

Serial Number 19-57H-42 Do Not Duplicate

Rendezvous
with
Extraterrestrial Phenomena

Do Not
Break Seal

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Use

COMMANDER'S HANDBOOK

Long Range Survey Craft ENDEAVOR

RENDEZVOUS PROCEDURES

This manual, compiled by the Space Advisory Council, provides instructions to Commanders of Earthwatch on procedures in the event of a rendezvous with alien craft.

The Council believes that these procedures will increase the chances of Earthwatch crew members surviving a rendezvous. However, as of this revision of the manual, an opportunity for a rendezvous has yet to be encountered. These procedures are correct in theory but are untested, and in some instances represent speculation by Councilmembers on the course of events during a rendezvous.

Therefore, a distinction has been made between proven methods and those that are untried. Commanders should make every effort to comply with regulations classified as "mandatory." All other procedures are classified as "optional but recommended."



COMMANDER'S HANDBOOK

GENERAL RENDEZVOUS PROCEDURES

Mandatory

Initializing The Mission

Phase I: Loading RENDEZVOUS

On the **Apple II**[™] series: Load the program by inserting Side One into the disk drive. Turn the computer on.

On the **Commodore**[™]: Before loading, disconnect all peripherals except the disk drive. Turn the computer on. Insert Side One into the disk drive, and enter:

LOAD "DISK", 8

Phase II: Accessing New Features

Enter **NEWDATA** to obtain information on features which were added to procedures after this handbook was issued.

Phase III: Selecting Command Controls and Screen Mode

1. The Commander should select the means by which the *RENDEZVOUS* will be controlled. Enter **KEYBOARD** for keyboard controls only, or **JOYSTICK** if a joystick is available for use along with the keyboard. If no selection is made, the program will automatically select the keyboard controls. At any point in the game, the Commander may change the controls by entering one of the above commands.
2. The mission may be conducted with

or without pictures of the interior of the spacecraft and the *RENDEZVOUS*. Enter **PICTURESOFF** if only text is desired. This feature may be changed at any time by entering **PICTURESON**. The program will automatically provide pictures if no selection is made.

Phase IV: Starting and Conducting the Mission

RENDEZVOUS is now ready to begin. The Commander should consult the instructions on "Communications During a Rendezvous," following in this handbook. The Commander also may choose from any of six special commands which may be used at any time during the game.

CREATE Use this command to create a Save Disk.

For even the most skilled of Commanders, the use of a Save Disk is required. If at any point in the mission the Commander feels there is mortal danger to self or crew, the current *RENDEZVOUS* point should be saved on the Save Disk (see explanation of the **SAVE** command, following). The Commander will then be able to return to that point, using the command **RESTORE** (see explanation following), and may rectify any mistakes in the event of a fatal accident.





The Save Disk will save up to ten *RENDEZVOUS* points. Each point may be identified as the Commander chooses.

To create your Save Disk:

1. Enter **CREATE**.
2. The computer will read: PLEASE INSERT A BLANK DISK.
3. **If you have one disk drive:** Remove the game disk and insert a blank disk. Enter **1**. The program will then format the blank disk you have inserted. When the disk drive light goes off, remove your Save Disk and insert Side One. You are now ready to proceed with the mission.

If you have two disk drives: Insert the blank disk into the second disk drive. Enter **2**. The program will then format the disk. Your Save Disk may be left in the disk drive throughout the mission.

Beware: The program will erase any contents of a disk that is being formatted as a Save Disk.

SAVE Use this command to save *RENDEZVOUS* points to which there may be a need to return.

To save any RENDEZVOUS point:

1. Enter **SAVE**.
2. The computer will read: PLEASE INSERT YOUR SAVE DISK.

3. **If you have one disk drive:** Remove the game disk, insert the Save Disk, and enter **1**. Select the number of the next available position, or rename a position used earlier: Name the *RENDEZVOUS* point to be saved (up to ten characters). Finally, remove the Save Disk, insert the game disk, and resume the mission.

If you have two disk drives: Enter **2**. Select the number of the next available position, or rename a position used earlier: Name the *RENDEZVOUS* point to be saved. You will be returned to the mission automatically.

