

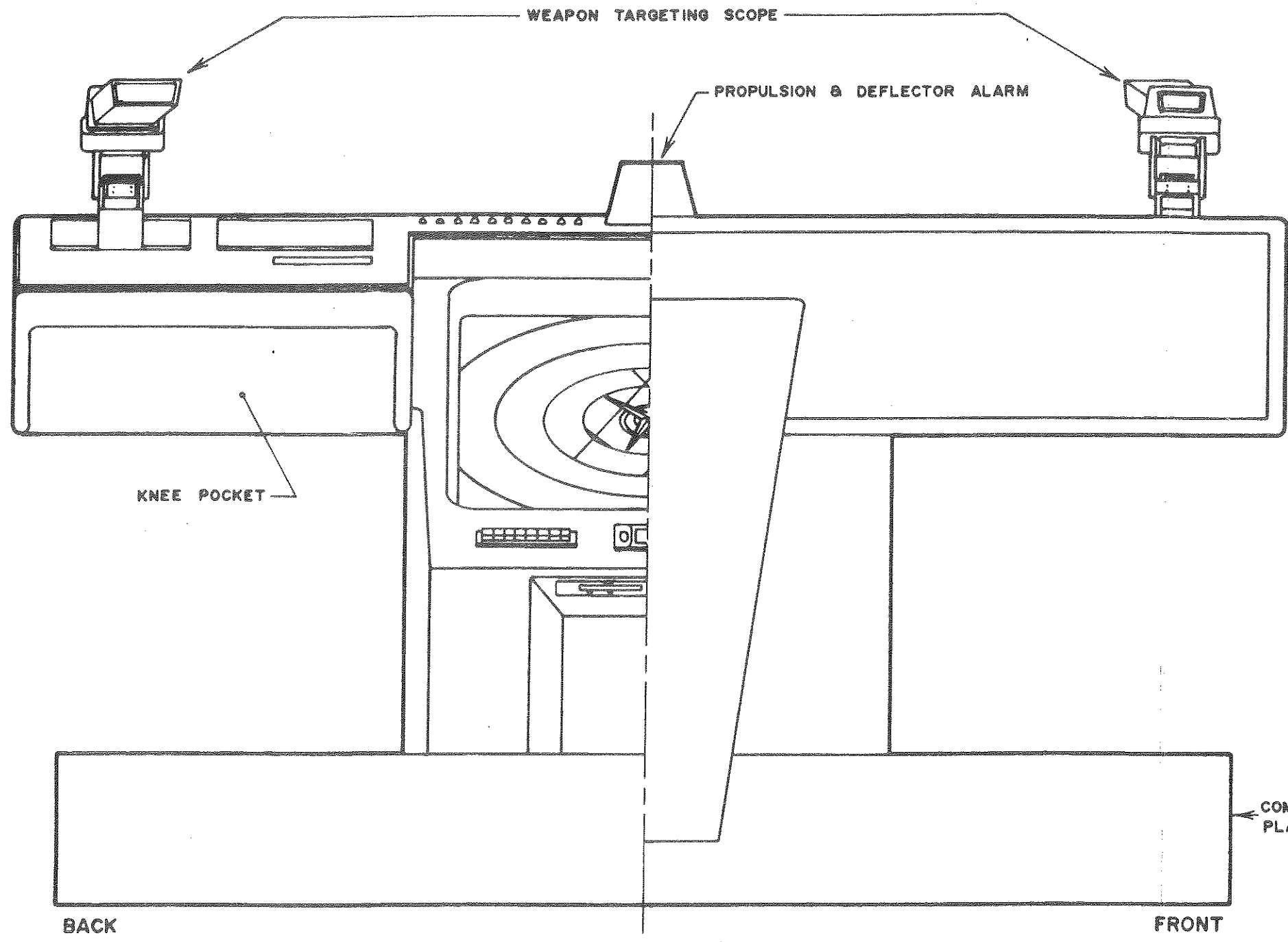
**HELM FUNCTION PANEL**

FUNCTIONS	BUTTON NO.
<b>FIRE CONTROL</b> (OVERLAY NO 1, BUTTON 31)	
PHOTON TORPEDO TUBE SELECT	1-6
PHAS R BANK SELECT	7-12
WEAPONS TARGETING SCOPE CONTROLS:	
NARROW AREA 13, WIDE AREA 15, UP 14, DOWN 26	
PORT 19, STARBOARD 21, HOME 20, TRACK 27	
SIGHTING RETICULE 25	
PHOTON TORPEDO SETTINGS	16-17
PHAS R BANK SETTINGS	22-23
FIRE PHAS RS	28
FIRE TORPEDOS	29
TRANSFER TO AUXILIARY FIRE CONTROL	30
EXACT FUNCTIONS FOR BUTTONS 16-17, 22-23, AND 28-30 ARE CONTROLLED BY COMMAND MODIFICATION SWITCHES.	
TRACTOR BEAM 18, DEFECTOR BEAM	24
<b>MAIN SCREEN CONTROLS</b> (OVERLAY NO. 2, BUTTON 32)	
SPECTRUM SELECT	1-6

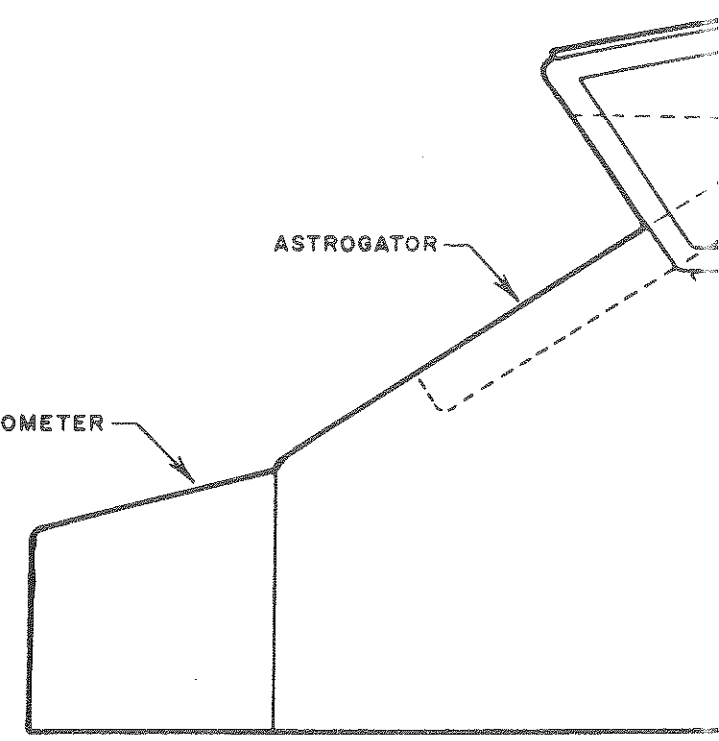
**HELM FUNCTION PANEL CONTINUED**

FUNCTIONS	BUTTON NO.
<b>MANEUVERING CONTROLS</b> (OVERLAY NO. 3, BUTTON 35)	
MANUAL MANEUVERING:	
RATES:	HIGH    LOW    STOP    LOW    HIGH
FORWARD	1    7    13    19    25    REVERSE
PITCH, UP	2    8    14    20    26    DOWN
YAW, PORT	3    9    15    21    27    STARBOARD
COURSE ENTRY KEYPAD	4-6, 10-12, 16-18, 23
DECIMAL POINT	22
MARK	24
ABSOLUTE COORDINATES	28
CLEAR KEYPAD	29
RELATIVE COORDINATES	30

FUNCTIONS	BUTTON NO.
<b>PROPULSION CONTROLS</b> (OVERLAY NO. 6, BUTTON 36)	
IMPULSE POWER SPEED SELECT:	FORWARD    STOP    REVERSE
	1-3, 7    8    9, 13-15
WARP FACTOR KEYPAD	4-6, 10-12, 16-18, 23

