

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>11/22/68</u></p> <p>04-08</p> <p>Position: <u>PORT of Palm Beach</u></p> <p>Weather: <u>CLEAR AND WARM</u> <u>WATER TEMP 73°F</u> <u>CURRENT 1-2 KNTS</u></p> <p>0730 START READY FOR SEA CHECK OFF</p>	<p>0400</p> <p>0500</p> <p>0600</p> <p>0700</p>	<p>Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Record air flask readings. Flask #1 _____; #2 _____ #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Record battery readings Check F.W. valves shut Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin pressure _____ Cabin humidity _____</p> <p>Check bilges. Check hull valves. Check LOX tanks. Record Battery Readings Check F.W. Valves Shut.</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	<p><u>D</u></p>

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27 September 1968

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>11/27/68</u></p> <p>08-12</p> <p>Position:</p> <p>Weather:</p> <p>0800 BATT. WATER READINGS TAKEN (see R. QUICK)</p> <p>COMPL READY FOR SEA CHECK OFF</p> <p>HELD OBA INSTRUCTION HELD FIRE DRILL</p> <p>SECURE ALL HP FLASK HULL VALVES EXCEPT #1 (190 kg/cm²)</p> <p>UNDERWAY WITH TOW ON STATION LINES TO PIER SIDE</p>	0800	<p>Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/stand-by position. Check F.W. valves shut Record battery readings Conduct contaminant checks and record. Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____ LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels.</p>	
	0900	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
	1000	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
	1100	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	

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Date <u>11/22/68</u>	1200	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 <u>190</u> ; #2 <u>190</u> ; #3 <u>190</u> ; #4 <u>190</u> ; #5 <u>190</u> ; #6 <u>190</u> Test emergency ballast alarm.	
12-16		Check equipment not in use in off/standby position.	
Position:		Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % <u>0</u> Oxygen % <u>21</u> Cabin temperature <u>74</u> Cabin humidity <u>82%</u>	
Weather:			
1315 LOAD SHOT INTO TANKS #1000			
1320 SECURE HATCH			
1325 LOAD SHOT ON DECK			
1330 FLOOD MBT			
1330 LOAD SHOT ON DECK			
1340 FLOOD VBT - PORT			
1350 CHECK UQC NOT VERY GOOD SOUND IS GARBLED			
USE HAED HARD LINE PHONE			
1400 DO MBT BLOW TEST 1ST BLOW OPEN BOTH VALVES 1/4 TURN AIR GAGE READING 160 KAL/cm ² TOPSIDE REMOVE MONOMETER CONTIN LOAD SHOT			
1405 1450 USE TO PORT MOTORS ATTEMPT TO PULL BOAT DOWN - N.G. ADD SHOT	1300	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1501 USE MOTORS TO DIVE BOAT STARTING TO DESCEND - SW. SENS #2 ON	1400	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1505 ON BOTTOM SECURE MOTORS OPERATE SAS (2 TIMES) TAKE ENG READINGS BATT. MONIT NG. INSPECT BOAT ALL OK. CHECK MAIN FLANGES, ALL OK. BOAT IS TIGHT	1500	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	

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	Time	Routine	Initial
Date <u>11/22/68</u>	1600	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Check F.W. valves shut Record battery readings Carbon dioxide% _____ Oxygen % <u>21</u> Cabin temperature <u>78°</u> Cabin humidity <u>94%</u>	
16-20			
Position:			
Weather:			
1620 TAKE DWYER READINGS 0.8% 0.6% 0.5% 0.6%			
TEMP OUTSIDE WATER TEMP 26°C LAB. PRESS = 1.05 ATM.			
1630 Prepare TO SURFACE	1620		
1631 BOAT LIFTING			
1631 Drop SHOT HyDr. Systm. 20-30 Sec To oper. VALVES	1700		
1636 ON SURFACE Blow MBT			
1638 OPEN HATCH			
1645 Rig FOR SURFACE	1800		
1650 ANS. propul. commands			
17:15 Compl Rig FOR SURFACE SECURE BOAT	1900		

	Time	Routine	Initial
Date <u>11/26/68</u>	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 <u>190</u> ; #2 _____ #3 _____ ; #4 _____ #5 _____ ; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/stand-by position. Check F.W. valves shut Record battery readings Conduct contaminant checks and record. Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____ LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels.	
08-12			
Position: <u>PORT OF PALM BEACH, SLIP #2</u>			
Weather: <u>CLEAR, ±2 KNT WIND, TIDE 3/4 UP.</u>			
0830 <u>Prepare To Get UNDERWAY, LOAD SHOT etc</u> <u>START CHECK OFF OF BOAT - READY FOR SEA.</u>			
0905 <u>VACUUM TEST OF BOAT - START</u>			
0915 <u>SECURE VACUUM pump @ .89 atm's</u>			
0925 <u>HOLD FOR 10 MIN. NO LEAKS.</u> <u>SECURE FROM TEST. BLEED OFF AIR.</u>			
1030 <u>READY FOR SEA. Compl</u> <u>PILOT PANEL LIT OFF</u> <u>CS INVERTER</u> <u>PORT & STR 60KVA INVERTERS</u>			
1039 <u>UNDERWAY WITH TOW.</u> <u>START "RIG FOR DIVE" CHECK OFF</u> <u>BOAT LOC. IN POSITION Center of</u> <u>SLIP 2</u> <u>BOAT READY TO DIVE</u> • WATER DEPTH ON FATHOMETER 24 FT • DEPTH TO KEEL BY DIVER 21 1/2 FT <u>FWD HATCH SHUT & DOGGED.</u> • EXT. TEMP (GAGE) 25°C.			
1120			
1125 <u>OPEN FWD VENTS</u>	0900	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1127 <u>OPEN AFT VENTS</u> <u>NOTE! LAMP FOR #4 MBT CAME ON</u> <u>WHEN FWD GROUP WERE FLOODED</u> <u>APPEARS THE LAMP NAME IS</u> <u>WRONG.</u>	1000	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1132 <u>COMMENCE LOADING SHOT ON DECK</u> <u>NOTE! LAMP ON #1 MBT WENT FULL</u> <u>WENT OFF.</u>	1100	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1140 <u>TRY TO USE MOTORS TO GO DOWN</u> <u>ALL BACK 1/2</u>			
1142 <u>ALL BACK FULL</u>			
1144 <u>ALL BACK 1/2</u>			
1145 <u>ALL STOP - STILL ON SURFACE NO DEPTH CHANGE</u>			

(OVER)

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>11/26/68</u></p> <p>12-16</p> <p>Position: <u>See 0800 - 1200</u></p> <p>Weather:</p>	<p>1200</p>	<p>Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: ONLY ON LINES Flask #1 <u>190</u>; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____</p>	<p><i>(Handwritten mark)</i></p>
<p>1200 LOST ALL PWR TO STB INVERTER SECURE PILOT PANEL MOTOR SWITCHES & INVERTER NO VOLTAGE NO AMPERAGE BLOWN FUSE. ATTEMPT TO REPLACE FUSE 2ND FUSE BLEW AS IT WAS PUT INTO HOLDER. SMALL PWR SHUT DOWN FUSE ALSO BLEW. GREVES WILL CHECK OUT. WE CAN OPER. ON (1) INVERTER (PORT)</p>			
<p>1205 OPEN VENTS } NO DEPTH CHANGE 10 SECURE VENTS }</p>			
<p>1210 BOAT HAS A PORT LIST. MAG COIL SENSORS INDICATE WE LOST SHOT IN STB TANK, RE REMAG. MAG VALVE. SEND DIVER DOWN TO CHECK.</p>	<p>1300</p>	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1225 DIVER REPORTS LOAD OF FRESH SHOT UNDER BOAT. REMOVE COVER OF TANK. TOPSIDE REPORT ALL SHOT GONE IN STB TANK,</p>	<p>1400</p>	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1226 TANK, BLOW MBT } GAGE READS 80 KSI/CM² 1226.5 SECURE BLOW } ON SURFACE</p>	<p>1500</p>	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1229 OPEN PWD HATCH RAWD TOPSIDE</p>			
<p>13 MAG VALVE IS NOW HOLDING. COMMENCE LOADING SHOT</p>		<p>Original 27 September 1968</p>	

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	Time	Routine	Initial
<p>Date <u>11/26/68</u></p> <p>11-16</p>			
<p>Position: BATT STRUNG VOLT. ON BATT MONIT. H. DOZE RCVD SHOCK & ELECTROSHOCK (NOT SERIOUS)</p> <p>Weather: THIS WAS TRANSMITTED THROUGH A SET SCREW IN THE 2 KNOBS OF THE DVM. SECURE & DISABLES THIS SYSTEM</p>		<p>Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure.</p>	
<p>1410 SHOT LOADING COMPLETE SHOT INDICATING METER IN BOAT IS FLUCTUATING INDIC. POSS. SHOT IN SYSTEM.</p>		<p>Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____</p>	
<p>1411 PORT INVERTER ON LINE MODE 1 TURN MODE SECURE HATCH</p>		<p>Test emergency ballast alarm. Check equipment not in use in off/standby position.</p>	
<p>1412 OPEN MBT VENTS TANKS FULL BOAT STILL ON SURFACE</p>		<p>Check F.W. valves shut Record battery readings Carbon dioxide% _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____</p>	
<p>1417 LOAD SHOT ON DECK</p>			
<p>1420 BOAT DOWN BY THE STERN. DIVING SLOWLY</p>	<p>1450</p>	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1423 AMP HR MTR ON "D" BATT FUNCTIONING INTERMITTLY</p>		<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1426 USE (2) MOTORS - BACK 1/2</p>	<p>1800</p>	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1427 STOP</p>			
<p>1429 ON BOTTOM AT 38'</p>		<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1432 SECURE PROPUL. "O" GAP ON STB BATT VALVE</p>		<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1435 TAKE MEGGER READINGS CHECK ON PHONE (UAC) N.G.</p>	<p>1900</p>	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1434 DIVER REPORTS: BOAT IS ON FWD LEGS & FRT FAIRING AFT LEGS OFF BOTTOM. SLIGHT ϕ DOWN BY BOW $\sim 2^\circ$</p>			
<p>1450 SURFACE ON VBT'S (7.8 kg/cm² REMAINS)</p>			
<p>1453 ON SURFACE BLOW MBT (5.9 kg/cm² REMAINS)</p>			
<p>1500 OPEN HATCH RIG FOR SURFACE</p>		<p>Original 27 September 1968</p>	

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	Time	Routine	Initial
Date <u>11/26/68</u>	2000	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air Flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____ Conduct contaminant Checks _____	
20-24 12-16			
Position:			
Weather:			
1507 RIG FOR SURFACE Compl WITH EXCEPT OF P. LOF PAN & T WRENCHES			
1515 T HANDLES IN PLUGS IN SHOT VALVES PLUGS IN MBT			
1520 POST AFT MOTORS			
1523 POS. FWD MOTORS			
1525 CRUISE MODE - PORT INVERT FWD MOTORS - Ready TO ANS. COMMANDS - TRIM BOAT 51% FWD } TRIM TANK 49% AFT }			
ANS. BELLS MOVE BOAT - UNDER POWER INTO POSITION TO TIE UP	1535	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1555 SECURE BOAT, SECURE INVERTERS Compl RIG FOR SURFACE	1600	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1600 1600	1600	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	

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27 September 1968

	Time	Routine	Initial
Date <u>11/27/68</u> <u>3RD DIVE</u> 08-12	0800	Replace LiOH panels Conduct thorough boat inspection.	
Position: <u>Port of Palm Beach, FLA</u> Slip #2	ON BOARD DOER RAND KAZMIR PICCARD REBERS GREVE	Check hull valves for proper position. Check LOX tanks for leaks.	
Weather: <u>CLEAR, SLIGHT SWIND FROM THE South-west about 1-2 mph</u> <u>Water Clear AND CALM Water Temp 72°F</u>		Vent main ballast tanks. Check emergency ballast hydraulic pressure.	
0800 RIG BOAT FOR SEA.		Air flask readings:	
0930 Rotate Main Motors Do motor checks; Inverter & SW gear checks ALL SAT.		Flask #1 _____; #2 <u>176</u> #3 <u>190</u> ; #4 <u>190</u> #5 <u>190</u> ; #6 <u>190</u>	
0930 Compl RIG FOR SEA		Test emergency ballast alarm.	
0952 UNDERWAY - UNDER TOW FROM CHASE BOAT. CS TOPAZ ON LWS 1 & 2 SW SENSORS LIT Temp in Boat 72°F - 94% HUMID WATER TEMP ON SENSOR = 72 23°C FWD MOTORS TURN MODE (2) INVERTERS ON LWS		Check equipment not in use in off/stand-by position. Check F.W. valves shut Record battery readings Conduct contaminant checks and record. Carbon dioxide % <u>0</u> Oxygen % <u>21</u> Cabin temperature <u>71</u> Cabin humidity <u>91</u> LOX pressure Fwd ~ <u>1/3 Full</u> Aft ~ <u>1/2 Full</u>	
1020 Compl RIG FOR DIVE SWITCH MOTORS TO CRUISE/MODE		Record F.W. & LOX tank levels.	
1023 FLOOD STB VBT NOTE FROM TOPSIDE OIL NOTED NEAR FWD STBD VENT VALVE	0900	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1030 FWD HATCH CLOSED - STAND BY Ready TO DIVE UNWATER PHONE CHECK = 5X5	1000	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1043 VBT FLOODED Compl. SWITCH MOTORS TO TURN MODE Read Bottom as 22 feet ON FATHOMETER SHOT LEVEL Reads PORT 8.1 V STB 8.8 V	1100	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1044 Dive OPEN MAIN BALL VENTS			