RESTORE Use this command to return to a *RENDEZVOUS* point saved on the Save Disk.

This command works in two instances:

1. **If the Commander wishes to resume an unfinished mission:**
 - a. Load the program as usual by inserting Side One into the disk drive.
 - b. Enter **RESTORE**. The computer will read: PLEASE INSERT THE SAVE DISK.
 - c. Follow the instructions, and select a *RENDEZVOUS* point from the list. The program will move to that *RENDEZVOUS* point and the mission may be resumed from there.





2. If a fatal accident occurs:

- a. The computer will state: YOU ARE DEAD.
- b. If the Commander wishes to return to a saved *RENDEZVOUS* point, enter **RESTORE**.
- c. The computer will request that the Save Disk be inserted into the proper disk drive.
- d. The Commander may then select a *RENDEZVOUS* point from the list, and the game will resume from there.

ACTION This command should be used when the Commander wishes to practice any of the action games that will be encountered during the *RENDEZVOUS*. When the command **ACTION** is entered, the following two options will appear:

DOCKING: Computer manipulation of the docking procedure will allow the Endeavor to land on any unknown body. Control the ship using the joystick, if one is available, or the keyboard. Your macro-screen will provide data on meteorites and other celestial objects. Once proximity to the proposed landing site is reached, your directional computer will automatically convert to micro-screen, providing data on your landing site.

DRAGONFLY: This allows you to practice

flying an ultralight gossamer craft.

Keyboard controls: Use the **I,J,K,M** keys to control the Endeavor or the Dragonfly.

The Commander may return to the *RENDEZVOUS* mission at any time, simply by pressing the space bar:

QUIT Use this command to terminate the mission at any point. This command may also be used in the event of a fatal accident, if the Commander does not wish to restore a saved mission.

RESTART This command, used at the discretion of the Commander, returns a partially-completed *RENDEZVOUS* to the beginning and starts the mission over.



COMMUNICATIONS DURING A RENDEZVOUS

Optional But Recommended

Conducting The Mission

General Communiques

Commanders of Earthwatch craft attempting a *RENDEZVOUS* should switch to the use of **RENDEZVOUS ELECTRONIC COMMUNICATION (REC)**. REC was developed by syntax specialists at Earthwatch Command to answer the need for an efficient, operative communication technique during a *RENDEZVOUS*. The use of REC also allows Earthwatch to access a complete transcript of *RENDEZVOUS* communication at a later time.

The Commander of a *RENDEZVOUS* ship will use an abridged version of REC, represented by the attached Vocabulary List. When transmitting to the computer, the Commander should consult the attached Vocabulary List and utilize only those words. (Commanders should note that this vocabulary list is less extensive than the vocabulary the computer will use when relaying information to the Commander.)

REC techniques call for succinct, precise commands. A verb (**GIVE, CLOSE, TAKE**) should start the command. A noun (**KNIFE, DOOR, LINE**), should follow a verb.

**GIVE KNIFE
CLOSE DOOR
FLY SOUTH**

It is acceptable to use **THE** before a noun (**TAKE THE BOOK**).

Prepositions may follow the verb to clarify the command.

**STARE IN GLOBE
LOOK THROUGH THE VIEWPORT**

Multiple nouns should be separated from each other through use of a **comma** or **AND**, such as:

**TAKE THE KNIFE
AND THE LASER.
TAKE THE NET, THE LASER, AND
THE LINE.
TAKE NET, LASER, AND LINE
TAKE NET, LASER, LINE**

It is not necessary to end a command with a period.

Several separate actions may be included in one command, but actions must be separated by a comma or the word **THEN**. If a noun is repeated in a string of actions, the noun may be replaced with **IT**. For example:

**TAKE THE CASE
THEN EXAMINE IT
TAKE THE CASE,
THE LINE, AND THE KNIFE,
THEN GO SOUTH
TAKE ALL, THEN GO NORTH**

Improper Commands in REC

Commands that do not conform with the syntax requirements of REC—if the computer determines them to be impossible to carry



out, if they mention unavailable objects, or if they use words that are not on the Vocabulary List—will elicit one of several adverse responses. If necessary, revise the command.

