Cue Cards and Procedural Decals Book

Mission Operations Directorate Operations Division

Generic, Rev D July 8, 2005

NOTE

For STS-114 and subsequent flights

National Aeronautics and Space Administration

Lyndon B. Johnson Space Center Houston, Texas





MISSION OPERATIONS DIRECTORATE

CUE CARDS AND PROCEDURAL DECALS BOOK

GENERIC, REVISION D July 8, 2005

PREPARED BY:

Carol H. Pierce Publication Manager

APPROVED BY:

Kirnberly A. Johnson
Manager, Shuttle Procedures Management

Michael T. Hurt FDF Manager

This document is under the configuration control of the Crew Procedures Control Board (CPCB). All proposed changes must be submitted on FDF Workflow Crew Procedure Change Request (CR) to DO3/FDF Manager.

Additional distribution of this book, for official use only, may be requested in writing to DO3/FDF Manager. The request must include justification and requester's name, organization, position, and phone number. Contractor requests are made through the NASA or DOD organization supported. Deletions, reduction in quantity, or change of address may be submitted to DO3/FDF Management Office, 281-244-1184.

		Incorporates the following:
482#:	CUE-503	
	CUE-504	

AREAS OF TECHNICAL RESPONSIBILITY

Publication Manager DO352/C. Pierce 281-483-6087

Backup Publication Manager DO354/T. Vaughan 281-483-4180

<u>NOTES</u>

- 1. <u>Location maps</u> give the titles of those card procedures that are mounted initially. Cards listed as not shown on the location maps are stowed for launch.
- 2. The decals published in this document are provided for ground reference only to document the configuration of procedural decals that are actually flown.
- 3. All cue cards published in the <u>Ascent Checklist</u>, <u>Entry Checklist</u>, and <u>Ascent/Entry Systems Procedures</u> have critical size and Velcro location constraints. Any changes that may affect the card size, shape, or Velcro requirements must be coordinated with the <u>Cue Cards and Procedural Decals</u> Book Manager prior to publication. This requirement also applies to all other cue cards or overlays that must be placed in specific locations for use.
- 4. Maximum cue card size is 8-1/2" x 10-1/2" (stowage/fabrication constraint). Cue cards requiring larger than the maximum size must be coordinated with the <u>Cue Card and Procedural Decals</u> Book Manager.
- 5. CCTV overlays must be 6.5" x 8.5" for color monitors.
- 6. All cue cards must have Velcro on the back if single-sided and on the front and back if dual-sided.
- 7. All cue cards and overlays must have a card code and a title located inside the crop marks or outline for identification after fabrication.
- 8. Specific fabrication requirements or notes must be placed outside the crop marks or outline.

This Page Intentionally Blank

CUE CARDS AND PROCEDURAL DECALS BOOK *

LIST OF EFFECTIVE PAGES

GENERIC 01/04/88 REV D 07/08/05

Sign Off	ALL/GEN D
	,
ii	ALL/GEN D
iii	ALL/GEN D
iv	ALL/GEN D
V	ALL/GEN D
vi	ALL/GEN D
vii	ALL/GEN D
viii	ALL/GEN D
1-1	ALL/GEN D
1-2	ALL/GEN D
1-3	ALL/GEN D
1-4	ALL/GEN D
1-5	ALL/GEN D
1-6	ALL/GEN D
2-1	ALL/GEN D
2-2	ALL/GEN D
2-3	ALL/GEN D
2-4	ALL/GEN D
2-5	ALL/GEN D
	ALL/GEN D
2-6	
2-7	ALL/GEN D
2-8	ALL/GEN D
2-9	ALL/GEN D
2-10	ALL/GEN D
2-11	ALL/GEN D
2-12	ALL/GEN D
2-13	ALL/GEN D
2-14	ALL/GEN D
3-1	ALL/GEN D
3-2	ALL/GEN D
3-3	ALL/GEN D
3-4	ALL/GEN D
4-1	ALL/GEN D
4-2	ALL/GEN D
4-3	ALL/GEN D
4-4	ALL/GEN D
4-5	ALL/GEN D
4-6	ALL/GEN D
4-7	ALL/GEN D
4-8	ALL/GEN D
4-9	ALL/GEN D
4-10	ALL/GEN D

^{* -} No flight book published

This Page Intentionally Blank

<u>CONTENTS</u>	<u>PAGE</u>
CUE CARD LOCATION MAPS	1-1
ASCENT OMS 2 BURN DEORBIT BURN ENTRY	1-4 1-5
ORBITER PROCEDURAL DECALS	2-1
COMM PANEL ACTIVATION O5, O9, L9, R10, AND AW18D PANEL C5 FIRE EXTINGUISHER HATCH DECALS EMERGENCY EGRESS PRYBAR CABIN VENT/HATCH JETT INSTRUCTIONS EMERGENCY EGRESS SLIDE ESCAPE POLE DEPLOYMENT	2-4 2-5 2-6 2-8 2-9 2-11
LOOSE EQUIPMENT PROCEDURAL DECALS	3-1
AIR SAMPLE BOTTLE	
SURVIVAL EQUIPMENT PROCEDURAL DECALS	4-1
MK 124 SMOKE AND ILLUMINATION SIGNAL OPERATION	4-4 4-5 4-6 4-7 4-8
CEA DVE MADIZED	4 40