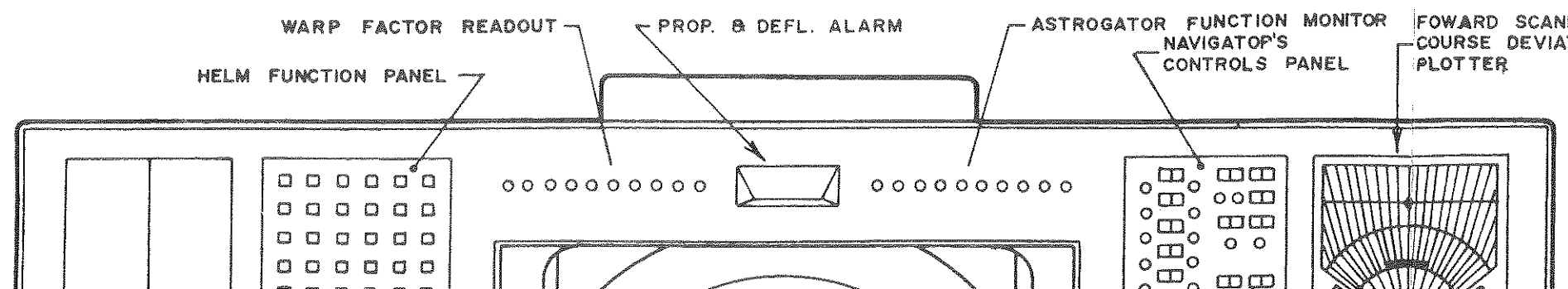


TO RAISE TARGETING SCOPE PUSH BUTTON NO. 31 ON HELM PANEL. TO LOWER SCOPE PUSH BAR

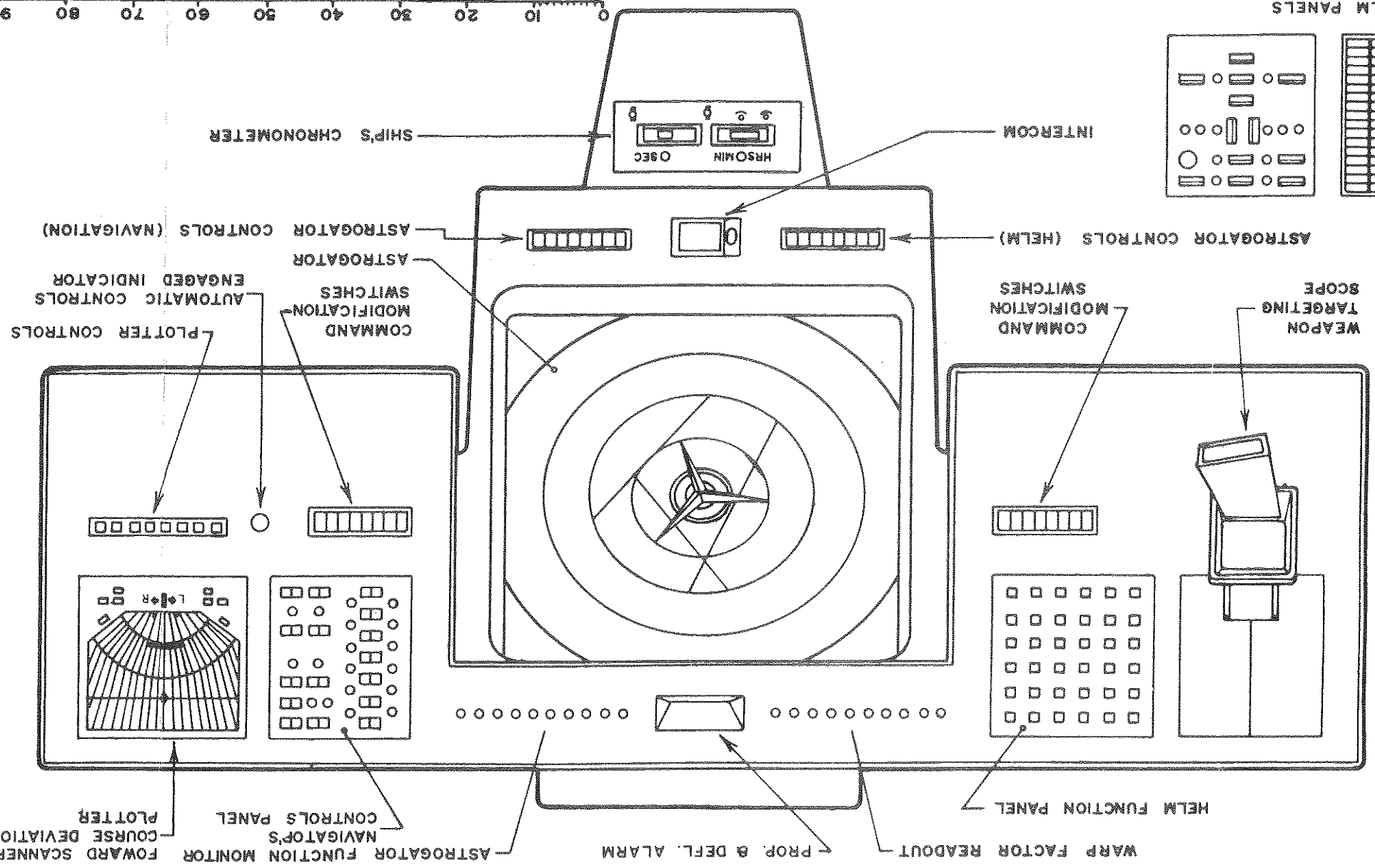
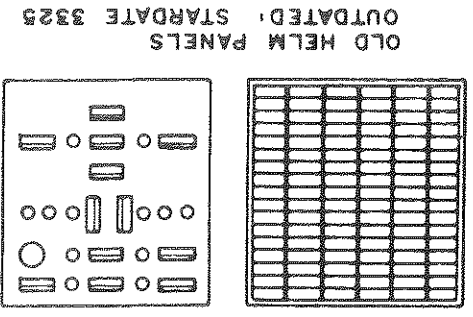


