

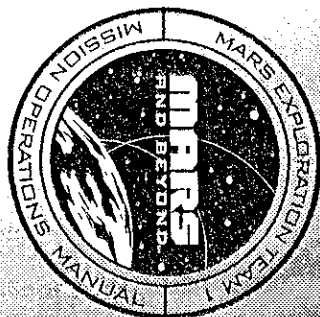
PREPARE TO LIVE THE ADVENTURE!  
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**SURFACE LANDMARKS:**

**VALLES MARINERIS:** THE "GRAND CANYON" OF MARS, 2,280 MI.  
 (4,480 KM) IN LENGTH, 3 MI. (4.8 KM) IN DEPTH, EQUIVALENT IN  
 SIZE TO AN IMAGINARY CANYON RUNNING FROM LOS ANGELES TO  
 NEW YORK CITY. BELIEVED TO HAVE BEEN CREATED LONG AGO WHEN  
 WATER RUSHED UP FROM FAR BENEATH THE MARTIAN CRUST.  
**OLYMPUS MONS VOLCANO:** THE LARGEST OF MANY VOLCANOES  
 ON MARS. MEASURES 16 MI. (25.6 KM) IN HEIGHT AND 374 MI.  
 (598.4 KM) IN DIAMETER AT ITS BASE. IT IS 100 TIMES LARGER  
 THAN THE MAUNA LOA VOLCANO IN HAWAII.



STANDARD ISSUE SYSTEM COMPONENT:  
**CMS MISSION COMMUNICATORS.**

**MISSION SCHEDULE**

	DURATION (EARTH YEARS)	DISTANCE (MILLIONS OF MI./KM)
PHASE 1: FLIGHT TO MARS	0.5	250 / 400
PHASES 2/3: PLANETARY/DEEP SPACE EXPLORATION	1.5	...
PHASE 4: RETURN FLIGHT TO EARTH	0.5	250 / 400
<b>TOTALS:</b>	2.5	500 / 800

## SECTION 1: MARS EXPLORATION MISSION PROFILE

YOU HAVE BEEN SELECTED TO BE A MEMBER OF THE MARS EXPLORATION TEAM, AN ELITE GROUP OF ASTRONAUTS AND MISSION SPECIALISTS WHO WILL CARRY OUT THE FIRST HUMAN INTERPLANETARY EXPEDITION - A MANNED MISSION TO MARS. THIS IS THE FIRST OF MANY MISSIONS IN THE MARS COLONIZATION PROGRAM. THE OBJECTIVES OF YOUR MISSION WILL BE TO EXPLORE AND RESEARCH THE PLANET TO DETECT THE EXISTENCE OF LIFE, EITHER PAST OR PRESENT, AND TO GATHER SCIENTIFIC DATA TO BE USED ON FUTURE MISSIONS TO MARS.

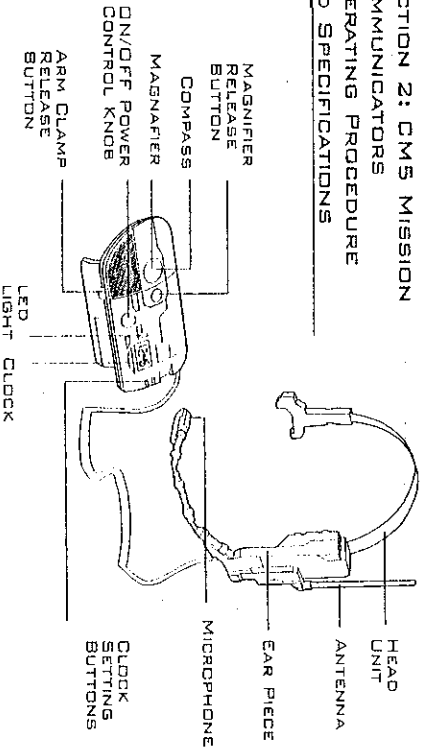
## THE MARTIAN METEORITE:

IN 1984, A 180 MILLION-YEAR-OLD METEORITE WAS DISCOVERED IN ANTARCTICA. EARTH'S SOUTHERN ICE CAP. THE METEORITE IS BELIEVED TO HAVE ORIGINATED FROM MARS. MINERALS FOUND IN THE ROCK ARE SIMILAR TO THOSE FOUND ON MARS. THE SPECIMEN ALSO CONTAINS AIR VERY MUCH LIKE THE AIR MEASURED ON MARS. SOME SCIENTISTS BELIEVE THAT EVIDENCE OF MICROBACTERIAL FOSSILS ON THE METEORITE PROVIDE PROOF OF ANCIENT EXISTENCE OF LIFE ON MARS.