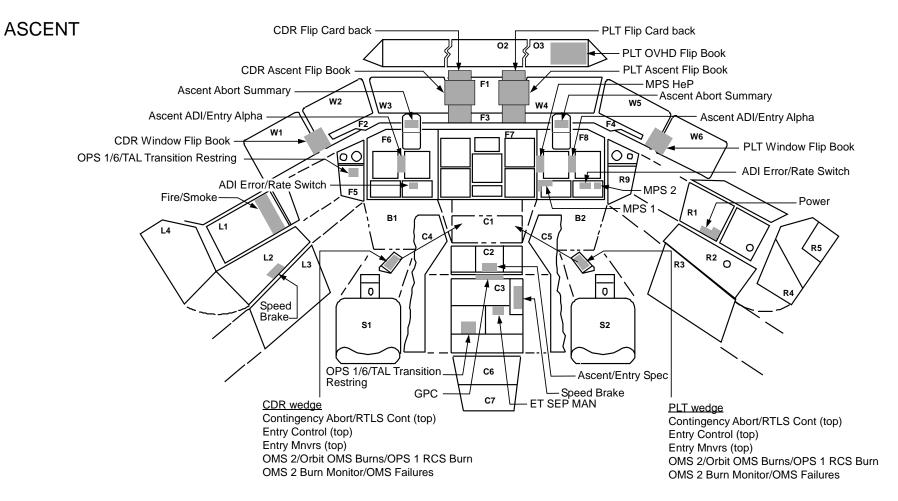
This Page Intentionally Blank

CUE CARD LOCATION MAPS

ASCENT	1-3
OMS 2 BURN	1-4
DEORBIT BURN	1-5
FNTRY	1-6

1-1

This Page Intentionally Blank



Not shown: Escape PNL Egress (back of CDR headrest)

Emergency Egress (back of PLT, CDR seats and on middeck FWD lockers)

TAL (back of CDR/PLT seat)

Ascent Abort Summary (back of PLT seat)

Contingency Abort/RTLS cont (back of CDR/PLT seats)

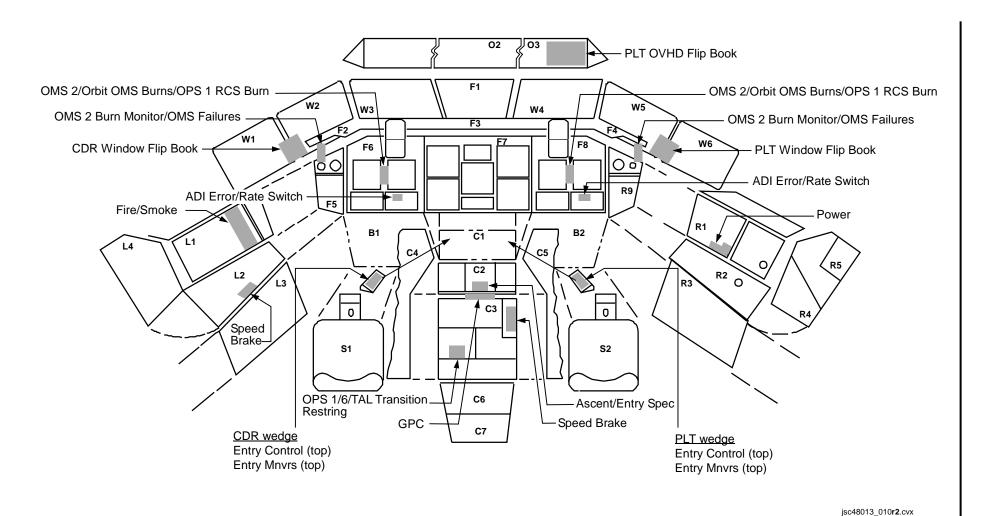
Panel R14 (stbd side of flt deck) ET Photo (ovhd window) LOC/Breakup (optional) Urine Collection (middeck)

CO2 Absorber Replacement (middeck)