### HELM FUNCTION PANEL

FUNCTIONS	BUTTON NO.	FUNCTIONS
<b>FIRE CONTROL</b>		
(OVERLAY NO 1, BUTTON 31)		
PHOTON TORPEDO TUBE SELECT	1-6	MANUAL RATE
PHAS R BANK SELECT	7-12	FORWARD PITCH
WEAPONS TARGETING SCOPE CONTROLS:		
NARROW AREA	13	YAW, COURSE
WIDE AREA	15	DECIMAL MARK
UP	14	ABSOLUTE CLEAR
DOWN	26	RELATIVE
PORT	19	
STARBOARD	21	
HOME	20	
TRACK	27	
SIGHTING RETICULE	25	
PHOTON TORPEDO SETTINGS	16-17	
PHAS R BANK SETTINGS	22-23	
FIRE PHAS RS	28	
FIRE TORPEDOS	29	
TRANSFER TO AUXILIARY FIRE CONTROL	30	
EXACT FUNCTIONS FOR BUTTONS 16-17, 22-23, AND 28-30 ARE CONTROLLED BY COMMAND MODIFICATION SWITCHES.		
TRACTOR BEAM	18	DEFLECTOR BEAM
		24
<b>MAIN SCREEN CONTROLS</b>		
(OVERLAY NO. 2, BUTTON 32)		
SPECTRUM SELECT	1-6	WARP
IMPACT PROTECTING SELECT	7-12	



NO BUTTON NEEDED FOR FORWARD SCAN  
 PANEL LOCK / UNLOCK - PUSH 1 & 8 SIMULTANEOUSLY



OVERLAY OPERATION  
 AS YOU PUSH THE 6 BUTTONS ALONG THE BOTTOM OF THE BOTTOM OF THE HELM FUNCTION PANEL (NUMBERS 31-36) THE FUNCTIONS OF THE OTHER 30 BUTTONS ABOVE THEM CHANGE AS NOTED.