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Date <u>11/27/68</u>	<u>0800</u>	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Record air flask readings. Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
0800 08-12			
Position:			
Weather:			
1057 ON BOTTOM #3 SW sensor LITE ON NOTG SLOW DESCENT OF BOAT ALWAYS BY THE STERN INDICATES SLOW VENTING OF THE SAIL SUGGEST WE DIVE WITH HATCH OPEN FOR CHECK		Test emergency ballast alarm. Check equipment not in use in off/standby position (ex. fathometer, temperature sensor, compass, sonar, rudder position indicator, lights, sink, shower). Check F.W. Valves shut Record battery reading Carbon dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin pressure _____ Cabin humidity _____	
1101 B.F. RISING OFF BOTTOM - Appears AIR LEAKING PAST Blow VALVES INTO MBT SECURE Hull VALVES RISING @ 2 FT/MIN			
1106 close to SURFACE. Stop ASCENT VENT MBT			
1120 TEST underwater phone Reception on FWD Head - POOR TOPSIDE " - VERY POOR MAY BE SHIELDED BY SHOT TANK ON DECK IN THIS AREA			
1124 Divers REMOVE SHOT BAGS (13)			
1125.5 ON SURFACE	0800	Check bilges. Check hull valves Check LOX tanks Record battery readings Check F.W. Valves Shut	
1127 FLOOD PORT VBT CONDENSATION FORMING ON BOTH HEMISHEADS & LINES			
1140 VBT FLOODED	<u>0800</u>	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1141 USE (2) MOTORS TO DIVE			
1141.5 ON BOTTOM			
1143 Blow PORT VBT - TAKES 70 SEC TO BLAD DRY BOAT RISING	<u>0800</u>	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1144 Power DOWN ON BOTTOM - OPEN MBT SECURE PWR Blow MBT ON SURFACE 150 KG/cm ² in #2			
1148			
1148.5 Dive - open MBT vents APPLY Power			
1156 ON BOTTOM - HOLD WITH MOTORS			

Original *Dick*
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	Time	Routine	Initial
Date <u>11/27/68</u>	1200	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	
12-16 Position: Weather:			
1201 FULL Power (4) MOTORS TO SURFACE (IN FEW SECONDS)			
1203 FLOOD VBT			
1208 POWER DOWN ON (2) MOTORS			
1210 ON BOTTOM VBT FULL SECURE FLOODING Depth 32 FT + 7 FT = 39 FT			
1212 TRIM TEST PUMP FT TO AT $\phi = 11^\circ$ CHANGE PUMP AT TO FT $\phi = 5^\circ$ CHANGE MAY BE DUE TO SITTING ON FWD FAIRING	1300	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1217 Power UP (2) MOTORS			
1220 power DOWN (2) MOTORS			
1230 PUMP AT FT TO AT TO ACHIEVE $0^\circ \phi$			
1236 Blow MBT SURFACE	1400	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1237 FWD HATCH OPEN			
1240 Blew VBT'S - VENT OFF RIG FOR SURFACE	1500	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1300 RIG FOR SURFACE COMPL. MOTORS ROTATED - IN-TURN-MODE			
1310 ANS BELLS ON (4) MOTORS			
1325 S.W. SENSOR LIGHT (5) ON & OFF			
1326 SECURE PILOT PANEL - SECURE BOAT NOTE: LARGE QUANTITIES OF OIL COAT INSIDE SAIL DECK MAY BE DUE TO AIR LEAKING BACK INTO DEPTH SENSOR. OIL WAS ALSO NOTICED COMING FROM UNDER STB END DOOR, NOT FROM VALVE AS PREVIOUS REPORTED			

Original 27 September 1968

Date	Time	Routine	Initial
<p>12/3/68</p>	0800	<p>Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 <u>25</u> ; #2 <u>85</u> #3 <u>200</u> ; #4 <u>200</u> #5 <u>200</u> ; #6 <u>200</u> Test emergency ballast alarm. Check equipment not in use in off/stand-by position. Check F.W. valves shut Record battery readings Conduct contaminant checks and record. Carbon dioxide % <u>0</u> Oxygen % <u>21%</u> Cabin temperature <u>74</u> Cabin humidity <u>86</u> LOX pressure <u>52</u> Fwd <u>1/3</u> Aft <u>1/3</u> Record F.W. & LOX tank levels.</p>	
<p>08-12</p>			
<p>Position: Part of Palm Beach, Fla 5 Turning Basin</p>			
<p>Weather: Clear, no seas running. Water temp 72°F - Tide 1-2 kts</p>			
<p>0830 Compl Rig for sea check off. #3 air Bottle on line. Lamps #1 & 2 on SW sensor #5 intermittent.</p>			
<p>0858 Rotate main motors Hory - (2) 60 KVA inverters on line ^{Reading 320V} (2) Topaz inverters on line ^{Reading 118V}</p>			
<p>make Radio check - OX TO office make Un. Water tel. check - OX ^{No change Boat} Boat ready for sea P.P ready to ans com mands</p>			
<p>0900 Underway with tow Boat trim 50% - 50%</p>	0900	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>0905 Drop Tow - underway on main motors</p>	1000	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>0908 Start Surface training. Boat responds very well Some diff. in Steading up on a course. But This should be O.K. with training.</p>	1100	<p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	
<p>1100 Secure training start AEG Electrical test</p>			
<p>Various motor combinations 1130 Starboard Main motor, ammeter must be replaced not functioning correctly</p>		<p>Original 27 September 1968</p>	

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Date <u>12/3/68</u>	1200	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	
12-16 Position: Weather: 1200 NOTE LARGE FLUCTUATION IN SHOT INDICATOR METER WHEN RADIO IS OPERATED & WHEN CIRCUIT BREAKER (N). STAND BY FOR AEG TEST ALL READINGS NORMAL. THERE IS PRESS. BUILD UP IN VBT'S PROB. DUE TO LEAKING VALVES. STB TANK HEADS 15 KG/CM ² COUNTER ON "D" BATT NOT FUNCTIONING			
1218 RUN SELF GEN TESTS. AFT TACH. METERS NOT OPERATING CORRECTLY - AEG COMMENT METERS MAY BE BAD			
1300 SECURE FROM TEST WITH AEG			
1305 HOOK UP TO TOW; ROTATE MOTORS FOR SELF GEN. TEST.	1300	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1307 UNDER TOW. NO SELF GENERATION SCREWS DO NOT ROTATE WHEN UNDER TOW.			
1310 MOVE MOVE BOAT UNDER PUR TO SLIP. PREP. TO DIVE	1400	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1400 RIG FOR DIVE COMPL - BOAT IN POS. FLOOD STB VBT READY TO DIVE ABOARD - KAZ AEBERSOLD PICCARD KALMAN KAZ QUICK GREVE DONR CHETTY (AEG)	1500	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1418 OPEN VALVES - DESCEND SLOWLY			
1420 HOLDING USE (2) MOTORS			
1425 ON BOTTOM DEPTH = 37 FEET			
1425 SECURE PROPULSION - TAKE MEGGER READINGS ALL CHECK OUT NO GRDS MAIN MOTORS THERE ARE GRDS ON SHOT DROP SYST. AFTER MEGGER CHECK SHOT COIL VOLT READ 9A FROM T.S.A.			
1426 LIGHT ON #3 SW SENSOR ON.			

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20-21 12-10			
Position:			
Weather:			
1440 READY TO SURFACE ON MBT			
1441 BLOW SECURED, ATTEMPT TO BLOW UNSUCCESSFUL. (2) CAPS MISSING FROM LINES. WHERE REMOVED CHECKED VALVES IN AUTO. BLOW SYSTEM. (VALVES V59 & V60) RAG HAD COVERED LINES & WAS BLOWN BACK INTO INVERTER AREA. ALL OK	MIST		
1445 Request topside to send diver down with two caps & we will take in through SAS.			
1511 Diver places object in SAS			
1515 Close SAS Drain & Remove (2) plugs.			
1520 LINES CAPPED	2100	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1523 BLOW MBT'S (30kg/cm ² at) NOTE ICE FORMED ON #3 PLUG H. AIR LINE - THE BOAT IS VERY HUMID.	2200	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1520 Divers RIG TANKS (PLUGS ETC)			
1540 RIG FOR SURFACE Compl.	2300	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1600 MOOR AT DOCK SECURE PILOT PANEL (LAMP #3 OFF) Compl SECURE BOAT & CLEAN UP			
1615 BOAT SECURE			

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	Time	Routine	Initial
Date <u>12-5-68</u>	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure.	
08-12			
Position: <u>Port of Palm Beach, FLA</u>			
Weather: <u>SLIP #2</u>			
<u>CLEAR, NO SEA, WIND W@1-2 KNT</u>			
0800 START "READY FOR SEA Check off"		Air flask readings:	
1054 Compl "READY FOR SEA Checkoff" (SEE SHEETS FOR EXCEPTIONS)		Flask #1 <u>180</u> ; #2 <u>180</u> K	
1107 REPORT READY TO GET UNDERWAY		#3 <u>180</u> ; #4 <u>180</u> K	
1108 READY TO GET UNDERWAY		#5 <u>180</u> ; #6 <u>180</u> K	
LIGHT OFF PILOT PANEL. SWITCH ON STB'D INVERTER		Test emergency ballast alarm.	
NO POWER - BLOWN FUSE		Check equipment not in use in off/stand-by position.	
NOTE! 110V. ON PILOT METER -		Check F.W. valves shut	
PORT INVERT. OK.		Record battery readings	
STBD SOME INDICATION.		Conduct contaminant checks and record.	
SECURE PILOT PANEL CALL AEG		Carbon dioxide % <u>0</u>	
1120 BLOW MBT'S		Oxygen % <u>21%</u>	
1200 AEG WORKING ON INVERTER		Cabin temperature _____	
FUSE OPERATES NEAR ITS CAPACITY		Cabin humidity _____	
& BLOWS. THIS IS PROB. WHAT		LOX pressure _____	
CAUSED BLOWN FUSE DURING DIVE		Fwd <u>1/4</u> Aft <u>1/4</u>	
ON 11/26/68. FUSE WILL BE CHANGED		Record F.W. & LOX tank levels.	
TO HIGHER RATED ONE / GREVE & CHETTY (AEG)	0900	Check bilges	
		Check hull valves	
		Check LOX tanks	
		Record battery readings	
		Check F.W. valves shut	
	1000	Check bilges	
		Check hull valves	
		Check LOX tanks	
		Record battery readings	
		Check F.W. valves shut	
	1100	Check bilges	
		Check hull valves	
		Check LOX tanks	
		Record battery readings	
		Check F.W. valves shut	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-5-68</u>	1200	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	
12-16			
Position:			
Weather:			
1355 Compl Repair of AEG SWITCH GEAR. INDICATION ON PILOT PANEL METER WAS DUE TO MISS WIRE ON AEG SWITCHGEAR. DIVERS CHECKING BATT'S. OIL LEAKING. MAY BE BAD BATT. CELL.			
1400 (1) CELL IS BAD IT LOOKS LIKE A CRACKED CASE.			
1410 Boat Ready to get underway			
1411 Under way with tow			
1430 MOORED IN POSITION TO DIVE	1300	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1450 Report ready to dive #3 SW LAMP ON HATCH IN SAIL WILL REMAIN OPEN.	1400	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
* 1451 DIVE			
1458 ON BOTTOM - 5° DOWN BUBBLE NOTE! BOAT CAME DOWN WITH A LARGE DOWN BUBBLE.	1500	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1508 Pump F. Trim to A. TRIM. TO REMOVE 5° DOWN BUBBLE			
1511 SURFACE ON STB VBT Blow STB VBT			
Δ 1512 ON SURFACE			
* 1515 FLOOD PORT VBT - DIVE			
1525 POWER DOWN USE (2) MOTORS			

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[Handwritten signature]

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-5-68</u>	1400	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Record air flask readings. Flask #1 _____; #2 _____ #3 _____; #4 _____; #5 _____; #6 _____	
1400			
Position:			
Weather:			
1526 ON BOTTOM			
1528 SECURE FLOODING PORT VBT (NOT FULL - 14min)			
1529 SURFACE ON MBT'S - BLOW			
A 1530 SURFACE			
* 1531 OPEN MBT VENTS - DIVE		Test emergency ballast alarm. Check equipment not in use in off/standby position.	
1532 CHECK PORT VBT - FLOODED NOTE DIVE GOES FASTER WITH HATCH IN SAIL OPEN		Record battery readings Check F.W. valves shut Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin pressure _____ Cabin humidity _____	
1537 ON BOTTOM at 30' START HOVERING (AGBERSOLD)			
1540 AIR LEAKING OUT OF STB VBT STOPS WHEN HULL VALVE IS SHUT			
1542 BOTTOM TO ALLOW DOLPHIN TO PASS CLEAR.	1500	Check bilges. Check hull valves. Check LOX tanks. Record Battery Readings Check F.W. Valves Shut	
TOPAZ INVERTER FAN OUT. BLADE BROKE - GROVE REMOVE	1500	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1543 HOVER AT 30 FEET, CAN HOLD POSITION WITHIN 10 FEET. (DORR)			
1553 BOTTOM. SECURE PROP. PANEL & INVERTER. TO DO MEGA CHECKS ON MOTORS & SHOT BALLAST.	1500	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	

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Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-5-68</u>	1600	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Check F.W. valves shut Record battery readings Carbon dioxide% _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	
16-20			
Position:			
Weather:			
1602 Stopped VBT LEAK BY SHUTTING HULL VALVE			
1611 Compl MEGGA READINGS - MOTORS GOOD O'GRD ON 110V SHOT BALLAST			
1612 CONTIN. HOVER & PITCH TRIM EXERCISE - Pump AT TO FT 7° Pump FT TO AT 8°			
Δ 1620 SURFACE ON POWER			
1621 ON SURFACE (#3 SW SENSOR) MOTORS RUNNING (LIGHT ON) - Pump A.T. TO F.T. 2° DOWN BUBBLE NOTE / WATER COVERED AFT HATCH - NOT TO BAD - COULD GET OUT - Pump F.T. TO A.T. 10° UP BUBBLE NOTE / SOME WATER OVER HATCH COULD GET OUT	1700	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1630 STOPPED MOTORS - GOT 10° UP BUBBLE BLOW MBT'S	1800	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1635 SECURE H.P AIR FLASK #1 @ 74 KG/cm ² PLACE #2 ON LINE @ 190 KG/cm ²	1900	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
1637 Pump A.T TO F.T. BUBBLE 1/2° DOWN			
1641 Open hatch, Blow VBT (ART) RIG FOR SURFACE			
1655 ROTATE MOTORS READY TO ANSWER COMMANDS IN TURN MODE			
1725 MOORED - SECURE BOAT			

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Date 12-11-68

08-12

Position: Slip #2 port of P.B.