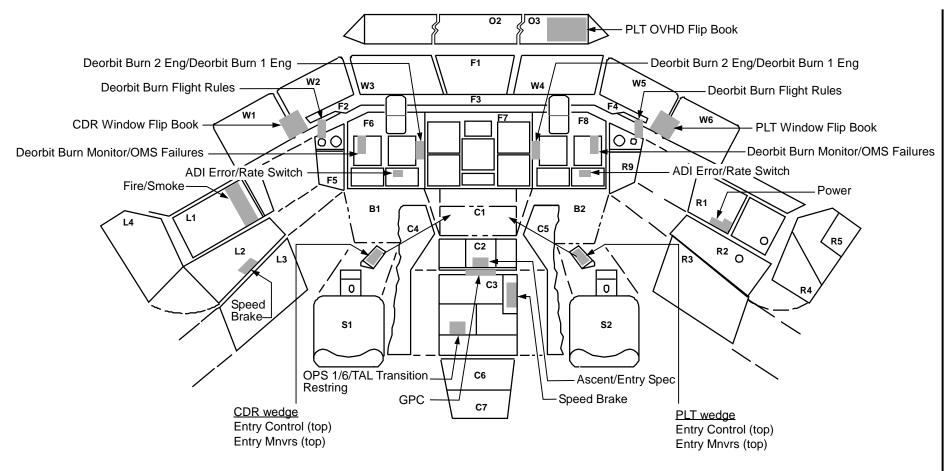
Ergometer (middeck)

jsc48013_008**r2**.cvx

OMS 2 BURN



DEORBIT BURN



Not shown: Escape PNL Egress (back of CDR headrest)

Emergency Egress (back of PLT, CDR seats and on middeck FWD lockers)

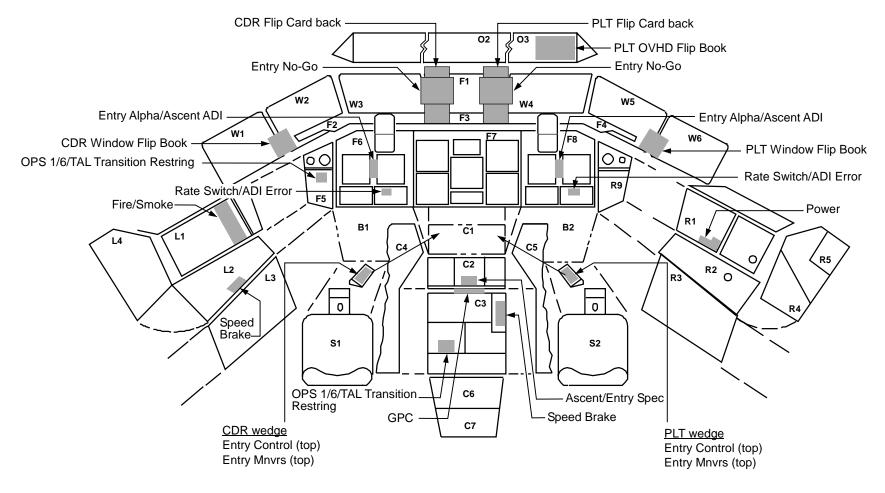
Panel R14 (stbd side of flt deck)

Deorbit Burn (RCS)

Unbalanced Prplt Deorbit Burn/Deorbit Burn (Mixed Xfeed)

jsc48013_011**r2**.cvx

ENTRY



Not shown: Escape PNL Egress (back of CDR headrest)

Emergency Egress (back of PLT, CDR seats and on middeck FWD lockers)

Panel R14 (stbd side of flt deck)

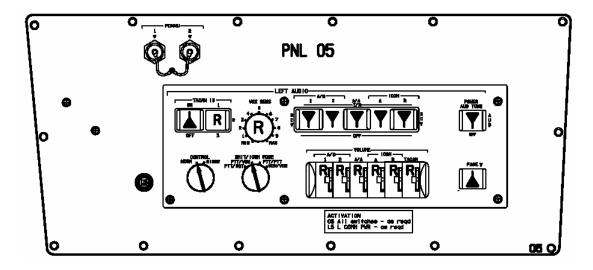
jsc48013_009**r2**.cvx

ORBITER PROCEDURAL DECALS

COMM PANEL ACTIVATION	
O5, O9, L9, R10, AND AW18D	2-3
PANÉL C5	2-4
FIRE EXTINGUISHER	2-5
HATCH DECALS	2-6
EMERGENCY EGRESS PRYBAR	2-8
CABIN VENT/HATCH JETT INSTRUCTIONS	
EMERGENCY EGRESS SLIDE	2-11
ESCAPE POLE DEPLOYMENT	

This Page Intentionally Blank

COMM PANEL ACTIVATION 05, 09, L9, R10, AND AW18D



ACTIVATION

O5 All switches – as reqd L5 L COMM PWR – as reqd

O5 ACTIVATION DECAL (Left (CDR) Audio Station)

ACTIVATION

O9 R AUD PWR - AUD/TONE All other sws - as reqd R6 R COMM PWR - as reqd

O9 ACTIVATION DECAL (Right (PLT) Audio Station)

ACTIVATION

R10 MS AUD PWR – AUD/TONE All other sws – as reqd R12 MS AUD CNTL – NORM A11 MS COMM CCU PWR – ON

R10 ACTIVATION DECAL (MS Audio Station)