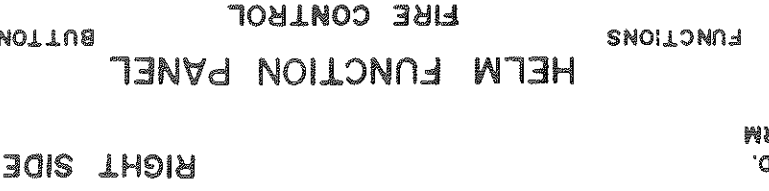
- WITH THIS OVERLAY,  
 THE REMAINING BUTTONS(19-30) ARE NOT PRESENTLY USED
- 18 ALL BATTLE STATIONS MANNED
  - 17 ENGINEERING EQUIPMENT AREAS EVACUATED
  - 16 HANGER DECK SECURE
  - 15 ISOLATION DOOR CLOSED
  - 14 HULL HATCHES SECURE
  - 13 HULL CLEAR
  - 12 SHIP READY:
  - 11 WEAPONS
  - 10 COMMUNICATIONS
  - 9 SENSORS
  - 8 PROPULSION
  - 7 MANEUVERING
  - 6 EQUIPMENT READY:
  - 5 AUXILIARY FIRE CONTROL
  - 4 WARP ENGINEERING
  - 3 IMPULSE ENGINEERING
  - 2 SECONDARY HULL BRIDGE

- STATIONS MANNED:  
 (OVERLAY NO. 4, BUTTON 34)
- ACTION PREPARATIONS MONITOR  
 ALL BUTTONS ON THIS OVERLAY (1-30) ARE PROGRAMM-  
 ABLE. THEIR FUNCTIONS ARE DEFINED AS REQUIRED.

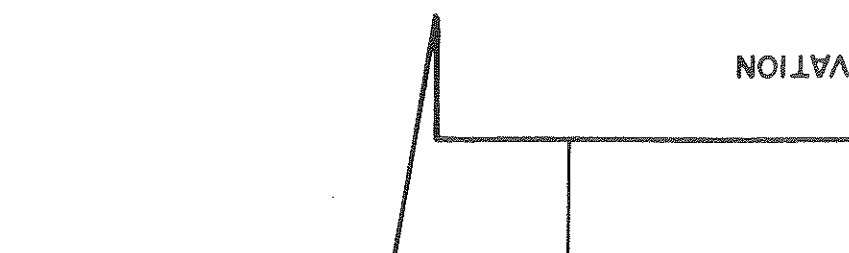
- MISCELLANEOUS CONTROL FUNCTIONS  
 (OVERLAY NO. 3, BUTTON 33)
- 28-30 MAGNIFICATION STEP
  - 16-18, 22-24 STANDARD VIEWS SELECT
  - 27 TRACK
  - 25 PORT 19, STARBOARD 21, HOME 20, LOG
  - 26 NARROW AREA 13, WIDE AREA 15, UP 14, DOWN 26
  - 7-12 VIEW POSITIONING CONTROLS:
  - 1-6 SPECTRUM SELECT

- MAIN SCREEN CONTROLS  
 (OVERLAY NO. 2, BUTTON 32)
- 24 TRACTOR BEAM
  - 16, DEFLECTOR BEAM
  - 30 ARE CONTROLLED BY COMMAND MODIFICATION SWITCHES.
  - 29 TRANSFER TO AUXILIARY FIRE CONTROL
  - 28 FIRE TORPEDOS
  - 22-23 PHAS R BANK SETTINGS
  - 16-17 PHOTON TORPEDO SETTINGS
  - 25 SIGHTING RETICULE
  - 27 PORT 19, STARBOARD 21, HOME 20, TRACK
  - 26 NARROW AREA 13, WIDE AREA 15, UP 14, DOWN 26
  - 7-12 WEAPONS TARGETING SCOPE CONTROLS:
  - 1-6 PHAS R BANK SELECT