Weather: Clear & Sunny

1040 SET RP. INTURN MODE MODE SW 2 FOR

1043 UNDERWAY WITH TOW

1050 SECURE PILOT PANEL
ROTATE MOTORS DIVE POS. (NOSE UP)

+1130 SHUT HATCHES, IN POSITION
COMMENCE TEST
DIVE

1139 #6 manifold vent on & then off
(intermittent)

1145 on bottom - 3° down bubble on the
dive - needed 1/2 speed on two
port motors to keep from
hitting - probably 800-1000
lbs heavy. (38 ft. of water)

1146 Using trim pump to get zero bubble

1149 Secured propulsion; shifted to mode 3
BI batt. switch to 28V
& Emerg/SP switch to normal

1200 Conditions normal sitting flat on bottom

1201 SET 1ST WATCH
DOOR
PICTURE

1206 Phone check - rang OK
UW phone - OK
SET UP LiOH PANELS

WJ Key
H. DORR
C/O INVERTED ON
LIFE

Time Routine Initial

0800

Replace LiOH panels
Conduct thorough boat
inspection.
Check hull valves for
proper position.
Check LOX tanks for
leaks.
Vent main ballast
tanks.
Check emergency
ballast hydraulic
pressure.
Air flask readings:
Flask #1 182 ; #2 190
#3 185 ; #4 185
#5 182 ; #6 185
Test emergency
ballast alarm.
Check equipment not
in use in off/stand-
by position.
Check F.W. valves shut.
Record battery readings
Conduct contaminant
checks and record.
Carbon dioxide % _____
Oxygen % 21
Cabin temperature 68°F
Cabin humidity 59%
LOX pressure _____
Fwd _____ Aft _____
Record F.W. & LOX
tank levels.

0900

Check bilges
Check hull valves
Check LOX tanks
Record battery readings
Check F.W. valves shut

1000

Check bilges
Check hull valves
Check LOX tanks
Record battery readings
Check F.W. valves shut

1100

Check bilges
Check hull valves
Check LOX tanks
Record battery readings
Check F.W. valves shut

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-11-68</u>	1200	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: ^{ONLY READ} FLASK ^{ON LAST} Flask #1 <u>175</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	
12-16			
Position: <u>PORT of PALM BEACH, SLIP #2</u>			
Weather: <u>CLEAR, 65-68°F</u>			
1201 - SET FIRST WATCH - DOOR - <u>PICCARD</u> UNDRWAY ROUTING MODIFIED <u>H DOOR</u> UNDRWAY ROUTING MODIFIED			
1206 - <u>H'D LINE</u> Phone check - OK UW. phone OK SET UP LI OH PANELS CG INVERTER ON LINE - NOTE CS WAS ON & CUT OFF REMOVE FROM LOAD SW SENSOR ON 1 2 3 & 5 SENSOR 6 IS INTERMITT F.W. PRESS = 1.48 ATMOSPHERES WATER COLIM. #2 H.W #4 TANK	See L.S. TEST PLAN LOG SHEETS		
1310 Phone check - H.L. OK UN WATER VERT HEAD OK HORN " GARAGED BUT OK	1300	Check bilges Check hull valves ✓ Check LOX tanks Record battery readings Check F.W. valves shut	
1324 <u>Entered CS</u> with <u>repaired C.B.</u> and left CS on the line.			
1410 TAKE ENGR READINGS LUNCH FOR ALL RAY DAVIS HAS INST. ON LINE	1400	Check bilges Check hull valves ✓ Check LOX tanks Record battery readings Check F.W. valves shut	
1450 CYC. VENTS CHECK LI OH PANELS ALL ARE WORKING FEEL WARM.			
1500 Phone check - HEAD SET BEST ON S.P. PHONE FROM DIVER 72°F CHECK LEAK OF AIR Term. Box FOR PHEN#2 Term 43 & 44 Grevers in H1 BOX #1 Term AEG TEST STRIP SAME BOX #20 & 39 Term.	1500	Check bilges ✓ Check hull valves ✓ Check LOX tanks Record battery readings Check F.W. valves shut	
Head - <u>290-295</u> NOW			
1520 FLOOD STB VBT (TIME TO FLOOD = 15 MIN) PUMP FW TRIM AFT - ALL WATER AFT (10% FWD)			
1535 FLOOD PORT VBT			
1600 WATCH RELEASED H. DOOR			

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Franklin Underway Log Sheet

Date <u>12-11-68</u>		Time	Routine	Initial
16-20		1600	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 <u>170</u> ; #2 _____; ONLY #3 _____; #4 _____; #1 IN #5 _____; #6 _____; USE AEB.	/
	Position: <u>PORT OF PALM BEACH, SLIP #2</u>			/
	Weather: <u>CLEAR</u>			/
16:00	WATCH <u>AEBERSOLD - GREEVE</u>			/
16:05	UNDERWATER TELEPHONE CHECK O.K.			/
16:05	HARD LINE PHONE CHECK O.K.			/
16:30	CO ₂ ANALYSER DWYER NO READING			/
16:40	AEBERSOLD ON THE H.L. PHONE			/
16:50	GREEVE ON THE H.L. PHONE			/
16:55	AIR LEAK TO PRESSURE REDUCER			/
17:00	CHECKS AND RECORDS			/
17:08	AEBERSOLD ON THE H.L. PHONE			/
17:09	FWD HEMISPHERE LITTLE HUMIDE			/
17:27	Temp. in #4 hot water tank down to 165°			/
17:33	H.L. CHECK O.K.			/
17:44	PROJECTORS CHECK			/
17:45	GREEVE ON THE H.L. PHONE			/
17:46	SECURED C5 ENGAGED C6; POS 3			/
17:50	EXERCISED 28V TOPSIDE PROJECTORS & 110V AFT PROJECTORS.			/
18:00	V/W TEL CHECK O.K.			/
18:05	CHECKED BATTERY VOLTAGES ALL O.K. 4RP			/
18:55	V/W TEL CHECK O.K.			/
19:27	OPEN 10 SEC AND SHUT. MIST WENT VALVES			/
19:38	TRIM FROM AFT TO FWD 15% FWD			/
20:00	WATCH RELEASED S. <u>Observed</u>			/
		1700	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	/
		1800	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	/
		1900	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	/

SEE L.S. PLAN LOG SHEETS

ONLY #1 IN USE AEB.

AEB.

AEB.

AEB.

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>11 Dec 68</u>	2000	Check bilges for water	DK
20-24		Check hull valves for proper position.	DK
Position: Slip #2 Out of P.B		Check LOX tanks for leaks	DK
Weather: nice -		Vent main ballast tanks.	DK
2000 assumed the watch - conditions normal		Check emergency ballast hydraulic pressure.	DK
2015 noticed (Ray Davis) that O ₂ regulator set at 2.5 liters/min -		Air Flask readings:	DK
we thought 3 but Ray says to read center of ball vice top.		Flask #1 <u>167</u> ; #2 _____;	DK
2030		#3 _____; #4 _____;	DK
2100 Com Walker Com check - with Ray Davis -		#5 _____; #6 _____;	DK
Com check UWT & HARD LINE note: aft hemisphere wet.		Test emergency ballast alarm.	DK
Most of hull has condensation		Check equipment not in use in off/standby position.	DK
[WILL NOT DO MOTOR RUN BECAUSE OF HEAT & HUMIDITY]		Check F.W. valves shut	DK
2115 Cycled the vents		Record battery readings	DK
2123 Boat quite uncomfortable - too hot & humid		Carbon dioxide % _____	DK
2130 Com check - OK		Oxygen % _____	DK
Crew using cup to add germicidals		Cabin temperature _____	DK
wants as siphon from bottle doesn't work.		Cabin humidity _____	DK
2200 Com check - hardline & UWT OK		Conduct contaminant checks <u>NO</u>	DK
2230 Comm. check		2100 Check bilges ✓	DK
2231 Finished 2nd Jug of Spring water - filled it with hot water.		Check hull valves ✓	DK
2300 Com check slight trouble on chase boat with loose connection rectified Com. OK.		Check LOX tanks ✓	DK
2330 Com check Took 12 hour readings		Record battery readings ✓	DK
2400 Released		Check F.W. valves shut ✓	DK

See Test Plan

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D. J. [Signature]

Franklin Underway Log Sheet

W

Date	Time	Routine	Initial
12 Dec.	0000	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks.	DK DK DK OK
00-04			
Position: Port of Palm Beach, FLA Slip #2			
Weather:			
0000 ASSUMED THE WATCH - CONDITIONS NORMAL. S. WATER SENSOR 1,2,3,5 J. PICCARD H. DORR		Check emergency ballast hydraulic pressure. 130. Record air flask readings.	OK OK
0100 Comp. Check off Cycle vents. Phone check - Topside x Ducor OK.		Flask #1 166; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	ONLY 11/0N LINE
0115 SW. ON AFT LIGHTS MUCH SMALL FISH - FLY, SHRIMP ETC		Test emergency ballast alarm.	OK
0200 comp. check off. Cycle vents Phone check. Both x Ducor's TOPSIDE - BEST		Check equipment not in use in off/standby position (ex., fathometer, temperature sensor, compass, sonar, rudder position indicator, lights, sink, shower). Check F.W. Valves shut	OK OK
NOTE SOME SMALL ACCUMULATION OF WATER (CONDENSATE) IN FWD BILGE		Record battery reading Carbon dioxide % _____	OK
0300 Phone check - NOT TO CLEAR SLIGHTLY GARBLED NOISE		Oxygen % _____ Cabin Temperature _____ Cabin pressure _____ Cabin humidity _____	See Test Plan
CYCLE VENTS Lamps off		0100 Check bilges. ✓ Check hull valves	
0330 Check VST GAGE (STBD) READ Press INTANK = 22 KG/cm ²		Check LOX tanks ✓ Record battery readings Check F.W. Valves Shut	OK
REDUCE ^{ON} FLOW meter to <u>2.5</u> L/MIN		0200 Check bilges ✓ Check hull valves ✓	
0400 Phone check OK NOT TO CLEAR MAY BE TALKER. Relieved		Check LOX tanks ✓ Record battery readings Check F.W. valves shut	OK
H. DORR		0300 Check bilges ✓ Check hull valves ✓ Check LOX tanks ✓ Record battery readings Check F.W. valves shut #2 on LINE	OK

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-12-68</u>	0400	Check bilges for water	X
04-08		Check hull valves for proper position.	X
Position: <u>PORT OF PALM BEACH SLIP # 2</u>		Check LOX tanks for leaks.	X
Weather:		Vent main ballast tanks.	X
04'00 ASSUMED THE WATCH. J. GREEVE		Check emergency ballast hydraulic pressure.	so
CONDITION NORMAL E. ARBERKOLD		Record air flask readings.	
SENSORS (S.W.) 1, 2, 3, 5		Flask #1 <u>163</u> ; #2 _____	
PRESSURE VBT TANK STBD 25 kg/cm ²		#3 _____; #4 _____;	
05'00 CHECK		#5 _____; #6 _____	
PHONE CHECK - O.K. ON TOP WALKER		Test emergency ballast alarm.	K
S.W. PHONE CHECK O.K.		Check equipment not in use in off/standby position.	X
OBSERVE SAME CONDENSATION WATER BETWEEN STIFFENING 15-16		Record battery readings	X
06'00 COMPL. CHECK OFF		Check F.W. valves shut	X
PHONE CHECK OK.		Carbon dioxide % <u>0.2</u>	
OPEN 10 SEC AND SHUT MBT WENT VALVES		Oxygen % <u>20.5</u>	
S.W. PHONE CHECK O.K.		Cabin temperature <u>75°F</u>	
03.09 SERDEX RECORDER - BLUE INK WILL NOT WRITE		Cabin pressure <u>+0.4</u>	
06'10 FWD PROJECTORS ON - MUCH SMALL FISHES	0500	Cabin humidity <u>88.2%</u>	Rel.
07'00 COMPL. CHECK OFF		Check bilges.	X
07'05 KAZIMIR CANNOT SLEEP - TOO MUCH NOISE FROM DAVIS		Check hull valves.	X
07-06 U/W TEL CHECK .OK.		Check LOX tanks.	X
NOTICED BETTER RECEPTION ON HOR XDUCKER & BETTER XMISSION ON VERT XDUCKER		Record Battery Readings	X
07'51 BETWEEN STIFF. 1-2 MORE CONDENSATION WATER CLEAN DRY BETWEEN 1-2	0600	Check F.W. Valves Shut	X
" " " " 15-16		Check bilges	X
07:55 U/W TEL CHCK, NEGATIVE, No ANSWER		Check hull valves	X
08'00 COMPL. CHECK OFF	0700	Check LOX tanks	X
RELIEVED		Record battery readings	X
<u>E. Caband</u>		Check F.W. valves shut	X