ACTIVATION

L9 All switches – as reqd A15 PS COMM CCU PWR – ON

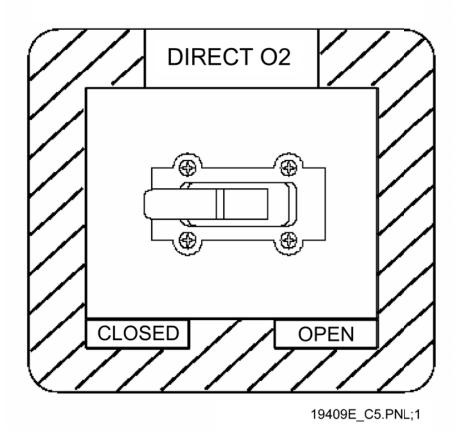
L9 ACTIVATION DECAL (PS Audio Station)

ACTIVATION

AW18D All switches – as reqd AW82D CCU 1, 2 PWR – as reqd

AW18D ACTIVATION DECAL (Airlock Audio Station)

PANEL C5



FIRE EXTINGUISHER



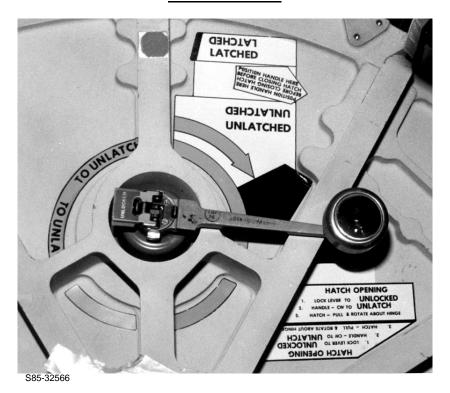
FIRE EXTINGUISHER OPERATION DECAL

TO OPERATE

- 1 PULL RING PIN
- 2 POINT HORN CLOSE TO BASE OF FIRE
- 3 DEPRESS TRIGGER FOR DISCHARGE AND KEEP BASE OF FLAMES COVERED
- 4 AVOID BREATHING OF SMOKE

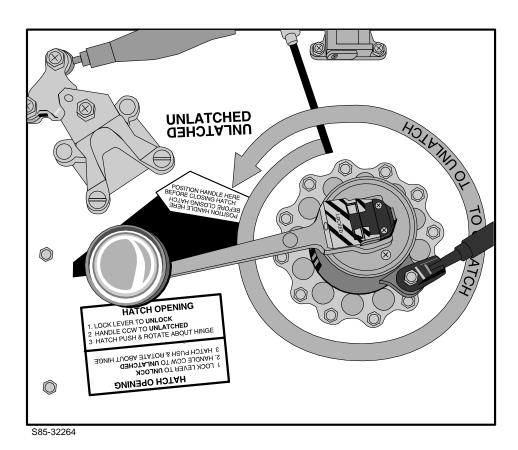
EXTINGUISHER, FIRE, CF₃ Br, 2 3/4 LB

HATCH DECALS



INNER/OUTER/EVA HATCH OPENING/CLOSING DECALS

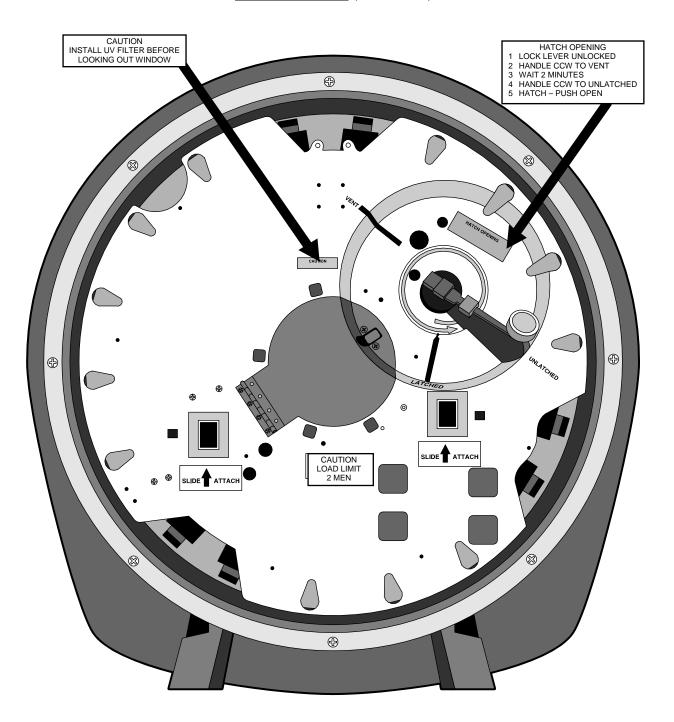
(Crewmodule Side)



INNER/OUTER/EVA HATCH OPENING/CLOSING DECALS

(Payload Bay Side)