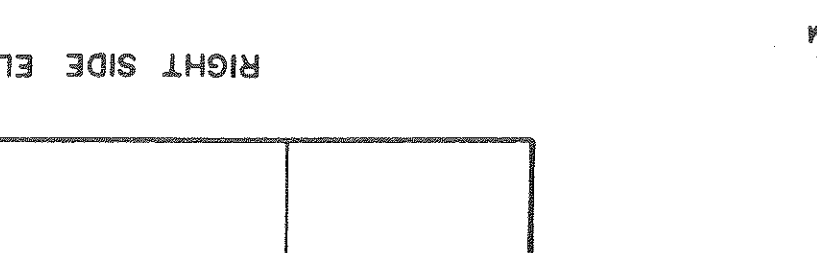
- FIRE CONTROL  
 (OVERLAY NO. 1, BUTTON 31)
- FUNCTIONS
- 1-6 PHOTON TORPEDO TUBE SELECT
  - 7-12 PHAS R BANK SELECT
  - 16-17 WEAPONS TARGETING SCOPE CONTROLS:
  - 26 NARROW AREA 13, WIDE AREA 15, UP 14, DOWN 26
  - 27 PORT 19, STARBOARD 21, HOME 20, TRACK
  - 25 SIGHTING RETICULE
  - 16-17 PHOTON TORPEDO SETTINGS
  - 28 PHAS R BANK SETTINGS
  - 29 FIRE TORPEDOS
  - 30 TRANSFER TO AUXILIARY FIRE CONTROL
  - 24 ARE CONTROLLED BY COMMAND MODIFICATION SWITCHES.
  - 16, DEFLECTOR BEAM
  - 24 TRACTOR BEAM