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Franklin Underway Log Sheet

Date	Time	Routine	Initial
12 Dec.	0800	Replace LiOH panels Conduct thorough boat inspection.	NO
08-12		Check hull valves for proper position.	DK
Position: Slip #2 Port of Palm Beach		Check LOX tanks for leaks.	DK
Weather: N.A.		Vent main ballast tanks.	DK
0800 Assumed The watch. Conditions normal. Boat a little more comfortable since people (4) were sleeping Condensation noticed in wireways under deck panels - also fwd. bilge.		Check emergency ballast hydraulic pressure.	DK
		Air flask readings: Flask #1/62; #2	
		#3; #4 #5; #6	
		Test emergency ballast alarm.	DK
0845 reduced O2 regulator to 2 liters/min. Close inspection of regulator says to head top of ball - note my remark of previous day.		Check equipment not in use in off/stand-by position.	DK
		Check F.W. valves shut Record battery readings	Done
		Conduct contaminant checks and record.	
		Carbon dioxide %	
		Oxygen %	
		Cabin temperature	
		Cabin humidity	
		LOX pressure	
		Fwd Aft	
0900 Chase boat does not answer underwater phone - still not repaired. heard line OK.		Record F.W. & LOX tank levels. LOX too low to read	F.W. 1/16 LOX 1 LOX 2
	0900	Check bilges	DK
0920 Checking bilges is murder because of deck plates		Check hull valves	DK
		Check LOX tanks	DK
0925 Started to run 2 std motors - would only run slow - came to all stops to messer motors #2 motor 0 ground #3 & #4 read 8 mess #2/1. 1 mess		Record battery readings	DK
		Check F.W. valves shut	DK
	1000	Check bilges	DK
		Check hull valves	DK
		Check LOX tanks	DK
		Record battery readings	DK
		Check F.W. valves shut	DK
	1100	Check bilges	DK
		Check hull valves	DK
		Check LOX tanks	DK
0937 Shifted Propulsion Inverter Selector to horiz. so port motors off std. Inverter Same effect - OK after 10 sec each Cabin Temp Sensity - 72 (Fwd hem.) aft - 73 90% RH aft		Record battery readings	DK
		Check F.W. valves shut	

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Franklin Underway Log Sheet

Date	Time	Routine	Initial
12-16	1200	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 <u>161</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	DK
Date <u>12 Dec.</u>			
Position: Slip 2 Port of P.B.			
Weather:			
1200 noticed oil in bilge under fresh water manifold. I wiped it (Key) It should be watched. (maybe Germeid)			
1220 U/W tel check O.K. Assumed the watch condition normal. Lunch underway H. DORR J. PICCARD			DK DJ
1230 Deck in fwd Hemi is getting slippery from dampness.			DK
1245 KITE, PUTTING OUT SILICA GEL THE BOAT IS VERY DAMP. Pressure in STB VBT 35 kg/cm ²	1300	Check bilges ✓ Check hull valves ✓ Check LOX tanks ✓ Record battery readings Check F.W. valves shut	} See test plan.
1300 Check off Compl Phone check all equip off ① Pilot light inter. with up phone ② ALL LIGHTS interfere ③ BATT AMPDR SYST. INTERFERE ④ BATT MONT. SYS. INTER. ⑤ TOPEZ INTER. C5266	1400	Check bilges ✓ Check hull valves ✓ Check LOX tanks ✓ Record battery readings Check F.W. valves shut	D
1400 SWITCH TO CS INVERT. TO RUN SCI. EQUIP	1500	Check bilges ✓ Check hull valves ✓ Check LOX tanks ✓ Record battery readings Check F.W. valves shut	D
TALK TO DIVERS OVER YAK-YAK - WORKS VERY WELL BOTH WAYS.			
1405 Pumped AT to FT Bruce says low 4" off bottom & stern solid on bottom. Angie wouldn't change from pumping.			
1405 Compl Phone check TAKE READINGS - NOTE 40 kg/cm ² IN STB VBT			

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Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12 Dec 68</u>	1600	Check bilges for water	✓
16-20		Check hull valves for proper position.	✓
Position: PORT OF PALM BEACH - SLIP #2		Check LOX tanks for leaks.	✓
DON WAS ON THE H.L. PHONE		Vent main ballast tanks.	✓
Weather:		Check emergency ballast hydraulic pressure.	✓
16'00 ASSUMED THE WATCH GREENE/REBERSOLD		Air flask readings:	⊙
16'05 STB VBT = 42 kg/cm ²		Flask #1 160; #2 _____;	
16'06 WENT MIST (10 SEC.)		#3 _____; #4 _____;	
16'20 REBERSOLD ON THE H.L. PHONE		#5 _____; #6 _____;	
16'54 H.L. PHONE CHECK OK. → GREENE		Test emergency ballast alarm.	✓
16'55 MUCH CONDENSATION WATER BETWEEN STIFF. 1-2		Check equipment not in use in off/standby position.	
17'05 U/W tel CK .OK.		Check F.W. valves shut	✓
17'15 CLEANED AND DRY BILGE WATER BETWEEN STIFF. 1-2 AND 3-4		Record battery readings	
18'00 U/W tel CK O.K.		Carbon dioxide% _____	} see
19'00 U/W tel CK G.I.C.		Oxygen % _____	} TEST
19'02 CLEANED AND DRY BILGE WATER BETWEEN STIFF. 1-2 AND 3-4	1700	Cabin temperature _____	
19'40 WENT MIST (10 SEC.)		Cabin humidity _____	
19'45 STB VBT = 47 kg/cm ²		Check bilges	X
19'54 CLEANED AND DRY BILGE WATER BETWEEN STIFF. 1-2 AND 15-16		Check hull valves	X
20'00 RELIEVED THE WATCH		Check LOX tanks	X
G. Cabaud		Record battery readings	X
	1800	Check F.W. valves shut	X
		Check bilges	X
		Check hull valves	X
		Check LOX tanks	X
		Record battery readings	X
	1900	Check F.W. valves shut	X

Franklin Underway Log Sheet

Date	13 Dec 1968	Time	Routine	Initial
00-04	Position: PORT OF Palm Beach FLA, Slip # 2 Weather: TOPSIDE - some wind, cool, NO Seas. any	0000	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Record air flask readings. Flask #1 <u>156</u> ; #2 <u>—</u> #3 <u>—</u> ; #4 <u>—</u> #5 <u>—</u> ; #6 <u>—</u>	DK DK DK DK DK
0000	ASSUME WATCH ON PICCARD CONDITIONS NORMAL. DORR MOTORS 3 & 4 ON LINE CIRCUIT MODE. SW. LIGHT 1, 2, 3, & 5 ON Compl UNWATER phone check		Test emergency ballast alarm.	DK
0055	Compl WIPE DOWN OF FWD HEMI. ALL MOISTURE ON WALLS REMOVED UP TO FRAME # 3 AND PILOT PANEL		Check equipment not in use in off/standby position (ex. fatho- meter, temperature sensor, compass, sonar, rudder position indicator, lights, sink, shower).	DK
0100	Compl check, Compl UN'phone check ALL NORMAL.		Check F.W. Valves shut	DK
0130	PUT FWD LIGHTS ON. WATER VERY CLEAR. GREAT DEAL OF MARINE LIFE		Record battery reading	DK
0200	Phone check Compl - - Check off Compl - EVERYTHING NORMAL - HAVE SECURED ALL (2) LIGHTS (EXT) Approx 3/4 H ₂ O IN FWD Bilge (CONDENSATE) Approx 1/2 H ₂ O IN B ₂ Bilge (CONDENSATE)		Carbon dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin pressure _____ Cabin humidity _____	} See test Plan
0300	Phone check Compl - SAT. - Check off Compl - ALL NORMAL - FWD LIGHTS DO NOT CORRESPOND WITH CIRC. BREAKERS. SOME LAMPS MUST NOT WORK. - NOTE! ALL READINGS TAKEN WITH Δ GAGE READ ABOUT THE SAME. WHILE CABIN PRESS. HAS GONE UP AT A STEADY RATE. - HOT WATER TEMP #3 = 190°F #4 = 170°F - CYCLE VENTS	0100	Check bilges. ✓ Check hull valves ✓ Check LOX tanks ✓ Record battery readings ✓ Check F.W. Valves Shut ✓	D
0400	- Phone check Compl - SAT - - Check off Compl ALL NORMAL WATCH RELIEVED	0200	Check bilges ✓ Check hull valves ✓ Check LOX tanks ✓ Record battery readings ✓ Check F.W. valves shut ✓	D
	WATCH RELIEVED HDORR	0300	Check bilges ✓ Check hull valves ✓ Check LOX tanks ✓ Record battery readings ✓ Check F.W. valves shut ✓	D

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>13 Dec 68</u>	0400	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks.	✓
04-08		Vent main ballast tanks. Check emergency ballast hydraulic pressure.	✓
Position: <u>Slip #2 port of P.B.</u>		Record air flask readings.	✓
Weather:		Flask #1 <u>156</u> ; #2 <u>-</u> #3 <u>-</u> ; #4 <u>-</u> #5 <u>-</u> ; #6 <u>-</u>	✓
0428 Tugs lined up to move tanker - already moving lots of water past us. Line handlers are standing by 2 lines to port. Chase boat and rubber boat ready to get underway to get underway with a line to keep us off south wall. We will keep cycling our vents.		Test emergency ballast alarm. Check equipment not in use in off/standby position.	✓
0450 #1 MISS does not indicate full.		Record battery readings	✓
0452 Tanker underway		Check F.W. valves shut	✓
0455 Tanker Clear. Chase boat reports we moved 56-75 feet south.		Carbon dioxide % _____	✓
1515 now that all water is calm, it appears we did not move		Oxygen % _____	✓
0525 CYCLED VENTS		Cabin temperature _____	✓
0605 UNDERWATER TELEPHONE CHECK O.K.	0500	Cabin pressure _____	✓
0615 CYCLED VENTS		Cabin humidity _____	✓
0620 CLEANED AND DRY BILGE WATER BETWEEN STIFF. 1-2, 3-4, 15-16	0600	Check bilges. Check hull valves. Check LOX tanks.	✓
0703 UNDERWATER TELEPHONE CHECK O.K. 9/5		Record Battery Readings Check F.W. Valves Shut	✓
0715 CLEANED AND DRY BILGE WATER 1-2 3-4 15-16 ALL NORMAL BELIEVED THE WATER	0700	Check bilges Check hull valves Check LOX tanks	✓
		Record battery readings Check F.W. valves shut	✓



See TEST PLAN

Original
27 September 1968

Franklin Underway Log Sheet

Date	Time	Routine	Initial
12-16	1200	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. 140 Kg/cm ² Air flask readings: Flask #1 155; #2 -; #3 -; #4 -; #5 -; #6 - Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	
1200		1200 ASSUME WATCH HVDORR J. PICCARD C6 INVERTER ON LINE UN WATERPHONE CHECK - SAT. SLIGHT (ABOUT 1/4") WATER (CONDENSATE) IN ALL BILGES.	
1245		H/W. TANK # 4 APPEARS TO BE EMPTY Temp DOWN TO 70°. (NOTE #4 HAD BEEN ^{Filled} Empty) Switch TO TANK #3 FROM #3	
1245		ATTEMPT TO COMM. WITH SURFACE NO ONE ON PHONES (HAND LINE & UW TEL.) APPROX. 7 MIN DISCONNECT REGAINED AT 1252	SEE TEST PLAN
1253		NOTE! Thermometer wire off TANK	
1300	1300	Comp. check out of BOAT - NORMAL Commence CIRCUL. BLOWER TEST Will RUN Blower 5 MIN IN EACH LOCATION PANEL.	
1340		STILL MUCH MOISTURE FORMING AS DROPS ON BULKHEAD AND OVERHEAD. MOST OF IT IS IN FWD & AFT HEMI.	
1350	1400	Comp. readings & check out of BOAT EVERYTHING NORMAL - PHONE CHECK - SAT RUN ALL (3) BLOWERS. SET O ₂ FLOW TO 1 3/4 L/MIN NOTE! MAY BE A GOOD IDEA TO PLACE Perm. BLOWER OVER AEG INVERTERS & SWITCH GEAR TO GET CIRCULATION.	
1400	1500	OPEN SAS OUTER HATCH. SAS OPEN SET (1) BLOWER ON DECK FWD DECK AMID DECK SCIEN } TO CONTINUE CIRC. AIR FOR (1) HOUR	
1410			
1414			
1430			
1445		#6 SW SENSOR LIGHT ON, READING ON PYRITE = 1.2% = 1.3%	
1500		CHECK OUT OF BOAT, PHONE CHECK OK.	