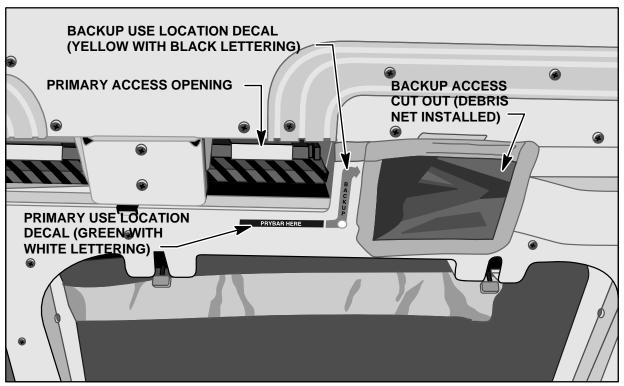
HATCH DECALS (Concluded)



j_48013_60_QC4_9

SIDE HATCH OPENING DECALS

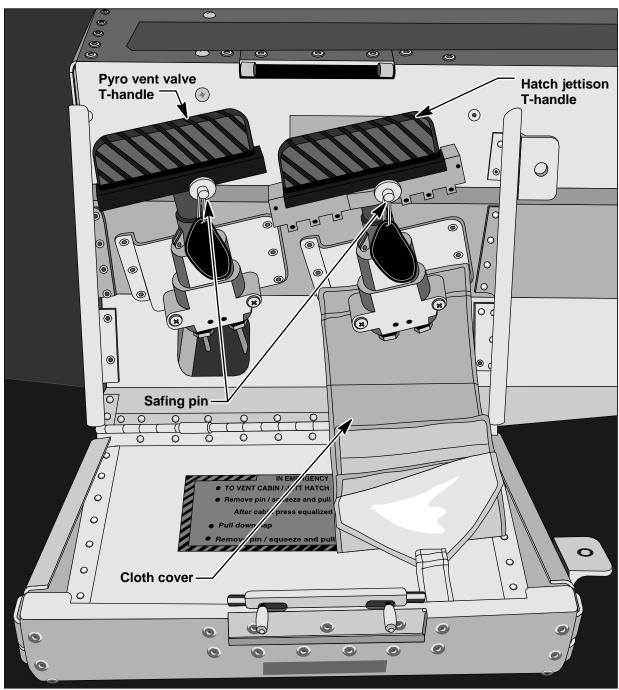
EMERGENCY EGRESS PRYBAR



j_48013_60_013

EMERGENCY EGRESS PRYBAR USE DECALS

CABIN VENT/HATCH JETT INSTRUCTIONS



j_48013_60_5_13

DECAL ON OUTSIDE OF "T" HANDLE COVER DOOR:

- BEFORE LAUNCH/ENTRY
 - REMOVE DOOR PIN
- POST LAUNCH/LANDING
 - INSTALL DOOR PIN

DECAL ON INSIDE OF DOOR:

DECAL ADJACENT TO DOOR LATCHES:

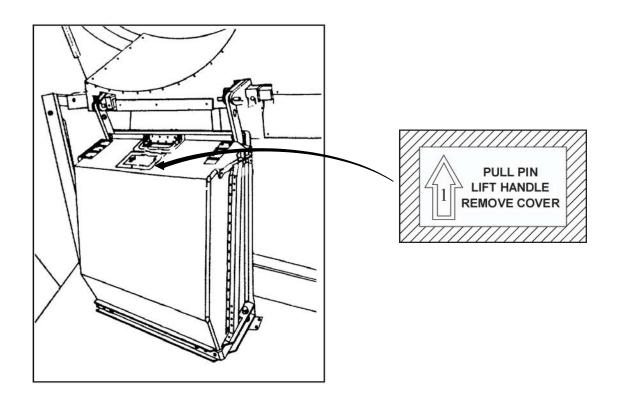
yellow background black letters

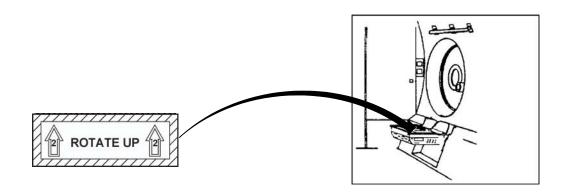
DOOR

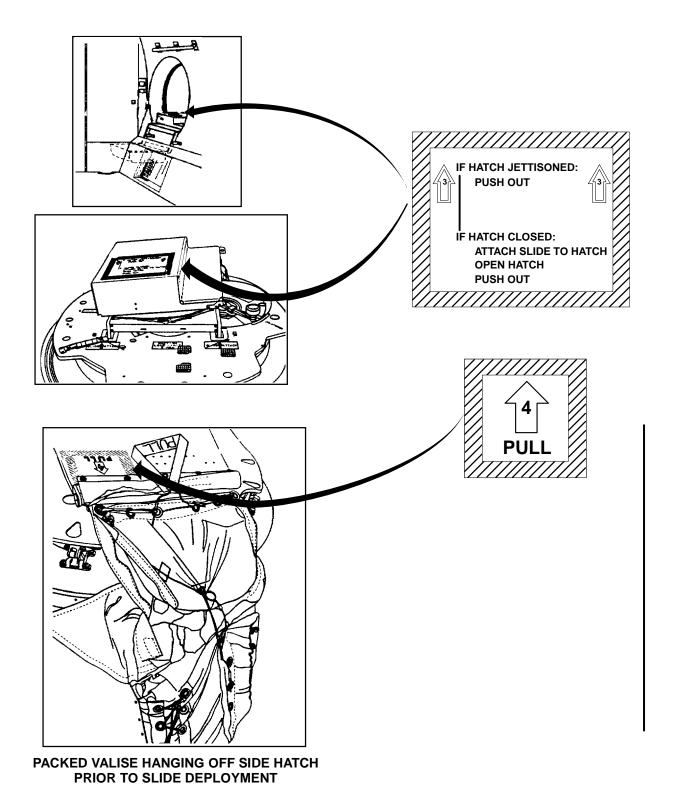
IN EMERGENCY

- TO VENT CABIN/JETT HATCH
 - REMOVE PIN/SQUEEZE AND PULL VENT HANDLE AFTER CABIN PRESS EQUALIZED:
 - PULL DOWN FLAP
 - REMOVE PIN/SQUEEZE AND PULL JETT HANDLE

EMERGENCY EGRESS SLIDE

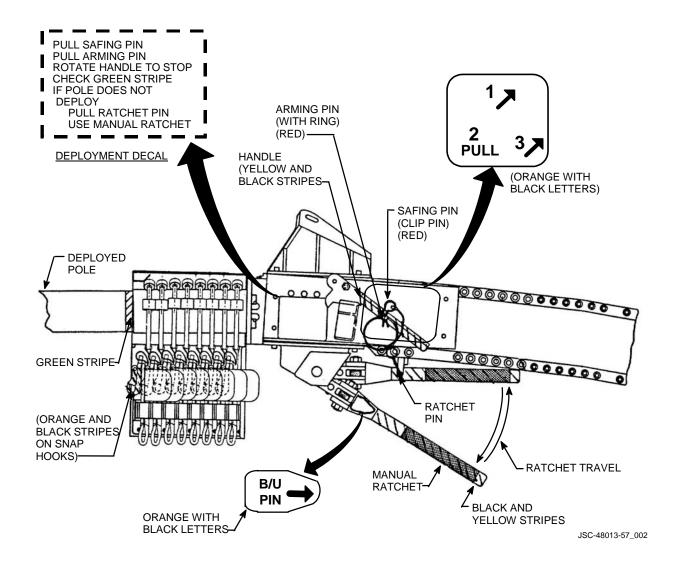






jsc38013_004r1.cvx

ESCAPE POLE DEPLOYMENT



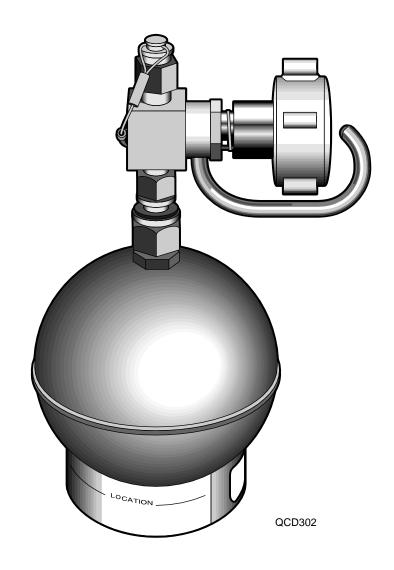
This Page Intentionally Blank

LOOSE EQUIPMENT PROCEDURAL DECALS

AIR SAMPLE BOTTLE	3-3
GYRO STABILIZED BINOCULARS	3-4

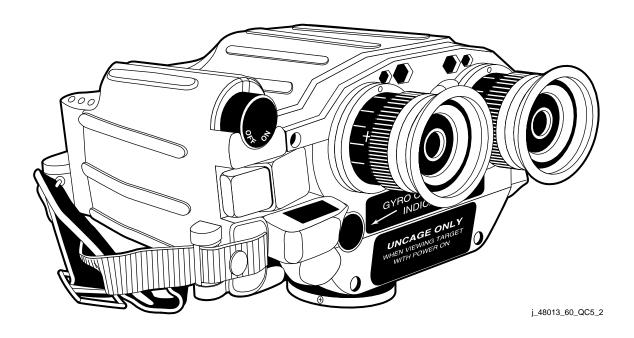
This Page Intentionally Blank

AIR SAMPLE BOTTLE



M	IET:/		:LOC	ATIO	N
			<u>Procedure</u>		
1 2	Record sampling data Unscrew dustcap	3 4	Open valve 1 turn for 10 sec Close valve until it slips and loc		Replace dustcap Restow

GYRO STABILIZED BINOCULARS



GYRO STABILIZED BINOCULARS DECAL LOCATIONS



CAGE/UNCAGE INSTRUCTIONS DECAL

(Top of Cage/Uncage lever)

GYRO CAGED WHEN YELLOW INDICATOR IS COVERED

CAGE INDICATOR DECAL

(Below Eyepieces)

