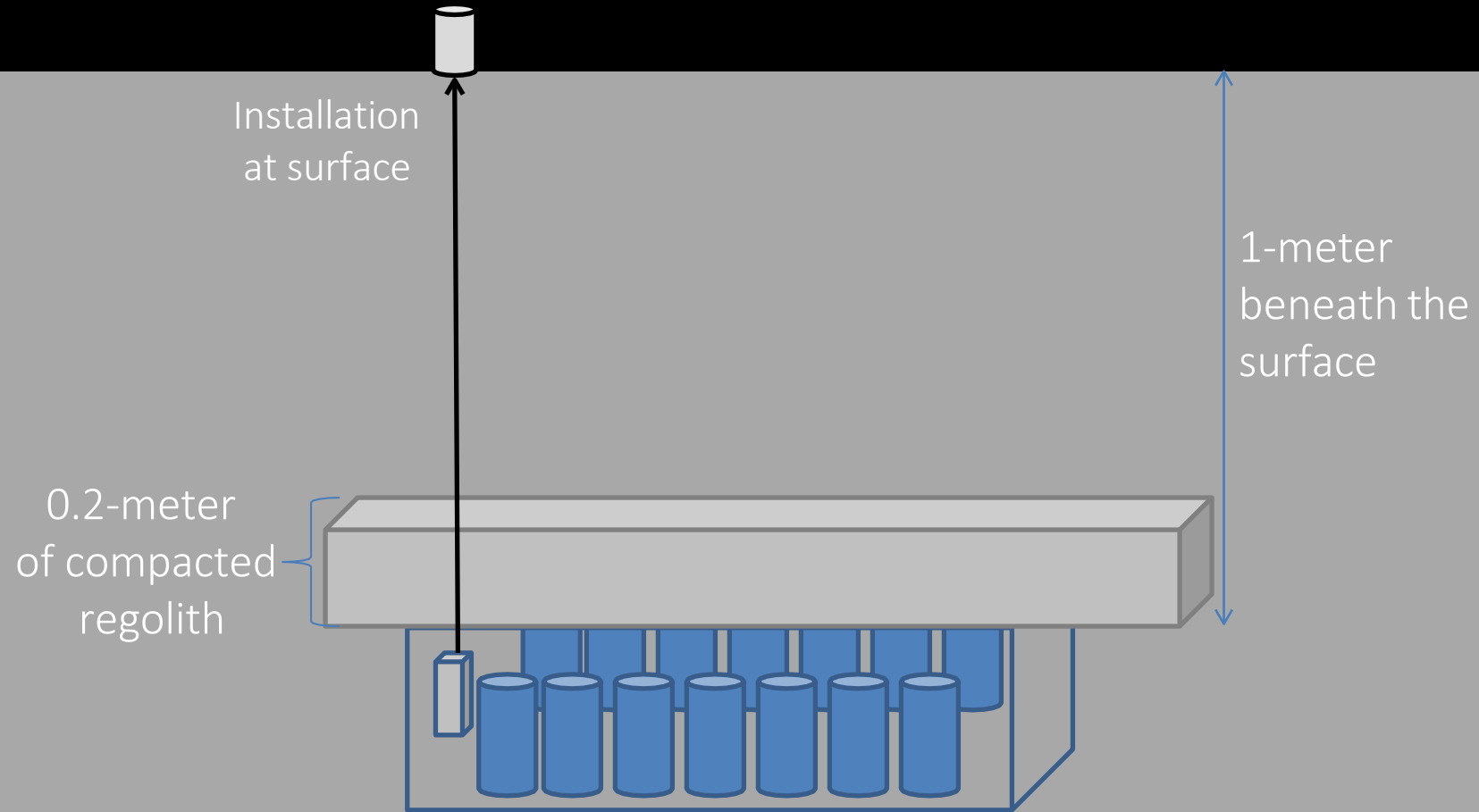
TRANSCENDENCE Lunar seed vault

The temperature one meter below the lunar surface is ideal for seed storage.