Original
27 September 1968

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>13 Dec 68</u>	1600	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 <u>154</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm.	✓ ✓ ✓ ✓ X X X X
16-20			
Position: <u>PORT OF PALM BEACH SLIP # 2</u>			
Weather:			
16:00 ASSUME WATCH J. GREEVE E. AEGERBOLD			
16:20 CLEANED AND DRY BILGE WATER FRAMES 1-2 3-4 10-11 15-16			
17:05 STARTED 3 CIRCULATING BLOWERS & set timer for 1 hour.		Check equipment not in use in off/standby position. Check F.W. valves shut Record battery readings Carbon dioxide% _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	X X X X X X
17:06 U/W tel ck OK			
17:40 DRÄGER CO2 TUBE 0.5% CH 314 1) 3% CO2 2) 3% CO2	1700	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	X X X X X
17:50 U/W tel ck. O.G.			
18:10 FLOWMETER set to 1.9 l/min	1800	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	X X X X X
18:40 water from #3 HW tank is considerably hotter than that from #4			
19:00 U/W tel ck OK	1900	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	X X X X X
20:00 U/W tel ck OK			
RELIEVED E. Aegerbold			

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>13 Dec 68</u>	2000	Check bilges for water	
20-24		Check hull valves for proper position.	
Position: <u>Port of Palm Beach</u>		Check LOX tanks for leaks	
Weather: <u>Slip #2</u>		Vent main ballast tanks.	
2000 Assumed The Watch		Check emergency ballast hydraulic pressure.	Add.
2015 Shot hold coil meggered:		Air Flask readings:	
<u>both coils 0 ohms</u>		Flask #1 <u>153</u> ; #2 _____;	
<u>motor #1 450 KΩ</u>		#3 _____; #4 _____;	
<u>#2 0</u>		#5 _____; #6 _____	
<u>#3 3 megs</u>		Test emergency ballast alarm.	
<u>#4 3.5 megs</u>		Check equipment not in use in off/standby position.	Y
2022 Even Though all Silicon Gel panels installed, boat is extremely humid. Lots of Rain		Check F.W. valves shut	Y
2025 Run Portable Circ. blower for 1 hour. (NOISY)		Record battery readings	Y
2030 Position meters meggered:		Carbon dioxide % _____	SEE TEST
<u>#1 100 KΩ (poor)</u>	2100	Oxygen % _____	FLAM
<u>#2 6.5 megs</u>		Cabin temperature _____	
<u>#3 3.5 megs</u>		Cabin humidity _____	
<u>#4 3.0 megs</u>		Conduct contaminant Checks _____	
<u>normally these are 50 meg ohms.</u>	2100	Check bilges	DK
* 2000 Commenced taking Complete Dräger Readings ("Full Containment Test").		Check hull valves	DK
This would have been done Sat. but wored up because of other activity Sat. A.M.		Check LOX tanks	DK
2100 Commenced air samples (Ray Davis) will be followed by running contaminant removal system for 2 hrs.		Record battery readings	DK
40 min. aft 40 min. wind ships 40 min. fwd.	2200	Check F.W. valves shut	DK
2115 Getword ship will arrive Port of P.B. 1400 to pick up PGH.		Check bilges	DK
2135 Commenced running portable blower for 1 hr.		Check hull valves	DK
2210 Completed Changing to 2100 panels		Check LOX tanks	DK
2215 Set O ₂ Regulator at 2.2 liters/min.		Record battery readings	DK
		Check F.W. valves shut	DK

Original
27 September 1968

Franklin Underway Log Sheet

Time Routine Initial

Date 14 Dec.

00-04

Position:

Weather:

0000 ASSUME WATER - J. PICCARD
H. DORR
EVERYTHING NORMAL.
BOAT VERY DAMP. HUMID.

- PICCARD CALCULATES AMP HR LEAKAGE RATE
OF 1 AMP HR IN 104 SECOND
(34.6 AMP)

- SWITCH ON EXT LIGHTS FORWARD
WATER VERY CLEAR

0100

Phone check - SAT
CHECK OFF NORMAL.
NOTE - ADDITIONAL WATER IN Bilge @
Frame 10 & 11. AFTER CREW MEMBER
SHOWER. SHOULD CHECK AREA FOR
LEAKS.

0115

SECURE (2) LIFE SUPPORT BLOWERS &
DISCONN. WIRE CABLES.

0135

READ 1% CO₂ ON FYRITE

0200

Compl Check of Boat All Normal
Phone check Normal
H.W. TANK #3 = 190°F

0245

AMP HR LEAKAGE RATE SLOWER
PICCARD CALCUL. 16 AMP/HR.

0300

Compl Check of Boat All Normal
Phone check - SAT.
BOAT IS VERY WET NOW.
Some WATER IN All Bilges. NO INCREASE
IN WATER AT FRAME 10 & 11.

0330

NOTE! Some WATER DROPLETS Fall From
overhead ONTO LOX PANELS. THIS IS N.G.

0345

SW SENSOR 1, 2, 5 & 6 ON

0400

SECURE EXT. LIGHTS
RELIEVED.

H. DORR

0000 • Check bilges for water ~~OK~~
Check hull valves for proper position. ~~DK~~
Check LOX tanks for leaks. ~~DK~~
Vent main ballast tanks. ~~DK~~
• Check emergency ballast hydraulic pressure. 140
Record air flask readings.
Flask #1 153; #2 _____
#3 _____; #4 _____
#5 _____; #6 _____
• Test emergency ballast alarm. ~~OK~~
• Check equipment not in use in off/standby position (ex. fathometer, temperature sensor, compass, sonar, rudder position indicator, lights, sink, shower).
Check F.W. Valves shut ~~DK~~
Record battery reading ~~DK~~
Carbon dioxide % _____
Oxygen % _____ } See test results
Cabin Temperature _____
Cabin pressure _____
Cabin humidity _____
0100 Check bilges. ✓
Check hull valves ✓
Check LOX tanks ✓
Record battery readings ✓
Check F.W. Valves Shut ✓
0200 Check bilges ✓
Check hull valves ✓
Check LOX tanks ✓
Record battery readings ✓
Check F.W. valves shut ✓
0300 Check bilges ✓
Check hull valves ✓
Check LOX tanks ✓
Record battery readings ✓
Check F.W. valves shut ✓

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-14-68</u>	0400	Check bilges for water	D
04-08		Check hull valves for proper position.	D
Position: PORT OF PACM TRENCH - SLIP # 2		Check LOX tanks for leaks.	D
Weather: ASSUME WATCH J. GAIERNE E. REBERSOLD		Vent main ballast tanks.	D
0400. Phone check - OK.		Check emergency ballast hydraulic pressure. 140	D
0415 CYCLE AEG GEAR		Record air flask readings.	
0430 FRESH WATER TANK #2 EMPTY - SHUT VALVE AND OPEN VALVE #3 OF F.W. TANK		Flask #1 <u>152</u> ; #2 _____	D
F.W. TANK #2 PRESSURE 0		#3 _____; #4 _____;	
F.W. TANK #3 PRESSURE 2,1		#5 _____; #6 _____	
0500 U/w tel check OK.		Test emergency ballast alarm.	D
0510 SWITCH ON EXT. FWD LIGHTS		Check equipment not in use in off/standby position.	D
WATER VERY CLEAR		Record battery readings	D
SWITCH OFF		Check F.W. valves shut	D
WE SEE 2 LIGHTS ON THE SURFACE AND THE SURFACE MIRROR		Carbon dioxide % _____	
2 LIGHTS FWD STB		Oxygen % _____	
2 LIGHTS AFT PORT		Cabin temperature _____	
0600 COMPL CHECK		Cabin pressure _____	
0610 CLEANED AND DRY BILGE WATER		Cabin humidity _____	
FRAMES 1-2 3-4 10-11 15-16		0500 Check bilges.	Y
BETWEEN 1-2 VERY MUCH WATER, MORE AS THE THREE OTHER TOGETHER		Check hull valves.	Y
0700 PHONE CHECKS O.K.		Check LOX tanks.	Y
0750 CLEANED AND DRY BILGE WATER		Record Battery Readings	Y
FRAMES 1-2 3-4 10-11 15-16		Check F.W. Valves Shut	Y
0759 DIVERS ARE COMING		0600 Check bilges	Y
0800 RELIEVED		Check hull valves	Y
E. <i>Abund</i>		Check LOX tanks	Y
		Record battery readings	Y
		Check F.W. valves shut	Y
		0700 Check bilges	Y
		Check hull valves	Y
		Check LOX tanks	Y
		Record battery readings	Y
		Check F.W. valves shut	Y

Original
27 September 1968

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>12-14-68</u></p> <p>12-16</p> <p>Position:</p> <p>Weather:</p> <p>1200 TRY 3 & 4 main motors all good Both operate well Fwd & Reverse on 5+60KVA</p> <p>1205 SECURE Rm - ROTATE MOTORS TO SURFACE ANS. Bells on 3 & 4 in <u>Emergency</u> mode.</p> <p>- SECURE SHOT DRIBBLE CRT. Breaker</p> <p>1224 - SECURE PROPUL. PLANT</p> <p>1230 - SECURE BOAT</p>	<p>1200</p> <p>1300</p> <p>1400</p> <p>1500</p>	<p>Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Vent main ballast tanks Check F.W. valves shut Record battery readings Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	

Original
27 September 1968

	Time	Routine	Initial
<p>Date <u>12-17-68</u> ON BOARD 08-12 GREVES AeBERSOLD KAZIMIR MUENCH PICCARD DORR</p> <p>Position: PORT OF PALM BEACH FLA.</p> <p>Weather: CLEAR, wind ~ 15knts</p> <p>0855 LIGHT OFF MAIN PROPUL. (4) MOTORS TURN MODE ALL INDICATIONS NORMAL</p> <p>0915 SECURE AFTER ALL CHECKS IN (4) MODES ALL NORMAL</p> <p>0950 FOUND GRD IN 110V CIR. ON EXT LIGHTS - PULL FUSE</p> <p>1000 Amp Hr Readings A1 = 353.66 A2 = 594.73 B1 = 101.91 B2 = 385.92 C = 364.32 D = 27.52</p> <p>1130 "Rig-For SEA", "Rig For Dive" Comp'u Ready To Go To SEA</p> <p>1135 PILOT PRAW. SET IN TURN MODE (2) INVERT ON LINE MODE 1</p> <p>1155 open hatch - PICCARD UP AeBERSOLD DOWN hatch SECURED-</p>	<p>0800</p> <p>0900</p> <p>1000</p> <p>1100</p>	<p>Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/stand-by position. Check F.W. valves shut Record battery readings Conduct contaminant checks and record. Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____ LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels.</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p> <p>Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut</p>	

- 13'03 KICKING STARTS AGAIN
TUG 2-3 KTS
NOTE: PULSATION NOTED BY PERSONNEL ON DECK
DURING HIGH SPEED TOW.
- 13'12 PROCEEDING TO INLET
CHASE BOAT HAS NOT TAKING STERN TOW
- 13'15 TUG RPM 800
- 13'32 TUG RPM 1200
- 13'35 AT SEA BOUY
- 13'40 Sea State 2-3 WATER ON DECK
- 13'42 STEERING VARIOUS COURSES
- 13'47 ROLL LEFT AND RIGHT 10°(20°) PITCH 4°
- 13'50 Test UWater Phone - SOUND GOOD - SOME GARBEL
BUT UNDERSTANDABLE.
- 13'56 RETURN TO TURNING BASIN - Everyone very SAT.
GOOD STRAIN ON TOW CABLE - NO SLACK.
- 14'05 FWD HATCH HAS REMAIN CLEAR OF WATER DURING TOW
- 14:11 ENTER Channel
Run MOTORS - SECURE
ALL NORMAL EXCEPT STB' FWD @ 200-300 RPM on Tach.
After being SECURED
CHECK RUNNING LIGHTS - AFT LIGHT MUST BE CORRECTED - CAN
BE SEEN FROM SAIL
- 14'20 ROTATE FWD/AFT MOTORS FWD nose up 30°
AFT nose down 30°
- 14'22 ROTATE MOTORS HORIZ.
- 14'30 5000 RPM on all motors - Light off CS tops
1-2-3-5-6-9-12-14
7 AND 13 ARE FLASHING
- 14'42 7 IS ON (Su sensor)
- 14'45 ON THE TOW ~ 200 FT
- 14'50 DROP TOW
- 14'55 UNDER TOW ~ 100 FT
- 15'05 ALL BACK IN - STB MOTORS SEEM TO TAKE LONGER TO GET UP TO
SPEED.


Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-17-68</u>	1650	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in off/standby position. Check F.W. valves shut Record battery readings Carbon dioxide% _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____	
1650			
Position:			
Weather:			
1505 Drop Tow All Stop Secure CS TOPAZ HS MOTOR Light ON			
1510 open hatch Hebersold up MANY BUBBLES pass pilots window			
1515 Close Hatch PIRCARD Below ANS. BELLS (4) MOTORS			
1532 Secure propul. open Hatch.			
	1800	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
	1900	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12-19-68</u>	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent main ballast tanks. Check emergency ballast hydraulic pressure. Air flask readings: Flask #1 <u>195</u> ; #2 <u>190</u> #3 <u>200</u> ; #4 <u>198</u> #5 <u>192</u> ; #6 <u>150</u> Test emergency ballast alarm. Check equipment not in use in off/stand-by position. Check F.W. valves shut Record battery readings Conduct contaminant checks and record. Carbon dioxide % _____ Oxygen % _____ Cabin temperature _____ Cabin humidity _____ LOX pressure <u>80</u> Fwd <u>3/4</u> Aft <u>3/4</u> Record F.W. & LOX tank levels.	
08-12			
Position: <u>PORT of PALM BEACH, FLA</u>			
Weather: <u>ATLANTIC OCEAN. off Palm Beach</u>			
Weather: <u>OVERCAST, WIND FROM S.E.</u>			
Weather: <u>21-2 KTS</u>			
0850 C5 TOPAZ ON SW. SENSE LAMPS			
Weather: <u>1,2,3,5,6,7,8,9,10 12,13,14 ON</u>			
0940 Check Ray Gregory out in use of OBA & Emerg. Drills.			
1017 Light off & ROTATE MAIN MOTORS			
READY FOR MOTOR RUN C/O			
1030 SECURE FROM READY FOR SEA			
OPERATIONS CALLED OFF			
SECURE BOAT - COMMENCE			
PREP. TO PULL BOAT ON 12/21			
	0900	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
	1000	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	
	1100	Check bilges Check hull valves Check LOX tanks Record battery readings Check F.W. valves shut	