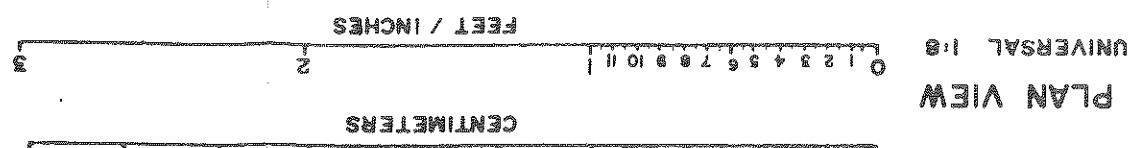
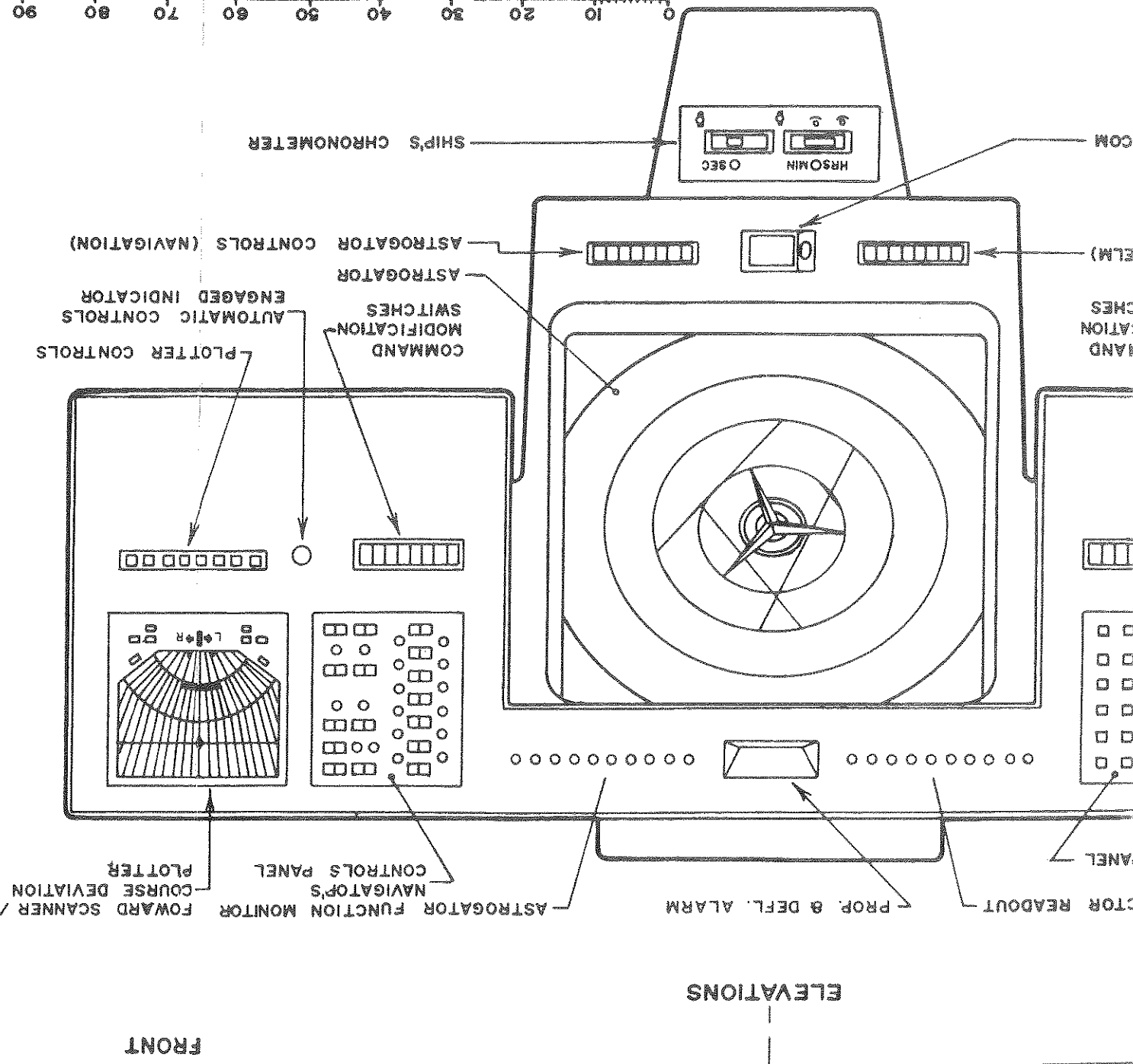
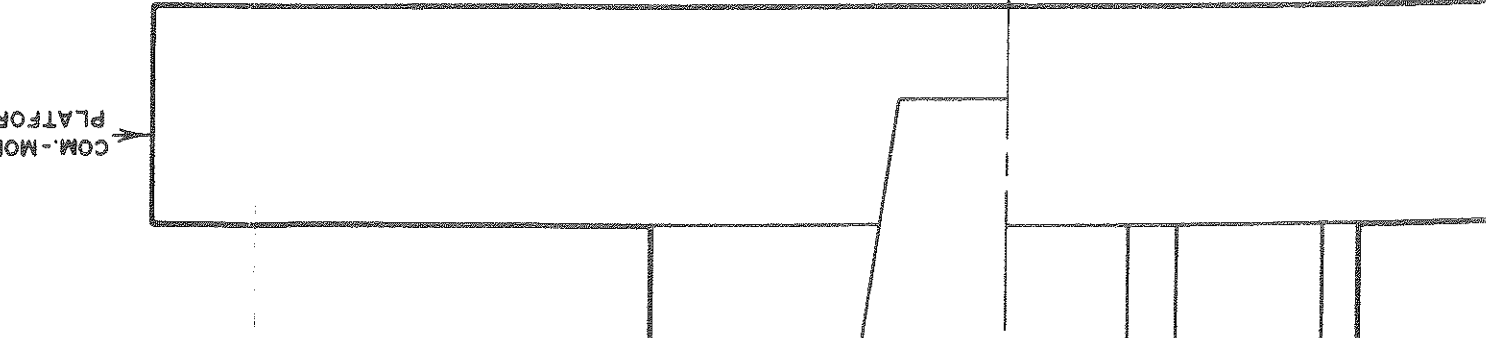
BUTTON NO.	FUNCTIONS
1-6	MANEUVERING CONTROLS (OVERLAY NO. 8 BUTTON 35)
7-12	RATES: HIGH LOW STOP LOW HIGH LOW STOP LOW HIGH REVERSE DOWN 26 20 PITCH, UP 2 8 FORWARD 1 7
13-18	MANUAL MANEUVERING: STOP 8 REVERSE 9, 13-15
19, 25	WARP FACTOR KEYPAD
20, 26	STANDARD ORBIT
21, 27	EVASIVE MANEUVERS
22	DECIMAL POINT
23	ACCEPT COURSE FROM NAVIGATION
24-30	PROPULSION CONTROLS (OVERLAY NO. 6, BUTTON 36)
1-3, 7	IMPULSE POWER SPEED SELECT: FORWARD STOP REVERSE
8	STOP
9, 13-15	REVERSE
16-18, 23	WARP FACTOR KEYPAD
19, 25	STANDARD ORBIT
20, 26	EVASIVE MANEUVERS
21, 27	DECIMAL POINT
22	REVERSE
23	FLANK SPEED FORWARD
24	FLANK SPEED REVERSE
25	CLEAR KEYPAD
26	FLANK SPEED FORWARD
27	FLANK SPEED REVERSE
28	CLEAR KEYPAD
29	FLANK SPEED FORWARD
30	FLANK SPEED REVERSE
1-4	COURSE ENTRY
5-8	DESTINATION ENTRY
9-12	WAYPOINT ENTRY
13-20	DISPLAY COURSE
21-26	ASTROGATOR CURSOR CONTROLS
27-30, 33-38	DATA ENTRY KEYPAD
31	MARK
32	DECIMAL POINT
33	CLEAR KEYPAD
34	ENTER
41-44, 47-50	CHART-FILE CONTROLS
45-46	PAGE ADVANCE / RETURN
1	PLOT OR SCAN
2	INCREASE RANGE
3	DECREASE RANGE
4	UP
5	DOWN
6	PORT
7	STARBOARD
8	COMPUTE STANDARD ORBIT
9	COMPUTE E.T.A.
10	PLOT OBJECT TRACKS
11	PLOT INTERCEPT COURSE
12	DISPLAY ORBITAL APPROACH
13	COMPUTE STANDARD ORBIT