UNCAGE ONLY WHEN VIEWING TARGET WITH POWER ON

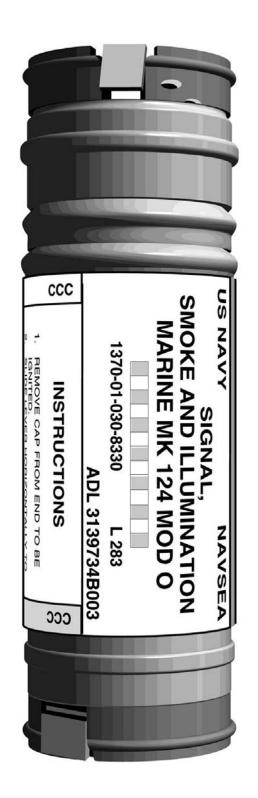
UNCAGE CAUTION DECAL

(Below Eyepieces)

SURVIVAL EQUIPMENT PROCEDURAL DECALS

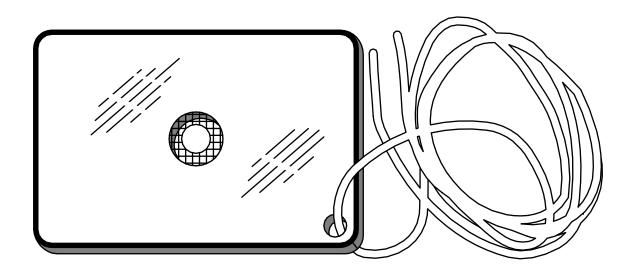
MK 124 SMOKE AND ILLUMINATION SIGNAL OPERATION	
MIRROR SIGNALING	4-4
PRC-112 SURVIVAL RADIO OPERATION AND PROCEDURES	4-5
SARSAT PERSONAL LOCATOR BEACON OPERATIONS	4-6
EMERGENCY DRINKING WATER	4-7
ILLUMINATION SIGNAL KIT	4-8
LIGHTSTICK	4-9
SEA DYE MARKER	4-10

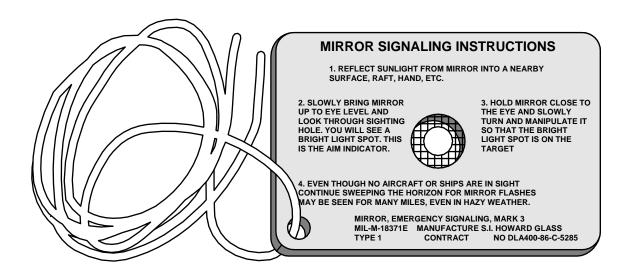
This Page Intentionally Blank



US	S N	AVY NAVSE	ΕΑ
SN		SIGNAL, KE AND ILLUMINATIO ARINE MK 124 MOD O	N
		1370–01-030–8330 L 283	;
		ADL 3139734B0	003
၁၁၁		INSTRUCTIONS	ccc
	1.	REMOVE CAP FROM END TO BE IGNITED.	
	2.	SLIDE LEVER HORIZONTALLY TO FULLY EXTEND.	
USE	3.	PULL LEVER DOWNWARD UNTIL FIRING PIN RELEASES.	MS
	4.	IF SMOKE FLAMES, BRIEFLY	SMOKE
보		IMMERSE IN WATER OR HOLD AGAINST SOLID OBJECT.	E
END - NIGHT	5.	AFTER USING ONE END SAVE OTHER END FOR FUTURE USE.	END
END -		WARNING	END - DAY
Ä	1.	DURING AND AFTER IGNITION, FULLY EXTEND ARM OVERHEAD	
FLARE		AT 45° ANGLE AND DO NOT	USE
ᆸ	2.	LOOK AT SIGNAL. PRIOR TO PULLING LEVER	
		DOWNWARD, POSITION ALL FINGERS BELOW TOP OF	
	3.	SIGNAL.	
၁၁င	ა.	AT 45° ANGLE.	၁၁၁
Ö			C

MIRROR SIGNALING





SIGNAL MIRROR DECAL LOCATION

(On back of mirror)

PRC-112 SURVIVAL RADIO OPERATION AND PROCEDURES

SARSAT, PRC-112 PROCEDURE

- 1. SARSAT RIGID ANTENNA EXTEND WIRE ANTENNA - DISCONNECT
- 2. PRC-112 PWR ON

ANTENNA - DEPLOY

3. √SARSAT BCN – BEACONING [PRC-112 - VOICE MODE - 243.0 (121.5)]

IF SARSAT BCN NO JOY, REPEAT CONTINUOUSLY:

- 4. PRC-112 BCN MODE 243.0 (121.5) BCN (~2 min)
- 5. PRC-112 VOICE MODE 282.8 (~1 MIN)
- 6. PRC-112 VOICE MODE 282.8
- PRC-112 PTT XMIT "MAYDAY, MAYDAY, MAYDAY. (VEHICLE) CM (ALPHA CODE) IN (MED CONDITION)." (REPEAT 2X ON THE QTR HR)
 IF CONTACT W/ SAR FORCES LOST:
- - 8. PRC-112 VOICE MODE 282.8