Communicating with Others

To address others, enter their name first, followed by a comma and the request:

**LAURA, ADVISE
GOLDIE, COME.**

Respond to a human by entering a remark as any other command is entered: **HELLO**. It is unnecessary to use quotation marks ("HELLO") or a verb (SAY HELLO).

Mobility and Exploration

Commands for moving in any particular direction may be specified in full sentences (**GO NORTH**), as directions (**SOUTH**), or as abbreviations (**W, E, S, N**). **UP (U)** and **DOWN (D)** are acceptable.

When it is necessary to explore the surrounding area, the Commander should enter **SURROUNDINGS (SURR)** or **LOOK (L)**. For further details about any particular item, enter **INSPECT <name of item>** or **EXAMINE <name of item>**. To use any available flying apparatus, enter **FLY**.

Remote sensing for long-distance environmental surveys should be performed by on-board crew to aid the Commander during

a *RENDEZVOUS* attempt. To initiate a long-distance scan, the Commander should enter the crew member's name, followed by **LANDMARKS**, as in:

PIETER, LANDMARKS

Taking Inventory

Commanders are responsible for periodic, routine checks of their belongings. New acquisitions should be thoroughly inspected. Enter **INVENTORY (I)** for a complete listing of possessions, and, for a description of any chosen item, enter **INSPECT <name of item>** or **EXAMINE <name of item>**.

Crew Assignments

The Manfred Study of Stanford University (2129) recommended that in the event of a *RENDEZVOUS* with an alien craft, crew members with the following capabilities should be assigned to the *RENDEZVOUS* tracking team: one specialist in medical/biological/physiological structures; one specialist in space reconnaissance; one specialist in mechanics; and one or more functional assistants.

Assignments of crew to the Endeavor will be made accordingly. In most cases, the three specialists will be humans, and the functional assistants will be android Simps (*Chimpus Kafantropus*, Superchimp) produced by SimpTronics, Hong Kong.

Rendezvous Electronic Communication (REC) List

Nouns

AIRLOCK	GROOVE	PIETER	TRELLIS	IN
BAR(S)	HAND	PILLBOX	TRIANGLE(S)	INFLATE
BELONGING(S)	HATCH	PLATE	TUNNEL	INSPECT
BOATS	HATCHWAY(S)	PLATFORM	VIEWPOINT	JUMP
BUILDINGS	HEAD	POD	WATER	KILL
CABLE	HEMISPHERE(S)	POST	WHEEL	LAND
CAGE	HOLE	RAFT	WHIRLWIND	LEAVE
CASE	HOPPER	RAMA	WILL	LIE
CHAMBER	INDENTATION(S)	RIPCARD	WILLARD	LOCKER(S)
CHIPS	KEYBOARD	ROD	WINDOW	LOOK(L)
CILIA	KIOSK	ROMCART(S)		MOVE
CIRCLE	KNIFE	ROMCART1	Verbs	OPEN
COLUMN	KNOB	ROMCART2	ACTION	PADDLE
CONTROLS	LASER	ROMCART3	ADVISE	PLACE
CRAB	LABEL	ROOF	APPROACH	PLUG
CRATER	LANDMARKS	ROOM	BOARD	PRESS
CREATURE	LAURA	RUG	CLIMB	PULL
CRYSTAL(S)	LIGHT	SAND	CLOSE	PUSH
DEPRESSION	LINE	SCREEN(S)	COME	PUT
DISK(S)	LOCKER	SHAFT(S)	CUT	READ
DOME	MACHINE	SHAFTWAY	DROP	ROLL
DOOR	MACHINERY	SIDEWALK(S)	EAT	STAND
DRAGONFLY	ME	SIMP	ENTER	STARE
DRAWING(S)	MENU	SLOT(S)	EXAMINE, EX	STEP
EDGE	MESH	SPACESUIT(S)	EXIT	SURR
FENCE	MONKEY	SPHERE	FLY	TAKE
FIBERS	NET	SPIDER	FOLLOW	THROW
FILE	NOTE(S)	SPONGE	GAZE	TIE
FLOWER	OBJECT	SUIT(S)	GET	TURN
FOOT	OPENING(S)	SURFACE	GIVE	UNTIE
FURROW(S)	PANEL	SURROUNDING(S)	GO	USE
GLASS	PELLET	TAPESTRY	HIT	WEAR
GLOBE	PHANTOM	TORCH	HOLD	
GOLDIE	PIECE	TRAPDOOR(S)	INVENTORY(S)	