Franklin Underway Log Sheet

Date	Time	Routine	Initial
<p>Date <u>1-27-68</u></p>	0800	<p>Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 <u>195</u> ; #2 <u>190</u> #3 <u>195</u> ; #4 <u>196</u> #5 <u>192</u> ; #6 <u>185</u> Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____ LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels. <u>3/4 - 3/4</u></p>	
<p>08-12</p>			
<p>Position: <u>BET OF PALM BEACH</u></p>			
<p>Weather: <u>CLEAR, WIND S-E @ 1-2 KTS</u></p>			
<p>1045 READY FOR SEA. CHECK OFF Sheets compl</p>			
<p>1056 LIGHT OFF P/L, P/AJ. IN TURN MODE. READY TO ANS. BELL'S</p>			
<p>UNDERWAY UNDER TOW</p>			
<p>1104 UNDERWAY UNDER TOW</p>			
<p>1114 DROP TOW (CHASE BOAT)</p>			
<p>1121 PICK UP TUG BOAT TOW Preceding TO INLET</p>			
<p>1125 FLOOD PORT VBT</p>			
<p>1144 COMPL FLOOD VBT (PORT)</p>			
	0900	<p>Vent MBT's Check hydraulic pressure</p>	
	1000	<p>Vent MBT's Check hydraulic pressure</p>	
	1100	<p>Vent MBT's Check hydraulic pressure</p>	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>1/27/69</u>	1200	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in Off/Standby position. Vent Main Ballast Tanks Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____	
12-16			
Position:			
Weather:			
1225 - SW SENSOR LIGHTS 1, 7, & 10 ON			
1315 DROP TOW START RIG FOR DIVE C/O			
1334 Ready to dive			
1335 opened vents (DIVE # 13)			
1340 D batt. drain > D amp? ?			
1350 Huring 15-20. We are a bit off # heavy			
1400 BOTH VBT's Comm. bad			
1430 D battery meter bad (anometer)	1300	Vent MBT's Check hydraulic pressure	
1430 BOTH VBT'S hooked to hold on bottom.	1400	Vent MBT's Check hydraulic pressure	
1432 Bad UQC Communications			
1445 No Comm. beginning to surface * on 12 meters	1500	Vent MBT's Check hydraulic pressure	
1537 Open vents (DIVE # 14) Both VBT'S - DRY (Blown)			
1538 MBT FLOODED. DIVING POWER DOWN			
1600 stop GOXVT want get more then 4 SURPM also, toggle switch for # 3 motor not working. Photos being taken by divers		Change 2 1 January 1969	
1613 Surfacing over			

WJ/Kay

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>27 Jan.</u>	1600	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 <u>95</u> ; #2 <u>190</u> #3 _____; #4 _____ #5 _____; #6 _____	
16-20		Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % <u>20</u> Cabin Temperature <u>74</u> Cabin Humidity <u>98</u>	
Position: <u>Same as 12-12</u>	1700	Vent MBT's Check hydraulic pressure	
Weather	1800	Vent MBT's Check hydraulic pressure	
1613 - Surfacing	1900	Vent MBT's Check Hydraulic pressure	
1615 Shifted to #2 flask			
1630 SECURED 3 KVA (BOTH) TURN MODE ALL 4 MOTORS			
1635 Water in fwd. bilge - pumped it out with portable bilge pump. Hull vent was open during last dive.			
1640 Rigged for Surfacing			
1650 UNDER TOW BY GRIFON			
1700 AHS. BELLS - BATH INVERTERS			
1800 MANOEUVRE - MUCH TRAFFIC IN TURNING BASIN			
1900 Tied up AT DOCK (PORT OF P.B.) COMPL RIG FOR SURFACE			

SECURE
on #2

 Change 2
 1 January 1969

4-2

Franklin Underway Log Sheet

Date	Time	Routine	Initial
<p>11/11/68 1-30-69</p>	0800	<p>Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 <u>1160</u>; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position.</p>	
08-12			
Position: PORT OF PALM BEACH FLA			
Weather:			
0943 BOAT READY TO GET UNDERWAY			
0950 P.L. PAN LIGHT OFF - TURN MODE (2) INVERT ON LINE			
0956 UNDERWAY IN ACCORD. WITH PLAN 12A			
1003 SHOT REVEL STB, VOLTAGE METER READING HIGH VOLTAGE			
1015 IN POSITION - COMPI RIG FOR DIVE			
1025 SECURE FWD HATCH - READY TO DIVE - UQC CHECK OK DIVE - DIVE #15			
1029 vents open -			
33 starts down @ very slowly			
34 going u u u			
34 1/2 stop instructions			
u starboard motor on			
35 going down really			
35 1/2 bottom -			
38 1/2 little water lily (flange) (comp. int.)			
	0900	<p>Record F.W. & LOX tank levels. Vent MBT's Check hydraulic pressure</p>	#3 on line
	1000	<p>Vent MBT's Check hydraulic pressure</p>	
	1100	<p>Vent MBT's Check hydraulic pressure</p>	
		<p>H₂O OUTSIDE Temp = 22°C</p>	

(WZ-7745 GRIFON)
CALL LETTERS

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>30 Jan '69</u>	1200	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks.	
12-16		Check emergency ballast hydraulic pressure	
Position: <u>Slip 2 Port of Palm Beach</u>		Check VBT's for pressure buildup.	
Weather: <u>Partly Cloudy 25 Kts wind</u>		Air flask readings (Flasks on service)	
<u>72° F</u>		Flask #1 <u>160</u> ; #2 _____	
1200 Conditions Normal		#3 _____ ; #4 _____	
Cabin Temp <u>72°</u>		#5 _____ ; #6 _____	
Ext. Temp _____		Test emergency ballast alarm.	
Humidity <u>50°</u>		Check equipment not in use in Off/Standby position.	
1201 CS Topaz not working		Vent Main Ballast Tanks	
1214 Go TO QUITE BOAT - EVERYTHING OFF		Check F.W. valves shut	
1217 checking strain gages for EMI		Record battery readings	
1218 fuse blown - wrong size		Carbon Dioxide % _____	
1244 FLOOD STB VBT - (BOAT WAS ATTEMPT TO SETTLE (BOUNCING) DOWN.)	1300	Oxygen % <u>20.5</u>	
1248 CHANGED FUSE FOR C-5 TOPAZ IN GSK Box	1400	Cabin Temperature <u>72°</u>	
1300 Cabin Temp <u>73°</u>	1500	Cabin Humidity <u>50°</u>	
Humidity <u>83%</u>			
Ext. temp. <u>2.5%</u>			
1310 meters 304 will not rotate - relay in console chatters, meters readily interfere badly with CTFM and Underwater phone.			

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>1-30-69</u></p> <p>16-20</p> <p>Position:</p> <p>Weather</p> <p>1625 SECURE PROP. PAN Commence Rig for SURFACE</p> <p>1640 Rig FOR SURFACE Compl BAT SECURED</p>	1600	<p>Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 <u>90</u> ; #2 <u>176</u> #3 _____ ; #4 _____ #5 _____ ; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____</p>	<p>ON LINE</p>
	1700	<p>Vent MBT's Check hydraulic pressure</p>	
	1800	<p>Vent MBT's Check hydraulic pressure</p>	
	1900	<p>Vent MBT's Check Hydraulic pressure</p>	

Change 2
1 January 1969

Franklin Underway Log Sheet

MISSION # 11

	Time	Routine	Initial
<p>Date <u>1-5-69</u></p> <p>08-12</p> <p>Position: PORT OF PALM BEACH, FLA. Slip No 2</p> <p>Weather: CLEAR - WIND 4-6 KNTS SEA IN SLIP CALM</p>	<p>0800</p>	<p>Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 <u>198</u> ; #2 <u>195</u> #3 <u>200</u> ; #4 <u>198</u> #5 <u>198</u> ; #6 <u>200</u> Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % <u>—</u> Oxygen % <u>21</u> Cabin Temperature <u>—</u> Cabin Humidity <u>—</u> LOX pressure <u>—</u> Fwd <u>—</u> Aft <u>—</u> Record F.W. & <u>LOX</u> tank levels. Full O₂ flow set at 2.5 l/min</p>	
<p>0900 START START RIG FOR SEA MAKE READY TO GET UNDERWAY Top off H.P. AIR</p>			<p>CHARGE Comp. 0930</p>
<p>0915 Run motor check - OK ROTATE MOTORS - NO ROTATION ON (1) INVERTER NO INDICATION ON METERS. TROUBLE SHOOT SYSTEM.</p>			
<p>1100 Comp INVERT. TROUB. SHOOT - WIRE IN WRONG LOCATION Comp Ready for sea.</p>			<p>#3 200 #4 198 #5 198 #6 200</p>
<p>1115 Ready for sea. Trim fore Aft 50-50</p>			
<p>1127 UNDERWAY IN ACCORD. WITH MISSION PLAN #11 ABOARD - DORR VANWEELE GREGORY KATMIRE REBERSOLD PILLARD</p>	<p>0900 1000 1100</p>	<p>Vent MBT's Check hydraulic pressure 142 kg/cm² Vent MBT's Check hydraulic pressure 142 kg/cm² Vent MBT's Check hydraulic pressure</p>	
<p>1140 Drop Chase Boat Tow AUS Bells</p>			
<p>1145 GRIFON HAS TOW UNDERWAY TO INLET HANG OUT SILICAGEL ~ 70 BAGS</p>		<p>Temp 67.5°F Humid 57.5% Water Temp 22°C EXT</p>	<p>DORR</p>
<p>1157 IN INLET INLET</p>			

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>2-5-68</u>	1200	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 <u>157</u> @; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in Off/Standby position. Vent Main Ballast Tanks Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____	
12-16			
Position: @ INLET - LAKE WORTH			
Weather: Sea's RUNNING 3-4 FT Swells			
1210 CLEAR Sea BOUY			
1305 Passed some hot menthalls up to Bruce Sorensen.			
1310 1310 Checked bilges - a little water near Fuel. trim pump.			
1329 TOWLINE Disconnected D BATT Amp meter rolls			
1345 Rigged for dive Sampling 430ft.			
6 > 1354 Diving 430ft. sampling			
1405 30 meters - checked bilges we are heavy.			
1415 TURN ON THIR. TOP LIGHTS	1300	Vent MBT's Check hydraulic pressure	
1430 Toggle switches on 3 & 4 not working. Also stbd inverts no longer working	1400	Vent MBT's Check hydraulic pressure	
1431 Surfacing	1500	Vent MBT's Check hydraulic pressure	
1445 RUN AFT MOTORS ON SURFACE APPEAR TO RUN WELL. KAZ. TO DECK FOR CEN A WITH GR. PAN SW LAMPS 1, 2, 8, 10 ON			
4 46 ESTIMATION: TOO HEAVY ABOUT 500 lbs.			
1447 DIVE			
1505 30 meters - messing up water 3 & 4			



Change 2
1 January 1969

Franklin Underway Log Sheet

	Date	Time	Routine	Initial
	5 Feb 69	1600	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast tanks. Check emergency ballast hydraulic pressure. 145. Check VBT's for pressure buildup. no Air flask readings (Flasks on service) Flask #1 110 ; #2 110 #3 112 ; #4 204 #5 155 ; #6 142 Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % 100 Cabin Temperature 72°F Cabin Humidity 71%	✓ ✓ na
16-20				
Position:	590 ft. of water - S.E. of Buoy 2LW - Palms Beach			
Weather	Partly Sunny - 10Kts wind from NE.			
1600	condensation heard Ext. Temp 18°C			
1605	ON SURFACE UNDERWATER phone xMITT VERY POOR DURING LAST 15 METERS ASCENT			
1630	TIGHTEN UP AFT PENETRATOR BLANK WHICH WAS LEAKING. APPROX 1/4 TURN OF NUT. ATTEMPT TOPSIDE REPAIR ON H3 - 2 battery penetrators			
1700	REPAIR COMPL TOPSIDE READY TO DIVE	1700	Vent MBT's Check hydraulic pressure	DK PK
1706	Diving - made surf at in Pos. 2 - DIVER # _____ Same as before. (last dive) sounding 50'	1800	Vent MBT's Check hydraulic pressure	
1717	Three reservoir lights on - also vent valves 5, 6, & 10	1900	Vent MBT's Check Hydraulic pressure	
1718	60 meters - cycled hull valves - Checked bilges & Hanger			
1719	70 meters			
1721	80 meters - cycled hull valves Checked bilges all OK			
1722	100 meters - cycled valves (hull)			
1725	120 meters - cycled hull valves Checked bilges & Hanger			

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>5 Feb 69</u></p> <p>20-24</p>	2000	<p>Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks.</p>	
<p>Position: <u>5 mi S.E. Bay 2LW</u> <u>Port of Palm Beach</u></p> <p>Weather: <u>Calm, 70°</u></p>		<p>Vent Main Ballast Tanks ✓ Check emergency ballast hydraulic pressure. <u>145 kg/cm²</u> Check VBT's for pressure buildup. - <u>vented</u> ✓ Air Flask readings (Flasks on service) ✓</p>	
<p>2000 ASSUME WATCH. PICCARD EVERYTHING NORMAL DORR SW. Lamps 1, 2, 3, 5, 8, & 10 LIT</p>		<p>Flask #1 <u>120</u>; #2 <u>155</u> #3 <u>200</u>; #4 <u>200</u> #5 <u>198</u>; #6 <u>198</u></p>	
<p>2100 phone check 2nd penetrator dripping at H3 very slow</p>		<p>Check equipment not in use in Off/Standby position. ✓ Check F.W. valves shut ✓ Record battery readings. Carbon Dioxide % <u>.03</u> Oxygen % <u>20</u> Cabin Temperature <u>66°F</u> Cabin Humidity <u>76%</u></p>	
<p>200 phone check very good <u>LOUD & CLEAR</u></p> <p>CYCLE VBT VALVES. PRESSURE BUILDS UP ABOUT EVERY HR. TO 25 kg/cm² IT APPEARS THIS AIR IS IN LINE ONLY. AS IT BLEEDS OFF WHEN HULL VENT (TOPSIDE) IS OPENED ONLY. VIEW OUT FWD PORT IS OF A SILT & SAND BOTTOM VERY FLAT. THERE ARE MANY CRABS & LARGE NUMBERS OF SQUID VARIING IN SIZE FROM 6 TO 10 INCHES. THE CRABS ARE ALL LARGE ABOUT 8 INCHES ACROSS SHELL.</p> <p>CO₂ READING = 0.3% NO CHANGE IN LEAKS</p>		<p>Conduct contaminant checks Ext Temp <u>22°C</u> Vent MBT's ✓ Check hydraulic pressure ✓</p>	
<p>2300 Phone check - very good O₂ reading up to 21% Decrease flow to 2.5 L/min</p>		<p>2200 Vent MBT's Check hydraulic pressure ✓</p>	<p>NS 4/101</p>
<p>2315 VENT STB VBT Press to 30 kg/cm² CYCLE VBT TANK VALVES. SECURE H.P. AIR SEA VALVE TO #2 TANK - MAY STOP AIR LEAKING INTO VBT</p>		<p>2300 Vent MBT's Check hydraulic pressure ✓</p>	
<p>2400 WATCH RELIEVED BY AEBERSOLD & GREGORY NOTE! Blown Fuse in FH-5 Box</p>		<p>WARRANT ACTION IS SET FOR CORRECTED FOR 300</p> <p>Depth = 165 m = <u>340</u> ft of sea water ACTUAL</p>	<p>Change 2 1 January 1969</p>

