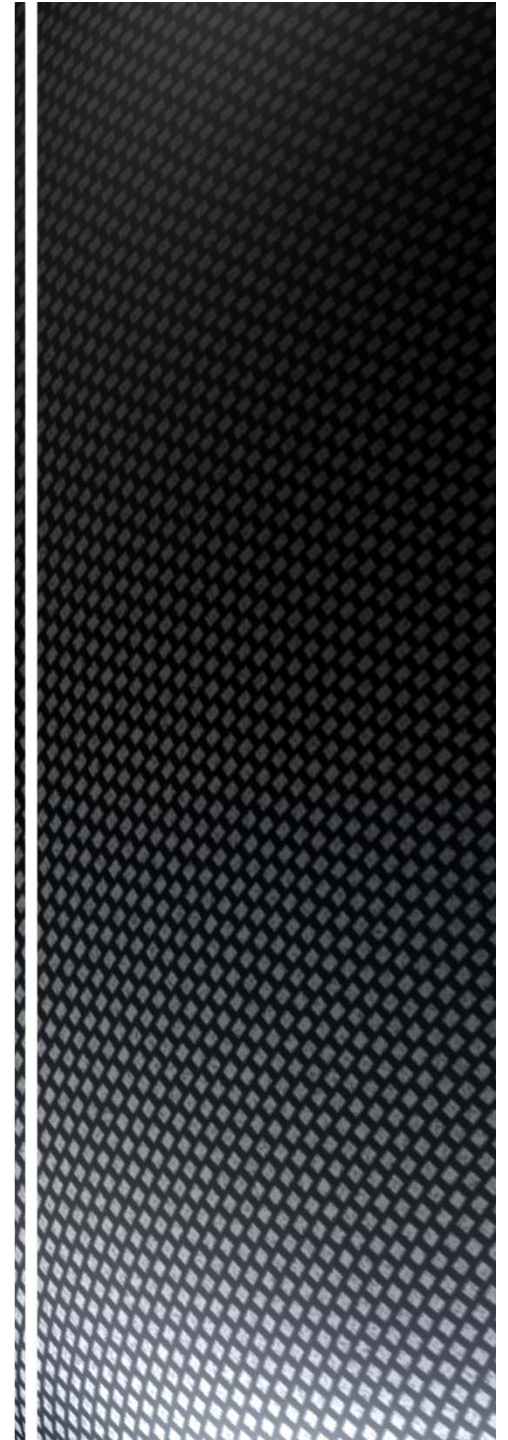


# What to Expect When Your Workplace is in Deep Space

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Individuals willing to undergo years of training to spend months in a small, cramped combination living / work space with little or no privacy with 3-5 other crew members physically present and multiple support personnel monitoring, directing or discussing everything that goes on for 24 hours a day, every day. Months of routine maintenance and repair work in addition to scientific exploration. Potential for life threatening emergencies and unknown dangers.

## A Potential Job Advertisement



- Applicants must be capable of remaining calm and focused under routine and emergency conditions and perform required tasks as directed regardless of physical or emotional challenges that may occur during the Mission.
- Applicants need a variety of skills and the ability to retain, improve and add to scientific, monitoring, repair and maintenance capabilities needed to operate and maintain the vehicle and perform duties needed to make the Mission successful.

## Job Description



- Applicants should be aware of the need to adapt to working under the following conditions:
  - Weightlessness
  - Maintenance and repair work performed in same space used for routine work and living and with other crew members in vicinity
  - Spares and tools are not replaceable
  - Emergency conditions could occur at any time and would be life threatening
  - If any crew member is unable to work, the rest of the crew would need to perform their tasks
  - The Mission is carefully planned, but reality does not usually go as planned
  - Changes in Mission phases create different working environments and new challenges

## Working Conditions



- Applicants must be willing to accept the following aspects of their living conditions:
  - Food, water and air are limited and must last for the entire trip. There are no convenient re-fills if you run out or lose any portion of your supplies.
  - Continuous light and acoustical issues
  - Little or no privacy 24 hours a day, every day
  - Medical concerns or emergencies must be addressed with what is available
  - Leaving the interior is inadvisable, since space is a hostile environment for humans

## Living Conditions



- Applicants should be aware that some physiological changes will occur due to prolonged exposure to weightlessness. These include, but are not limited to:
  - Visual
  - Changes in fluid locations, sinus issues and other irritations
  - Potential bone loss
  - Radiation concerns
  - Muscular changes
  - Sleep issues

## Physiological Changes



- People fall into routines and stop paying as much attention to details
- Constant vigilance is hard to continue for months or years
- Close quarters and no privacy affects working relationships
- Sleep issues, fatigue, feeling off, or added work when others are incapacitated affects the quality of work performed
- When constantly repairing systems or expecting danger becomes routine people react differently to future events

People are prone to making more mistakes when subjected to these conditions and environments during long Missions

## Effect of These Conditions and Environments on Job Performance



How the crew performs will affect the Mission; we need to know more to ensure success.

## Summary