Miscellaneous

ALL
AND
BLACK
BLUE
BUT
EMPTY
FILLED
FOUR
GRAY
GREEN
GREY
INNER
IT
LARGE
LARGER
LEFT
MAROON
MIDDLE
ONE
OUTER
RECTANGULAR
RED
ROUND
SMALL
SMALLER
SPLIT
STRIPED
THEN
THREE
TWO
WHILE
WHITE
WITH
USING

Directions

CLOCKWISE
COUNTERCLOCKWISE
DOWN, D
EAST, E
ENTER
EXIT
IN
INTO
LEFT
NORTH, N
OFF
ON
OUT
RIGHT
SOUTH, S
THROUGH
UP, U
WEST, W

**Functional
Commands**

ACTION
CREATE
JOYSTICK
KEYBOARD
NEWDATA
PICTURESOFF
PICTURESON
QUIT
RESTART
RESTORE
SAVE

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Based on the book *Rendezvous with Rama* by Arthur C. Clarke

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Handbook Design: Graphic Ink





LRSC PROTOCOL ONE-ALPHA-FIVE-NINER, 2130, MESSAGE TO
COMMANDER NORTON, LONG RANGE SURVEY CRAFT ENDEAVOR,
THIRD ORDER ENCRYPTION, YOUR EYES ONLY. FROM UNITED
PLANETS HQ, LUNA

ASTEROID ///RAMA/// MISIDENTIFIED **STOP** NOW BELIEVED TO
BE ARTIFACT **STOP** COURSE CHARTED FOR SOLAR INTERCEPT
AND CONFIRMED DUE TO EFFECTS OF SOLAR GRAVITATIONAL
PULL **STOP** RADIO SIGNALS ABSENT **STOP** ENDEAVOR IS TO
APPROACH WITH CAUTION AND EXPLORE **STOP** ENDEAVOR TO
TAKE MAXIMUM PRECAUTIONS DURING RENDEZVOUS ATTEMPT

ALERT ALERT ALERT ALERT ALERT ALERT ALERT ALERT

ENDEAVOR FUEL SUPPLIES DETERMINED TO BE INSUFFICIENT
FOR RETURN TO BASE POST-RENDEZVOUS **STOP** HQ WILL DEPLOY
FUEL TANKERS TO THE CALCULATED VICINITY OF ENDEAVOR/
RAMA SEPARATION **STOP** WARNING: TANKER ARRIVAL IN
VICINITY WILL OCCUR 11.4 DAYS FOLLOWING MAXIMUM SAFE
DURATION OF RENDEZVOUS WITH RAMA.

PROTOCOL FOLLOWING: ARTIFACT DATA

LRSC PROTOCOL FOUR-BETA-ONE-NINER, 2130, MESSAGE TO
COMMANDER NORTON, LONG RANGE SURVEY CRAFT ENDEAVOR,
THIRD ORDER ENCRYPTION, YOUR EYES ONLY. ARTIFACT DATA
SURVEY FROM MARS BASE, SPACEGUARD