5	TRO-TIZ VOIDE WODE 202.0
243 BCN	MILITARY EMER (UHF/BCN)
243	MILITARY EMER (UHF/VOICE) DME
В	B/U SAR OPS (236.0) (UHF/VOICE) DME
Α	SEC SAR (259.7) (SHUTTLE A/G) (UHF/VOICE) DME
282.8	PRIM SAR (UHF/VOICE) DME
121.5	CIVILIAN EMER (VHF/VOICE)
121.5 BCN	CIVILIAN EMER (VHF/BCN)

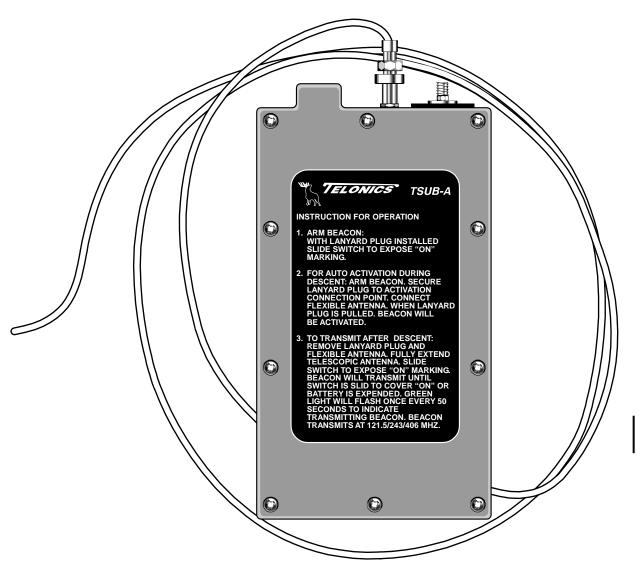


PRC SURVIVAL RADIO (Front)



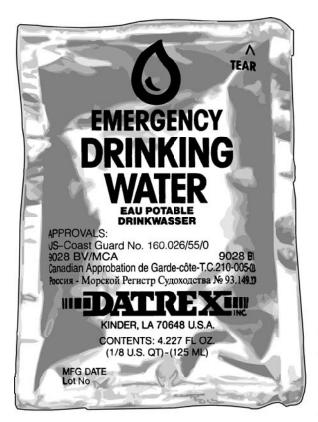
PRC-112 SURVIVAL RADIO (BACK W/PROCEDURAL DECAL)

SARSAT PERSONAL LOCATOR BEACON OPERATIONS



jsc48013_002r1.cvx

EMERGENCY DRINKING WATER



EMERGENCY WATER CONTAINER (Front)

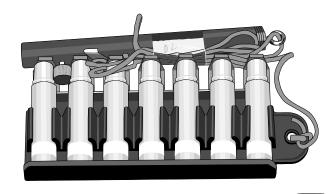
CONTAINER INSTRUCTIONS (Back)

EMERGENCY CONSUMPTION:

Drink no water first 24 hours unless sick or injured, or in desert conditions. Thereafter, approximately 8 oz. (2 ea, 4 oz. Bags) per day minimum. This posi-sealed bag may be checked by squeezing. Replace bag if air or water escapes. Recommended life five years or as established by local Administration.

jsc48013_006r3.cvx

ILLUMINATION SIGNAL KIT



SIGNAL KIT, ILLUMINATION

MK 79 MOD 0

CONSISTING OF
7 SIGNALS, HAND FIRED MK 80 MOD 0
1 PROJECTOR, SIGNAL, SURFACE MK 31 MOD 0

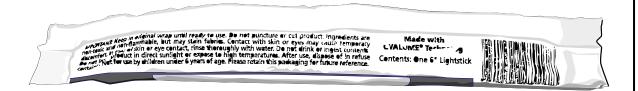
S88-37773

OPERATING INSTRUCTIONS

- 1. Pull trigger screw into angular (safety) slot.
- 2. Bend protective tab away from signal in bandoleer to allow attachment of projector.
- 3. Mate projector with signal and rotate to right until signal is seated.
- 4. Hold projector, arm fully extended, overhead.
- 5. Grip projector firmly. With snapping thumb action, pull trigger from safety slot and release into firing slot.
- 6. If signal misfires, at least one more attempt should be made to fire it.
- 7. Unscrew misfired or spent signal.

LIGHTSTICK





IMPORTANT: Keep in original wrap until ready to use. Do not puncture or cut product. Ingredients are non-toxic and non-flammable, but may stain fabrics. Contact with skin or eyes may cause temporary discomfort. In case of skin or eye contact, rinse thoroughly with water. Do not drink or ingest contents. Do not leave product in direct sunlight or expose to high temperatures. After use, dispose of in refuse container. Not for use by children under 6 years of age. Please retain this packaging for future reference.

jsc48013_007r2.cvx

SEA DYE MARKER



NOTE
The Life Raft contains two different types of Sea Dye Markers.
This drawing depicts the Wicktype. The Wickless (not shown) is located on the inside of the raft