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## SECTION 2: CMS MISSION COMMUNICATORS OPERATING PROCEDURE AND SPECIFICATIONS



## PHYSICAL FEATURES:

**POLAR REGIONS:** NORTH POLE BELIEVED TO CONSIST OF ICE. SOUTH POLE BELIEVED TO CONSIST MAINLY OF FROZEN CARBON DIOXIDE, AND NEVER MELTS COMPLETELY.

**COLOR OF SURFACE:** SURFACE APPEARS RED DUE TO PRESENCE OF IRON OXIDES(FeO<sub>2</sub>), COMMONLY CALLED RUST, IN SURFACE MINERALS, CAUSED BY EXPOSURE TO ATMOSPHERIC OXYGEN.

**COMPOSITION OF PLANET INTERIOR:** SIMILAR TO EARTH'S - A THIN CRUST OF SILICATE, A MANTLE AND CORE OF IRON AND SILICON.

**COLOR OF SKY:** PINK, DUE TO PRESENCE OF RED DUST IN THE ATMOSPHERE.

**COMPOSITION OF ATMOSPHERE:** MAINLY CARBON DIOXIDE, VERY LITTLE OXYGEN; CANNOT SUPPORT HUMAN LIFE WITHOUT ARTIFICIAL MEANS.

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FCC ID: N9BSV-5005

STATS:

DIAMETER: ABOUT 4,200 MI. (6,720 KM).  
DISTANCE FROM EARTH: 35,000,000 MI. (56,000,000 KM) AT CLOSEST ORBITS.  
DISTANCE FROM SUN: 141,000,000 MI. (225,500,000 KM). EARTH IS 92,000,000 MI. (147,200,000 KM) FROM THE SUN.  
DURATION OF DAY: ABOUT 1.03 EARTH DAYS.  
HIGHEST RECORDED TEMPERATURE: 68°F (20°C).  
LOWEST RECORDED TEMPERATURE: MINUS 220°F (MINUS 104°C).  
AVERAGE RECORDED DAYTIME TEMPERATURE: MINUS 81°F (MINUS 27.2°C).

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MARS: "THE RED PLANET"

FACT: MARS IS THE FOURTH PLANET FROM THE SUN.  
FACT: OF THE NINE PLANETS IN OUR SOLAR SYSTEM, MARS IS THE MOST SIMILAR TO EARTH.  
FACT: THERE ARE TIMES DURING EARTH'S ORBIT OF THE SUN WHEN MARS IS THE CLOSEST PLANET TO THE EARTH.  
FACT: MARS IS ABOUT HALF THE SIZE OF EARTH.  
FACT: THE ENVIRONMENT ON MARS IS LIKE NOTHING ON EARTH. THE MOST IMPORTANT OBJECTIVE WHEN HUMANS REACH MARS IS SURVIVAL.

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THE DMS MISSION COMMUNICATORS HAVE BEEN SPECIALLY DESIGNED TO KEEP YOUR HANDS FREE FOR EXPLORING.

1) PRESS THE BUTTONS ON THE SIDES OF THE WRIST UNIT TO OPEN THE ARM CLAMPS. PLACE THE WRIST UNIT ON YOUR LEFT ARM AND SQUEEZE THE CLAMPS CLOSE AROUND YOUR ARM. REMEMBER TO GET A GOOD SNUG FIT SO YOUR COMMUNICATOR DOES NOT FALL OFF WHILE YOU ARE EXPLORING. (DRAWING)

2) PLACE THE HEAD UNIT ON TOP OF YOUR HEAD. THE EAR PIECE WITH THE SPEAKER GOES OVER YOUR LEFT EAR. ADJUST THE HEAD STRAP TO GET A SNUG FIT. BEND THE WIRE TO POSITION THE MICROPHONE IN FRONT OF YOUR MOUTH. (DRAWING)

BATTERY INSTALLATION:

- 1) REQUIRES ONE (1) 9 VOLT BATTERY (NOT INCLUDED)
- 2) TURN THE ON/OFF KNOB TO THE OFF POSITION.
- 3) TO OPEN THE BATTERY COVER, SLIDE THE BATTERY COVER IN A DOWNWARD MOTION TO RELEASE THE DDOR.
- 4) TO INSTALL 9-VOLT BATTERY OBSERVE THE BATTERY POLARITY BY MATCHING THE SNAP ON THE CONNECTOR WITH THE PROPER SNAP TERMINALS ON THE BATTERY. USE CARE

NOT TO BEND THE CONNECTOR TERMINALS. PUSH THE BATTERY CONNECTOR FIRMLY ON THE BATTERY. REINSTALL THE BATTERY COVER.

5) INSTALLATION OF BATTERIES SHOULD BE DONE BY ADULT. DO NOT MIX NEW & OLD BATTERIES. DO NOT MIX ALKALINE, OR STANDARD (CARBON-ZINC) OR RECHARGEABLE (NICKEL-CADMIUM) BATTERIES.

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- 3) THE POWER CONTROL KNOB ON THE WRIST UNIT IS THE ON/OFF AND VOLUME CONTROL. ROTATE THE KNOB COUNTERCLOCKWISE TO TURN ON THE CMS MISSION COMMUNICATOR. AN LED WILL LIGHT UP TO INDICATE THE COMMUNICATOR IS ON. (DRAWING)
- 4) YOUR COMMUNICATOR ALSO FEATURES A COMPASS FOR DIRECTIONAL ASSISTANCE, A MAGNIFIER TO EXAMINE SPECIMENS AND A CLOCK TO ENSURE THAT YOU WILL MEET YOUR CREW AT THE CORRECT TIME.

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**CAUTION:**

- TRANSMISSION QUALITY IS AFFECTED BY THE FOLLOWING:
- 1) THIS DEVICE WILL NOT CAUSE HARMFUL INTERFERENCE TO OTHER TRANSMISSIONS.
  - 2) THIS DEVICE WILL ACCEPT OUTSIDE INTERFERENCE, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION. THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
- WARNING: CHANGES OR MODIFICATIONS TO THIS UNIT NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE

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- 5) TO REMOVE THE MAGNIFIER, PUSH THE BUTTON NEXT TO THE MAGNIFIER. THE HANDLE OF THE MAGNIFIER WILL POP OUT OF THE COMMUNICATOR AND BE READY FOR USE. TO REPLACE THE MAGNIFIER, INSERT THE END UNDER THE RELEASE BUTTON AND PUSH DOWN ON THE HANDLE TO SNAP THE MAGNIFIER BACK INTO PLACE. (DRAWING)
- 6) TO SET THE CLOCK, USE THE TWO BUTTONS ON THE END OF THE CMS MISSION COMMUNICATOR. PUSH THE TOP BUTTON TO GET THE CORRECT HOUR ON THE DISPLAY AND THE LOWER BUTTON TO SET THE MINUTES.

USER'S AUTHORITY TO OPERATE THE EQUIPMENT:

- 1) WHEN THE SOUND BECOMES WEAK, IT IS TIME TO CHANGE THE BATTERY.
- 2) AFTER USE ALWAYS RETURN THE ON/OFF CONTROL KNOB TO THE OFF POSITION.
- 4) YOUR COMMUNICATOR SET HAS BEEN FULLY ADJUSTED PRIOR TO SHIPMENT FROM THE FACTORY. DO NOT TOUCH THE INTERNAL PARTS OTHER THAN REPLACING THE BATTERY.
- 5) TO PREVENT DAMAGE, DO NOT EXPOSE THE SET TO RAIN OR MOISTURE.

FACT: THE MARTIAN ENVIRONMENT CONTAINS VERY LITTLE OXYGEN.

FACT: MARS IS MUCH COLDER THAN THE COLDEST PLACE ON EARTH.

FACT: THE MARTIAN SKY IS PINK FROM DUST BLOWN UP FROM THE SURFACE BY 100-MPH WINDS. THESE DUST STORMS CAN LAST FOR MONTHS AT A TIME.

FACT: THE MARTIAN ATMOSPHERE IS THIN AND PROVIDES LITTLE PROTECTION AGAINST SOLAR RADIATION.

FACT: METEORITE STORMS HAVE PITTED THE SURFACE WITH CRATERS.