SHAPE: CYLINDRICAL

POLES: CONVEX, UNIDENTIFIED STRUCTURES NEAR CENTER OF
SUNWARD POLE AXIS

LENGTH: 50KM ± .1KM

DIAMETER: 20KM ± .1KM

MATERIAL: UNKNOWN METALLIC CONTENT

LUMINOSITY: 0.58

MASS: 8×10^{15} KG ± 0.2×10^{15} KG

DENSITY: 1.7 G/CUB. CM. WHICH INDICATES RAMA IS HOLLOW

ROTATIONAL VELOCITY: .25 RPM WITH ANY POINT ON SURFACE
OF CYLINDER TRAVELING AT VELOCITY OF 1000 KM/HR

ANGULAR VELOCITY: 15 REV/HR

VELOCITY WITH RESPECT TO SUN: 245 ± 2 KM/SEC

VELOCITY WITH RESPECT TO ENDEAVOR: 240 ± 2 KM/SEC

ACCELERATION: 0.02 KM/SEC/HR, INCREASING DUE TO SOLAR
GRAVITATION

ORBIT: DETERMINED TO BE NON-ELLIPTICAL, NON-ASTEROIDAL

COURSE: TOWARD SUN



HISTORY: EARLY MISIDENTIFICATION AS ASTEROID DUE TO
 DISCOVERY OUTSIDE JUPITER ORBIT **STOP** REVISED ID BASED
 ON ABSENCE OF LIGHT CURVE **STOP** DATA INDICATES RAMA IS
 PERFECTLY SYMMETRICAL

ALERT ALERT ALERT ALERT ALERT ALERT ALERT ALERT
 RAMA ON DIRECT COURSE TO SOLAR IMPACT **STOP** VELOCITY
 INCREASING DUE TO SOLAR GRAVITATIONAL FORCE **STOP**
 MISSION CLASSIFIED WITH DANGER FACTOR OF 98.274 **STOP**
 ADVISE HASTE IN RENDEZVOUS AND PRECAUTIONS AGAINST
 DELAYS

PROTOCOL FOLLOWING: TACTICS

LASC PROTOCOL NINER-GAMMA-EIGHT-ZERO, 2130, MESSAGE TO
 COMMANDER NORTON, LONG RANGE SURVEY CRAFT ENDEAVOR,
 THIRD ORDER ENCRYPTION, YOUR EYES ONLY, FROM MARS BASE,
 SPACEGUARD

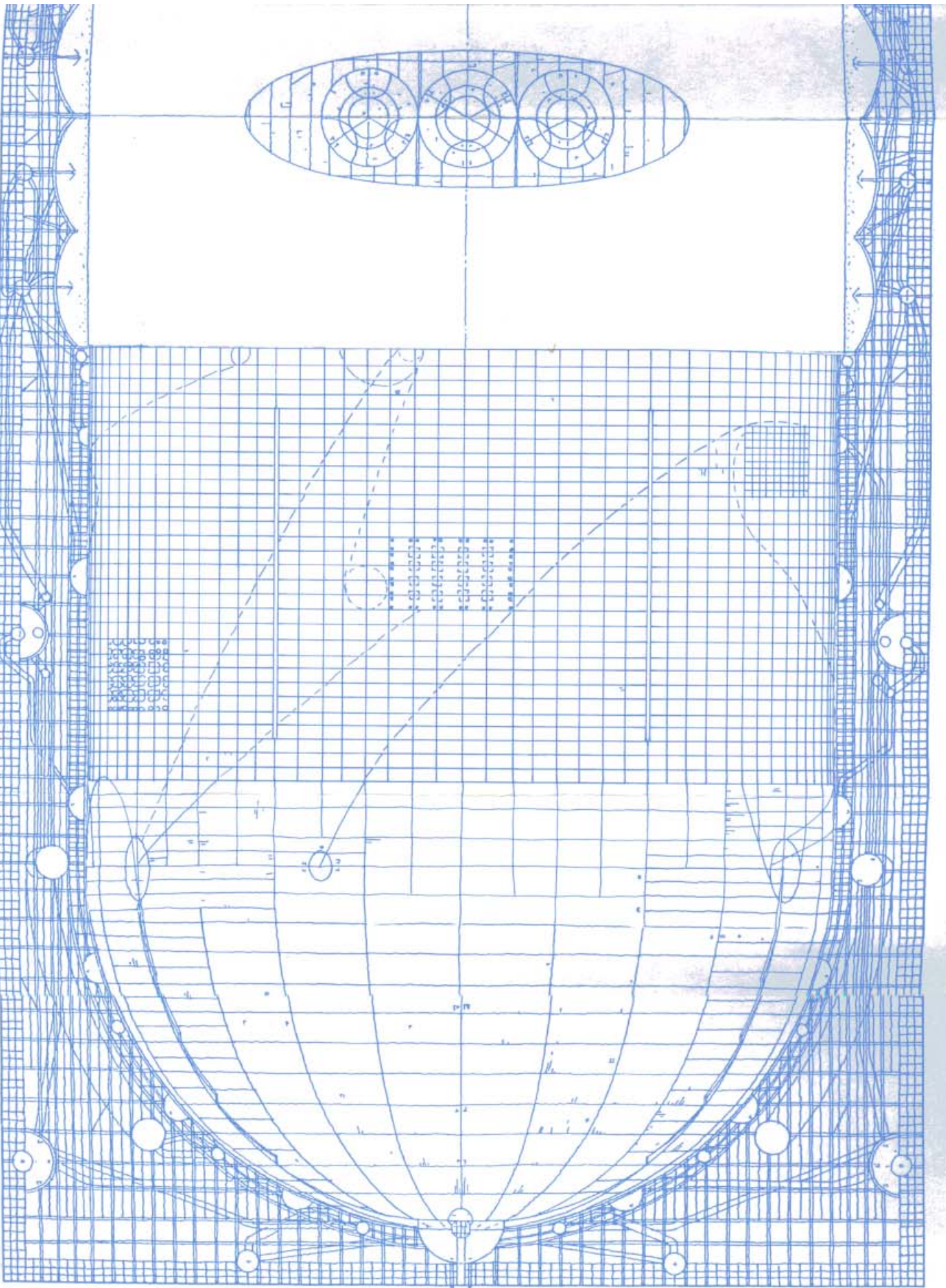
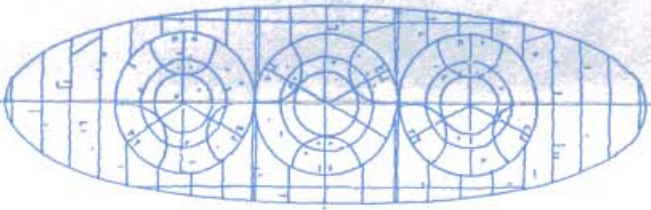
ADDITIONAL DATA REGARDING: RENDEZVOUS WITH RAMA

