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“Mission Mastermind” Glossary Words

Acronym (n.) – A word formed from the initial letters of a name or compound term, such as ‘**WAC**’ for **W**omen’s **A**rmy **C**orps or ‘**radar**’ for **r**adio **d**etecting **a**nd **r**anging.

Altitude (n.) – The distance between an object and the earth's surface.

Cleanroom (n.) – A room housing sensitive equipment, such as delicate optics and precision electronics, that cannot be contaminated with dust. Cleanrooms are 10,000 times cleaner than a hospital operating room. Such cleanliness is incredibly hard to achieve and maintain. Huge air filtration systems completely change the air in cleanrooms about 10 times per minute. People working in cleanrooms must wear special dust-free clothing.

Cryocooler (n.) – A miniature refrigerator designed to cool spacecraft instruments to very low temperatures. The system’s coolant is often a super-cooled gas, such as liquid nitrogen or liquid helium.

Cryogenic (adj.) – Of or relating to the production of very low temperatures.

Electromagnetic spectrum (n.) – The entire range of wavelengths of the electromagnetic radiation, from radio waves, to infrared, visible and ultraviolet light, to X-rays and gamma rays.

Field of view (n.) – The amount of sky visible through a telescope.

Infrared (IR) light (n.) – A region of the electromagnetic spectrum not visible to the human eye. This spectral region is analogous to sounds that are too low for the human ear to hear. Waves of IR light are slightly longer in length and slightly lower in frequency than those of visible light. IR light can be detected as the heat from a fire or light bulb.

Instrument (n.) – Any device that measures and records energy from astronomical objects.

Manifest (n.) – A list of activities to be accomplished, which are sometimes ranked in order of priority.

Nebula (n.) – A general term used in astronomy to indicate any light or dark patch of the night sky that is “fuzzy,” or not sharply defined, as a star or planet would be.

Orbit (n.) – The path a satellite takes around a celestial body.

Radiation (n.) – All wavelengths of the electromagnetic spectrum, including radio, infrared, visible, ultraviolet, X-rays, and gamma rays.

Retrofit (v.) – To provide with new equipment or parts that were unavailable at the time of original manufacture or construction.

Spectrometer (n.) – An instrument that divides light into its array of colors and records the information.

Switch-out (n.) – The process of replacing an old, outdated instrument or piece of equipment with an updated version.

Ultraviolet (UV) light (n.) – Situated beyond the visible region of the electromagnetic spectrum. Its location on the spectrum is analogous to sounds that are too high for the human ear to hear. Waves of UV light are slightly shorter in length and slightly higher in frequency than those of visible light. On Earth, too much UV light causes sunburns.