HELM FUNCTION PANEL



BUTTON NO.	FUNCTIONS
1-6	PHOTON TORPEDO TUBE SELECT
7-12	WEAPONS TARGETING SCOPE CONTROLS: PHAS R BANK SELECT
13, 14, 26	NARROW AREA 13, WIDE AREA 15, UP 14, DOWN 26
16-17	PHOTON TORPEDO SETTINGS
18-17	PHAS R BANK SETTINGS
19, 27	SIGHTING RETICULE 25
20, 27	PORT 19, STARBOARD 21, HOME 20, TRACK 27
21-23	PHAS R BANK SETTINGS
24	TRANSFER TO AUXILIARY FIRE CONTROL
25	FIRE TORPEDOS
26	FIRE PHAS RS
27	PHAS R BANK SETTINGS
28-30	EXACT FUNCTIONS FOR BUTTONS 16-17, 22-23, AND 28-30 ARE CONTROLLED BY COMMAND MODIFICATION SWITCHES.
1-6	MAIN SCREEN CONTROLS (OVERLAY NO. 2, BUTTON 32)
7-12	SPECTRUM SELECT
13, 26	NARROW AREA 13, WIDE AREA 15, UP 14, DOWN 26
16-18, 22-24	STANDARD VIEWS SELECT
19, 27	PORT 19, STARBOARD 21, HOME 20, LOG 25
20, 26	VIEW POSITIONING CONTROLS: TRACK 27
21-24	MAGNIFICATION STEP
25	TRACK 27
26	PHAS R BANK SETTINGS
27	PHAS R BANK SETTINGS
28-30	MISCELLANEOUS CONTROL FUNCTIONS (OVERLAY NO. 3, BUTTON 33)
1-6	STATIONS MANNED: (OVERLAY NO. 4, BUTTON 34)
7, 38	PROPULSION
8	EQUIPMENT READY:
9, 10	COMPUTER SYSTEMS
11, 38	COMMUNICATIONS
12	SHIP READY:
13, 14	HULL CLEAR
15, 16	HULL MATCHES SECURE
17	HANGER DECK SECURE
18	ENGINEERING EQUIPMENT AREAS EVACUATED
19	ALL BATTLE STATIONS MANNED
20	THE REMAINING BUTTONS(19-30) ARE NOT PRESENTLY USED
21	WITH THIS OVERLAY.
22	OVERLAY OPERATION
23	AS YOU PUSH THE 6 BUTTONS ALONG THE BOTTOM OF THE BOTTOM OF THE HELM FUNCTION PANEL (NUMBERS 31-36) CHANGE AS NOTED.
24	NO BUTTON NEEDED FOR FORWARD SCAN
25	PANEL LOCK / UNLOCK - PUSH 1 & 8 SIMULTANEOUSLY



PLAN VIEW  
UNIVERSAL 1:8  
CENTIMETERS  
FEET / INCHES