PROBES CONFIRM FOLLOWING DATA USEFUL DURING INTERCEPT
 WITH ARTIFACT **STOP** ADVISE CONSIDERATION OF DATA ONLY IF
 MISSION MOVES INTO DELAY-AVOIDANCE MODE REPEAT ADVISE
 CONSIDERATION OF HINTS ONLY IF NECESSARY

Rama Hints

MONKEY HOUSE	DBCME 4 UIF0 HPMEJF, DPNF
NORTH FACE	UVS0 XIFFM SJMIU
PILLBOX	QSTT BMM 4 HPMEJF IFMQT
AIRLOCK	XIJUF UIF0 CMVF
RECTANGLE BUILDING	HPMEJF UTF MJOF
SPIDER ROOM	UISPX OFU
TUNNEL	4 QSPOHT JO LOPC
DIM ROOM	QSFTT EPNF
SEA	PQFO QFMMFU
FURROW	MBTFS
FLOWER	DVU XJUI GJMF
GLOBE	FYBNJOF UIF0 QSFTT
	TTBMM EJTL
LIGHT SHAFT	FOUFS MJHIU
KIOSK	ASFTT 4 CBST
HUB	PQFO ESBHPOGMZ DBTF
SQUARE DOOR	GMPXFS
TRIANGLE DOOR	BMM USJBOHMFT PO
SPONGE	HPMEJF
BIGHORN	BWPJE HSBUF
TILE	UVS0 XIFFM BOE IPME PO
CAGE	QVMM EPPS EPXO
SCALE	ESPQ BMM
COLUMNS	DPQZ UVOF
POD AREA	DMJNC PO
ENGINE ROOM	HPMEJF XJUI HMPCF EPXO
	CMVF IBUDIXBZ