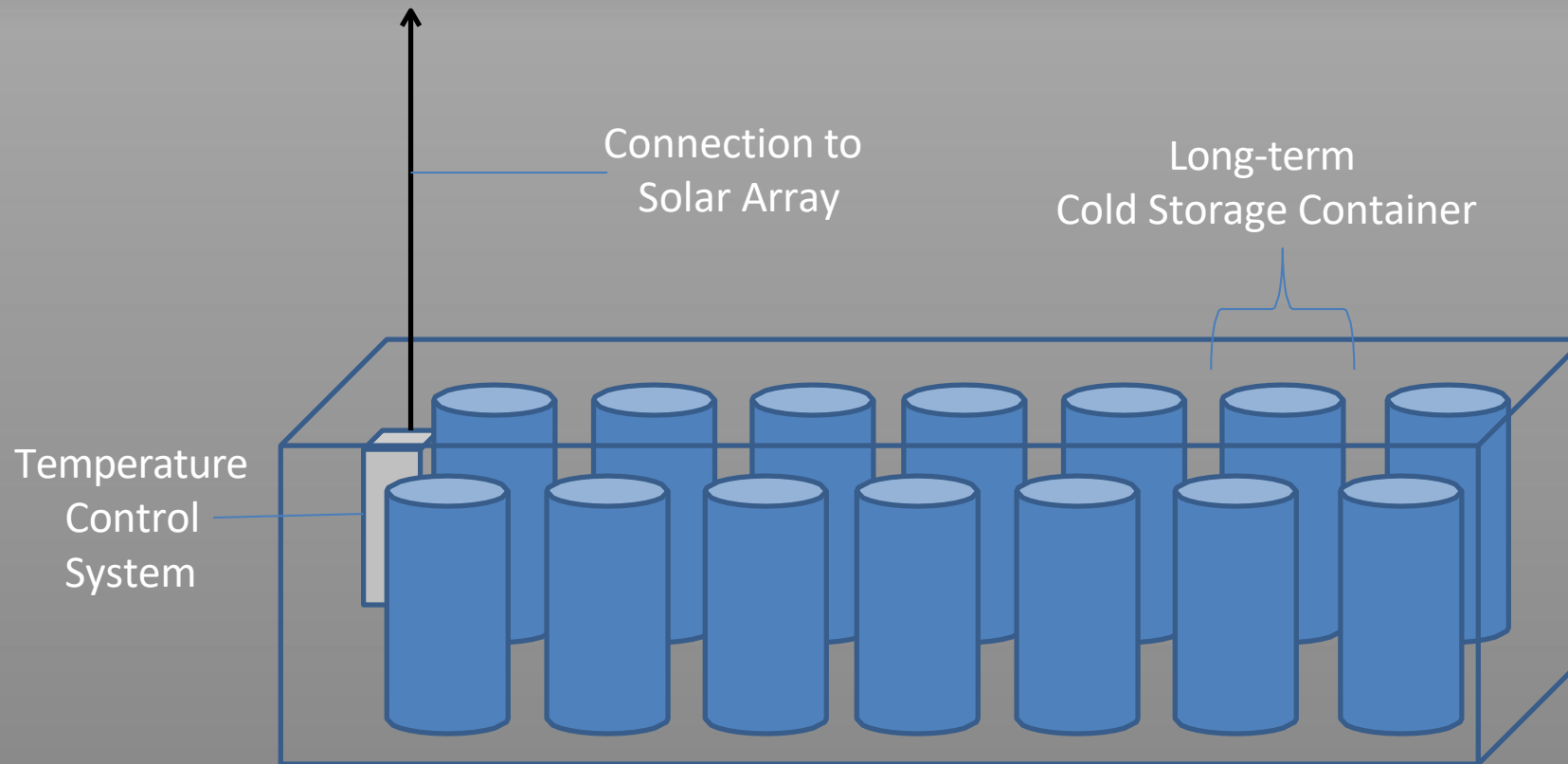
Robotic rovers can be flown to the Moon and used to stage the seeds and support equipment.

Support equipment could be solar powered or possibly harness “Moon tremors” for power.

Seed vault placement



Seed vault module concept



Seed modules will be assembled, loaded and sealed on Earth and delivered to the Moon

TRANSCENDENCE project formation

The Transcendence project is in the earliest stages, but is moving rapidly. Air University is currently searching for partners to make this vision a reality.

We aim to have gathered the core partners, establish the custodial organization, and publish the project roadmap.

Follow on activities will include a global system design challenge, construction, and launch.

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