Franklin Underway Log Sheet

	Time	Routine	Initial
Date	<u>6 FEB 1969</u>		
00-04	0000	Check bilges for water ✓ Check hull valves for proper position. ✓ Check LOX tanks for leaks. ✓ Vent Main Ballast Tanks. ✓ Check emergency ballast hydraulic pressure. 145 kg/cm ² Check VBT's for vented pressure buildup. Record air flask readings (flasks on service) All secured Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
Position:	~ 5 mi S.E. Bay 2 LW LAKE WORTH INLET		
Weather:	ON BOTTOM IN 165 M. CURRENT ~ 2-3 KNTS		
00:00			
		GREGORY-AEBERSOLD	
00:00		ASSUME WATCH	
00:12		TURN ON LANDING LIGHTS (TRAILING LIGHTS)	
00:13		SECURED FWD PROJECTORS " "	
00:18		WENT STB VBT.	
00:18		PHONE CHECK VERY GOOD	
00:19		SECURED ALL PROJECTORS	
00:45		WENT STB VBT.	
00:46		TEST CFM	
00:57		PHONE CHECK VERY GOOD	
01:00		NO CHANGE IN LEAKS	
01:02		TURN ON LANDING LIGHTS - WE DO NOT MOVE	
01:05		SECURED LANDING LIGHTS	
01:30		PHONE CHECK - GRIFON ASK FOR TEMPERATURE AND HUMIDITY IN THE CABIN TEMP: 60°F / EXT 17°C HUMID: 78%	
01:45		WENT STB VBT.	
02:00		PHONE CHECK VERY GOOD	
02:01		TURN ON LANDING LIGHTS - WE DO NOT MOVE	
02:03		SECURE LANDING LIGHTS	
02:30		PHONE CHECK VERY GOOD	
02:33		NO CHANGE IN LEAKS	
02:50		WENT STB VBT	
02:55		PHONE CHECK VERY GOOD	
03:02		LANDING LIGHTS CHECK - WE DO NOT MOVE	
03:30		PHONE CHECK VERY GOOD	
03:55		NO CHANGE IN LEAKS	
03:56		PHONE CHECK VERY GOOD	
04:00		WATCH RELIEVED BY KAZIMIR AND VAN WEELE S. Abouid	
	0100	Vent MBT's ✓ Check hydraulic pressure 142 kg/cm ²	
	0200	Vent MBT's ✓ Check hydraulic pressure 142 kg/cm ²	
	0300	Vent MBT's ✓ Check hydraulic pressure 142 kg/cm ²	
		Carbon Dioxide % 0.5 Cabin Temperature 61°C Cabin Pressure 4.05 on 2.975 Cabin Humidity 77% O ₂ CAB = 21%	

Franklin Underway Log Sheet

Time Routine Initial

Date 6 FEB 1969

04-08

Position: Approx. 5 mi. S.E. of Buoy 22W
Palm Beach - on the bottom in
168 meters of water - Sand bottom.
Weather: Calm

0400	Check bilges for water	✓
	Check hull valves for proper position.	✓
	Check LOX tanks for leaks.	✓
	Vent Main Ballast Tanks.	✓
	Check emergency ballast hydraulic pressure.	✓
	Check VBT's for pressure buildup.	VENTED
	Record air flask readings (flasks in service)	ALL SECURED
	Flask #1 _____; #2 _____	
	#3 _____; #4 _____	
	#5 _____; #6 _____	
	Check equipment not in use in Off/Standby position.	✓
	Record battery readings	
	Check F.W. valves shut	✓
	Carbon Dioxide % <u>0.3</u>	
	Oxygen % <u>21</u>	
	Cabin Temperature <u>50° F</u>	
	Cabin pressure <u>+93</u>	
	Cabin humidity <u>75%</u>	
	EXT SEA Temp <u>17° C</u>	
0500	Vent MBT's	
	Check hydraulic pressure	
0600	Vent MBT's	
	Check hydraulic pressure	
0700	Vent MBT's	
	Check hydraulic pressure	

4.40 spark fire - minor arcing in terminal strip in fuse box below main switch

5.00 about: decision to come up (due to water in fuel line)

5.06 via ~~blower~~ ~~blower~~ - 2 VBT (wear on) ~~by~~ emergency battery only) leaking cables - #48 at main switch #140 at MFB

5.15 below MBT & VBT. Takes too much air for MBT & maybe not safe due to expanding air - could damage MBT's

5.20 drop safety ballast (short) + vent air in MBT's
want to
raise very fast ascent

10 m / 5 sec - absolutely worth ascent.

about 2 meters/sec. ascent rate - between 50 and 30 meters

5.21 surface -

22 Blow MBT - DRY
HATCH CLEAR

23 open HATCH

05 43 PULL FUSES IN BOX # HF B-4
TO DRY UP WATER

05 45 TURN ON AMBER LIGHT (TRAFFIC)

05 50 During this mission, D battery has been counting of AH much too fast.

Change 2
1 January 1969

Franklin Underway Log SheetDate 6 FEB 1969

08-12

Position:

Weather:

0800 UNDER TOW BY GRIFON - INFORM
BASE OF RETURN ETA - 11-12 AM.
NOTE! ON RADIO FRANKLIN COULD
HEAR GRIFON TO BASE BUT WAS
UNABLE TO HEAR BASE XMISSION

0830 SW SENSOR LIGHTS 1, 2, 5, 8 & 10 ON.

0900 VENT VBT PRESS IN LINE = 40 KA/CM²
STBD
10 KA/CM²
PORT

TAKE DOWN LiOH PANELS.
SW. LIGHT #12 ~~IS~~ IS ON

1010 APPROACH LAKE WORTH SEA BOUY
SET UP P. PAN. IN CRUISE MODE (2)
FWD MOTORS ON PORT 60KVA INVERTED
- RUN MOTOR TEST. EVERYTHING NORMAL.
1/2 speed (375 RPM) @ ~60 AMPS
- AT STOP MOTORS PUT OUT ABOUT
100 - 125 RPM DUE TO TOW - STEADY

1016 ENTER LAKE WORTH INLET
S.W. LAMPS 1, 2, 5, 7, 8, 10 & 12 ON.

STB & PORT TACK FOR FWD MOTORS
READ 500 RPM WHILE AMP METER READS
140 AMPS WHICH IS SUFFICIENT FOR
MAX SPEED.

Time	Routine	Initial
0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % <u>21</u> Cabin Temperature <u>68°</u> Cabin Humidity <u>72°</u> LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels. EXT. Sea Temp: 25°C	
0900	Vent MBT's Check hydraulic pressure	} 0900
1000	Vent MBT's Check hydraulic pressure	
1100	Vent MBT's Check hydraulic pressure	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>2-13-69</u>	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % <u> </u> Oxygen % <u>21</u> Cabin Temperature <u>70</u> Cabin Humidity <u>66</u> LOX pressure <u> </u> Fwd <u>5/8</u> Aft <u>7/8</u> Record F.W. & LOX tank levels. EXT WATER Temp. <u>21°C</u>	
08-12			
Position: <u>PORT OF PALM BEACH FLA</u>			
Weather: <u>CLEAR - CALM ~5KT WIND</u>			
1045 <u>READY FOR SEA</u>			
1050 <u>LIGHT OFF (4) INVERTERS TURN MODE EXERCISE MOTORS ABOARD: KAZIMIR GREGORY VAN WEELE PICCARD AEBERSOLD DORR</u>	1050		
1101 <u>UNDERWAY IN ACCORD. WITH PLAN #11 SHUT FWD HATCH, AFT HATCH SHUT</u>			
1112 <u>IN TURNING POSITION WAIT TOW - MANU. ON MAIN MOTORS</u>	0900	Vent MBT's Check hydraulic pressure	
1116 <u>GRIFON HAS TOW - UNDERWAY FOR ATLANTIC</u>	1000	Vent MBT's Check hydraulic pressure	
1134 <u>PASSING #3 MACKEREL</u>	1100	Vent MBT's Check hydraulic pressure	
1140 <u>PASSING END OF INLET COMPL HANGING OUT SILICA GEL 92 BAGS</u>			
1146 <u>SOUNDING AT SEA BOUY 42 FT</u>			

Franklin Underway Log Sheet

Date 2-13-69

12-16

Position: ATLANTIC - OFF PALM BEACH

Weather: Clear 20Kts 4-6 ft waves

1207 DEPTH GAGES ON TME LINE

1225 we will dive with both VBT's empty,
since boat is overall heavy.

1245 S.W. Sensor Cams # 1, 7, 8, 10, 11, 12
LT.

1254 Drop Tow from Griffin

1255 Depth 400ft. Sea STATE 4

1258 ROTATE MOTORS FOR DIVE

1 MOTOR WOULD NOT ROTATE
for several min's. Then picked
UP

9/1310 open vents - DIVE
SOUNDING = 380ft.

1317 using power to dive - need full

1320 Still on SURFACE VERY SLOW
GOING - FULL PWR ON

1322 All The way UNDER
DIVING

1329 45-M Cycled hull valves -
continually checking bilges
& main ballers, fuses & water
cables

1330 FLOOD STB VBT

1330.5 Go to 60 meters.

1336 70 m Cycled hull valves

1337 LEAK - NO. 1 FRESH WATER
Go up to 50m
Go DOWN to 90m

Time

Routine

Initial

1200

Check bilges for water.
Check hull valves for
proper position.
Check LOX tanks for
leaks.
Check emergency
ballast hydraulic
pressure
Check VBT's for
pressure buildup.
Air flask readings
(Flasks on service)
Flask #1 _____; #2 _____
#3 _____; #4 _____
#5 _____; #6 _____
Test emergency ballast
alarm.

Check equipment not in
use in Off/Standby
position.

Vent Main Ballast Tanks
Check F.W. valves shut
Record battery readings
Carbon Dioxide % _____
Oxygen % 20.5
Cabin Temperature 71° F
Cabin Humidity 61%
EXT WATER 22° C

1300

Vent MBT's
Check hydraulic pressure

1400

Vent MBT's
Check hydraulic pressure

1500

Vent MBT's
Check hydraulic pressure

1535

Ext. temp. 10° C

Int. temp 66° F

Humidity 69.5%

O₂ - 20.5% 3 l/min

ALL SECURED
NO
NO
Ach

Change 2

1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>13 Feb. 69</u>	1600	Check bilges for water.	DK
16-20		Check hull valves for proper position.	DK
Position: <u>Approx. 5 mi. East of Palm Beach</u>		Check LOX tanks for leaks.	DK
Weather <u>15 Kts wind from North</u>		Vent Main Ballast tanks.	DK
<u>8-10 ft. Swells</u>		Check emergency ballast hydraulic pressure.	DK
1600 Cycled hull valves		Check VBT's for pressure buildup.	DK
Note: - we previously had one problem - when aft 3KVA was operated, we lost Thallium indicator lights - They must have been hooked up to aft 3KVA vice Fwd.		Air flask readings (Flasks on service)	
1715 0.4% CO ₂ - putting out 12 LIQH panels		Flask #1 _____; #2 <u>170</u>	
1745 Shifted from #4 to #1 F.W. tank.		#3 _____; #4 _____	
1800 Inspected bilges, cycled hull valves, vented Std VBT & inspected all main fuse boxes, battery charge penetrators & main water penetrators - we have been doing these checks at least every hour		#5 _____; #6 _____	
1807 Current increasing - we are moving		Check equipment not in use in Off/Standby position.	DK
1940 Ext temp. 11°C - questionable		Check F.W. valves shut	DK
		Record battery readings	
		Carbon Dioxide % <u>0.4</u>	
		Oxygen % <u>20.5</u>	
		Cabin Temperature <u>62.5</u>	
		Cabin Humidity <u>65.5%</u>	
		Ext. temp.	
	1700	Vent MBT's	DK
		Check hydraulic pressure	DK
	1800	Vent MBT's	DK
		Check hydraulic pressure	DK
	1900	Vent MBT's	DK
		Check Hydraulic pressure	DK