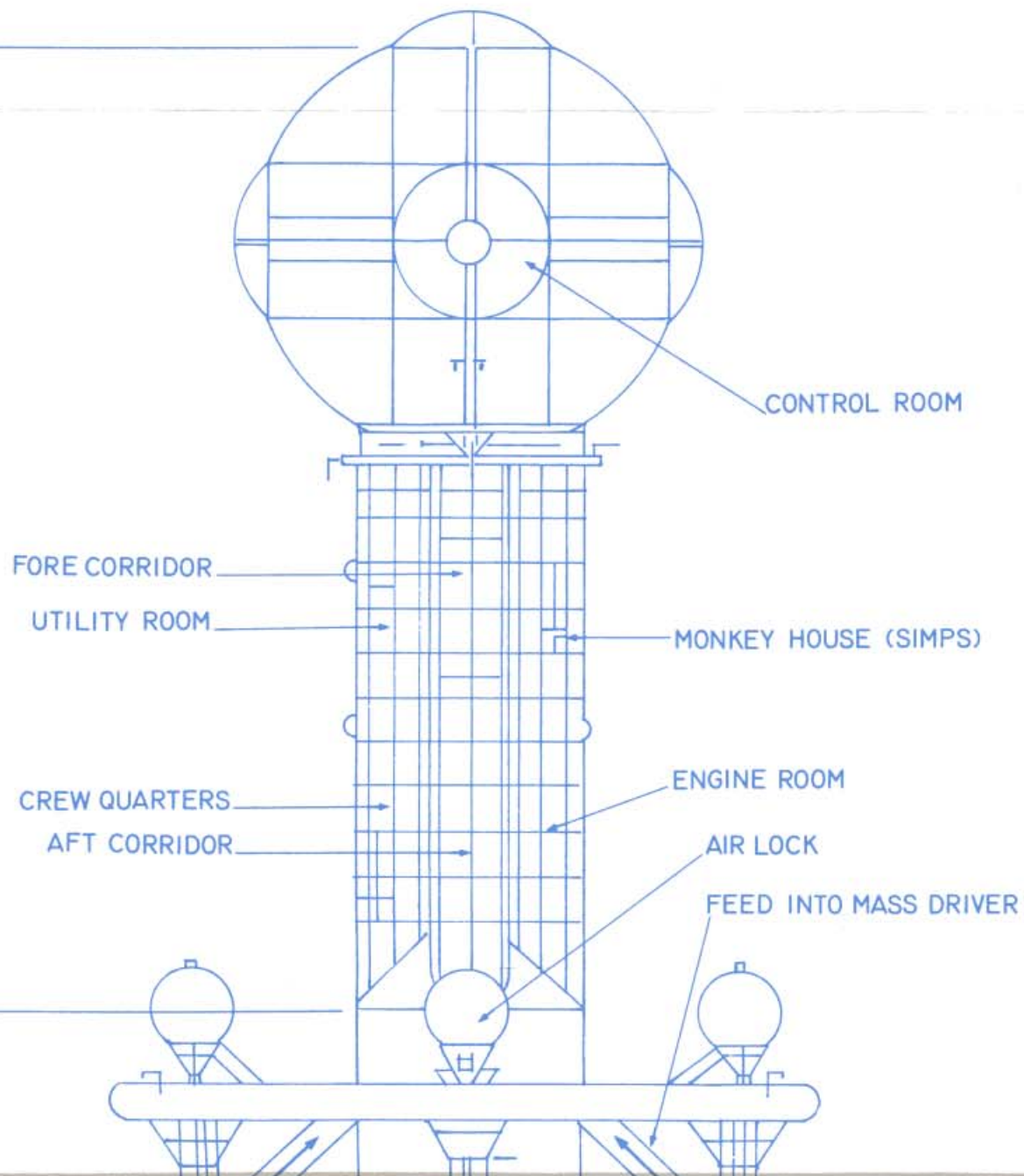
BCDEFGHIJKLMNOPQRSTUVWXYZA 1 2 3 4 5 6 ,
 ABCDEFGHIJKLMNOPQRSTUVWXYZ 0 1 2 3 4 5 ,



SECTION
1:100
PLAN

SECTION
1:100
PLAN

MAP NOT TO SCALE
FOR USE IN TRAVELING
ACROSS SURFACE INTERPRETIVE
GRID SHOWS 300' ANALYSIS
OF SURFACE AREA



AFT CORRIDOR

AIR LOCK

FEED INTO MASS DRIVER

FUEL (MASS)