WJG

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>13 Feb. 69</u>	2000	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air Flask readings (Flasks on service) NO Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	DK
20-24			DK
Position: <u>5 mi. east of Palm Beach</u>			DK
Weather: <u>Clean - 10 kts. wind</u>			DK
2000 Release WATCH - all normal in Boat			DK
H. Doer J. Piccard			DK
- our depth per Press.ducer = 458 FT S.W. Lamps 1, 2, 7, 8, 10, 11, 12, 14 ON			DK
- Checked "D" BATT. counter per Formula in OPR 69-238 (3) checks made			DK
① 1.665 x 24 Amp = 39.96 ② 1.665 x 20 Amp = 33.3 ③ 1.665 x 19 Amp = 31.4			DK
Readings ① was 184 counts/min ② was 91 " / min. ③ was 87 " / MIN		Check equipment not in use in Off/Standby position. Check F.W. valves shut. Record battery readings Carbon Dioxide % 20.4 Oxygen % <u>20.6</u> Cabin Temperature <u>60° F</u> Cabin Humidity <u>71%</u> Conduct contaminant checks <u>NO</u>	DK
2100 Boat check - all normal Lower O ₂ Flow TO 2.04/min O ₂ was 21.5%	2100	Ext. 11°C Vent MBT's Check hydraulic pressure	DK
2130 TALK TO SURFACE ON underwater phone The Griffin had difficulty hearing us when their motors were running	2200	Vent MBT's Check hydraulic pressure	DK
2200 Boat check - all normal O ₂ is 20.9%	2300	Vent MBT's Check hydraulic pressure	DK
Cycle vents & Bleed off VBT pressure			DK
2300 Phone check OK Boat check Everything normal. Franklin still moves over the bottom with her heading changing from West to North about every hour.			DK
0000 WATCH RECEIVED Phone check OK.			DK

[Handwritten signature]

Franklin Underway Log Sheet

		Time	Routine	Initial
Date <u>14 FEB '69</u>		0000	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Record air flask readings (flasks on service)	<input checked="" type="checkbox"/>
00-04	Position: 5 mi EAST OF PALM BEACH		Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	<input checked="" type="checkbox"/>
	Weather: TOPSIDE CLEAR 7-10KTS WIND		Check equipment not in use in Off/Standby position (eg., Fathometer, Temperature Sensor, Compass, Sonar, Rudder position Indicator, Lights, Sink, Shower).	<input checked="" type="checkbox"/>
00'00	RELIEVE WATCH GREGORY - REBERSOLD ALL NORMAL ON BOARD		Check F.W. Valves shut Record battery readings Carbon Dioxide <u>0.3</u> Cabin Temperature <u>58°F</u> Cabin Pressure <u>1.03</u> Cabin Humidity <u>67%</u> EXT WATER <u>11°C</u>	<input checked="" type="checkbox"/>
	- OUR DEPTH = 458 FEET			
	- S.W. LAMPS 1,2,7,8,10,11,12,14 ON			
00'30	PHONE CHECK O.K.			
00'36	WE DO NOT MOVE - ORIENTATION 30°			
00'55	A LITTLE WATER REMARKS ON THE 34 PENETRATORS			
00'57	WENT STB VBT			
01'00	PHONE CHECK O.K.			
01'20	AN OCTOPUS OF 6 INCHES IS ON THE WINDOW (PORT, BETWEEN STIFFENINGS 1-2)			
01'30	PHONE CHECK - O.K.			
01'56	POSITION - NO CHANGE			
02'00	PHONE CHECK - O.K.			
02'17	WENT STB VBT			
02'30	PHONE CHECK - O.K.	0100	Vent MBT's Check hydraulic pressure	X
02'50	<u>LEAK ON ALL 4 FRESH WATER VALVES.</u>			
03'00	PHONE CHECK - O.K.	0200	Vent MBT's Check hydraulic pressure	X
03'00	POSITION - NO CHANGE			
03'15	WENT STB VBT			
03'30	PHONE CHECK - O.K.	0300	Vent MBT's Check hydraulic pressure	X
03'31	<u>LEAK ON THE FRESH WATER FILTER IN THE TOILET</u>			
04'00	PHONE CHECK - O.K. ALL NORMAL WATCH RELIEVED			

E. Saband

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>14 Feb. 69</u>	0400	Check bilges for water	X
04-08		Check hull valves for proper position.	X
Position: <u>Approx 5 mi. East of Palm Beach</u>		Check LOX tanks for leaks.	X
490 ft. of water		Vent Main Ballast Tanks.	X
Weather: <u>Clear + calm</u>		Check emergency ballast hydraulic pressure.	X
0400 A very small amount of water noted in bilge at penetrator B-3 where battery cables enter.		Check VBT's for pressure buildup.	X
General note - Why is the boat so much lighter this time? The trim statement indicates she should be the same as last div - quite a bit heavy.		Record air flask readings (flasks in service)	NO
Also, very little condensation noted.		Flask #1 _____; #2 _____	
0500 water very clear. We are not moving		#3 _____; #4 _____	
0700 Taking another set of strain gage readings		#5 _____; #6 _____	
c/1/g.		Check equipment not in use in Off/Standby position.	X
		Record battery readings	X
		Check F.W. valves shut	X
		Carbon Dioxide % <u>0.3</u>	
		Oxygen % <u>21</u>	
		Cabin Temperature <u>56°</u>	F
		Cabin pressure <u>1.03</u>	
		Cabin humidity <u>67%</u>	Rel.
		EXT. WATER <u>11°C</u>	
	0500	Vent MBT's	DK
		Check hydraulic pressure	DK
	0600	Vent MBT's	DK
		Check hydraulic pressure	DK
	0700	Vent MBT's	DK
		Check hydraulic pressure	DK

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>14 Feb 69</u>	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 _____; #2 <u>173</u> #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings. Carbon Dioxide % <u>.3</u> Oxygen % <u>21.2</u> Cabin Temperature <u>58°F</u> Cabin Humidity <u>67.5</u> LOX pressure <u>130</u> Fwd _____ Aft <u>3/4</u> Record F.W. & LOX tank levels. Ext. temp. - <u>10°C</u>	
08-12			DK
Position: <u>5 mi. East of Palm Beach</u>			
Weather: <u>Clear + calm</u> <u>Cabin pressure 1.05</u>			DK
808 blowing stat. V.B.T. (jackets)			
809 same V.B.T.			
812 2y flow in for Quipam under way - East. 2 rear motors vertic. 2 fore. " horiz. 5th. minute mark, 450 rpm.			DK
0830 Steaming along nicely on the 2 aft motors in "Turn mode" using the aft joy stick for depth control. One man in control (Durr)	0900	Vent MBT's Check hydraulic pressure	DK DK
0847 #3 Reservoir Light on.	1000	Vent MBT's Check hydraulic pressure	DK
0855 Current makes it difficult to steer	1100	Vent MBT's Check hydraulic pressure	
0930 Piccard at the controls Boat is holding 100 m. nicely - very little joy stick needed			
1000 Holding 100 m Depth now is 710 FT			
1002 Achesold at controls			
1010 Depth 730 feet. over			

Franklin Underway Log Sheet

Date	Time	Routine	Initial
12-16	1200	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	DK DK DK DK DK NO
Position: 8 mi. East of Pelin Beach		Test emergency ballast alarm.	DK
Weather: unknown - believe it's clear with sea state 4		Check equipment not in use in Off/Standby position.	DK
Note - better fuse up two Piccard lights - we've been using the present ones a lot.	7.05 Cabin pressure	Vent Main Ballast Tanks Check F.W. valves shut Record battery readings Carbon Dioxide % Oxygen %	DK DK NO NO
1212 Completed strain gage reading - proceeding to 100 meters.		Cabin Temperature Cabin Humidity	62°F 64.7%
1214 Close All VALVES - Come up to 100m. No underwater Telephone		Vent MBT's Check hydraulic pressure	
1220 Observe Air Bubbles coming from sail top or side		Vent MBT's Check hydraulic pressure	
1225 at 100m. preparing to surface		Vent MBT's Check hydraulic pressure	
1232 Regained comm. @ 100m Griffin tracking hood damaged.		Vent MBT's Check hydraulic pressure	
1240 SURFACING slowly bubble			
1250 Bubbles still coming out of sail			
1251 ON SURFACE - Blom MBT's			
1256 open HATCH - sea very rough.			
1346 DIVE - open vents Can't get down - blew with 3 Kurt inverters fuses o.c.c. - fuses ok			
1400 Abort - will turn in under tow			
1430			

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>14 FEB - 69</u></p> <p>16-20</p> <p>Position:</p> <p>Weather</p> <p>1600 UNDER TOW BY GRIFON ETA PORT OF PALM BEACH 2100 HRS.</p> <p>1725 RIG MAST IN SAILED.</p> <p>1800 Ext. temp 22°C Cabin temp. 73°F Cabin humidity 66%</p>	<p>1600</p> <p>1700</p> <p>1800</p> <p>1900</p>	<p>Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____</p> <p>Vent MBT's Check hydraulic pressure</p> <p>Vent MBT's Check hydraulic pressure</p> <p>Vent MBT's Check Hydraulic pressure</p>	

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>14 Feb</u></p> <p>20-24</p> <p>Position: $\frac{1}{2}$ mi. east of Singer Island</p> <p>Weather: Clear - sea state 4 20 kts. wind</p> <p>RUN IN VERY ROUGH TRIP SEEMS TO LAST FOREVER BETWEEN LAND MARKS</p>	2000	<p>Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air Flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut. Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____ Conduct contaminant checks _____</p>	b/c
	2100	<p>Vent MBT's Check hydraulic pressure</p>	
2210 Drop TOW IN TURNING BASIN	2200	<p>Vent MBT's Check hydraulic pressure</p>	
2245 Tie up PORT OF PALM BEACH	2300	<p>Vent MBT's Check hydraulic pressure</p>	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>2-18-69</u>	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
08-12			
Position: PORT of PALM BEACH			
Weather: CLEAR - WIND FROM WEST @ 3-4 KTS			
1030 BOAT RIGGED FOR SEA. WAIT CLEARANCE TO GET UNDERWAY. ABOARD PICCARD DORR AEBERSOLD VAN WEELE KAZIMIR GREGORY			
1100 PUT OUT 43 BAGS OF SILICA GEL LIGHT OFF PILOT PANEL		Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____ LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels.	
1101 UNDERWAY (with Tow from Chase Boat) IN ACCORD. WITH PLAN # 11			
1114 DROP CHASE BOAT TOW - PICK UP GRIFON TOW - UNDERWAY FOR INLET.			
1124 Pump all TRIM WATER AFT TO ALLOW FOR TOW	0900	Vent MBT's Check hydraulic pressure	
1129 SECURE PROPULSION SYSTEM.	1000	Vent MBT's Check hydraulic pressure	
	1100	Vent MBT's Check hydraulic pressure	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>2-18-69</u>	1200	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
12-16		Test emergency ballast alarm. Check equipment not in use in Off/Standby position. Vent Main Ballast Tanks Check F.W. valves shut	
Position: UNDER TOW BY GRIFON HEADING 150°		Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature <u>66°</u> Cabin Humidity <u>57%</u>	
Weather: CLEAR - WIND 20KTS		EXT water 21°C	
1212 RADIO COMM. WITH GRIFON CHECK O.K. KEEP WATCH ON RADIO	1300	Vent MBT's Check hydraulic pressure	
1437 LIGHT OFF PILOT PANEL ADJUST TRIM WATER 80% FWD MAKE READY TO CAST OFF TOW WATER TEMP 23°C	1400	Vent MBT's Check hydraulic pressure	
1443 TOW LINE FREE	1500	Vent MBT's Check hydraulic pressure	
1505 OPEN VENTS - DIVE SOUNDING 145 FATHOMS.			
PROB. WITH INDICATOR CIRCUIT ON ROTATION MOTORS - READ OPPOSITE TO ROTATION. REQUEST INFO FROM BASE VIA GRIFON ON SUGGESTED FIX.			
S.W. LAMPS 1, 5, 7, 8 THRU 14			
1517 100 meters begin continuous inspection of bilges, hull hang, main top boxes + penetrators. Boat is heavy.			
1532 180 m dnp leak in position water penetr shot ballast ckt. MULT-penetrator - well tighten it.			
1545 TOOK ~ 1/8 TURN ON NUT			
1547 TO 200 m			
1553 220 m continuing inspection - penetrator still leaking the same boat a little heavy - handling trials			

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>18 Feb.</u>	1600	Check bilges for water. <i>DK</i> Check hull valves for proper position. <i>DK</i> Check LOX tanks for leaks. Vent Main Ballast tanks. <i>DK</i> Check emergency ballast hydraulic pressure. <i>DK</i> Check VBT's for pressure buildup. <i>DK</i> Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
16-20			
Position: <u>10 mi. S.E. of Palm Beach</u>			
Weather <u>Clear 20 kts wind</u> <u>Sea state 4</u>			
1614 Reservoir Light 2 "on", # 3 flickering We are taking readings (Strain gage)			
1630 Cell s.w. sensor lights "on" except 4 & 6 - Bottom			
1645 Only # 2 position motor working - UNDERWAY Use of the left position motor, reads 0 ground - #1 reads 0 0 megohms So no joy sticks We'll try it with fuel motors vertical & left motors hoist & using toggle switches for steering			
1710 WATER LEAK THROUGH EMERG SALV. VALVE. SHUT BOTH VALVES IN BOAT	1700	Vent MBT's Check hydraulic pressure	
1740 Since we can't secure motors with a toggle, steering control is ridiculous - making little headway & sometimes going in circles	1800	Vent MBT's Check hydraulic pressure	
1745 LIHT panels out - 12	1900	Vent MBT's Check Hydraulic pressure	
1825 STBD THROTTLE STBD MOTOR PORT INVERTOR ON PORT THROTTLE #2 motors 2 & 4 ON PORT THROTTLE Joy STICK FOR DEPTH control on #2 motor #1 motor secured. much better working headway.			

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date	18 Feb. 69		
20-24	2000	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air Flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut. Record battery readings Carbon Dioxide % _____ Oxygen % 20.6 Cabin Temperature 59 Cabin Humidity 74% Conduct contaminant checks _____ Ext. temp - 8°C	DK DK - - DK DK - - - - DK - -
Position:	15 mi. East of Palm Beach		
Weather:	20 Kts wind Clear		
Humidity increases - good amount of condensation in hemisphere			
2005		We are still heavy and both VBT's are dry - probably about 1500 to 2000 lbs heavy.	
2006		penetrator reach worse - about 2 drops per second.	
20 - 1.027 DENSITY 1200 ft - TEMP 56°F			
2030		Strain gage readings complete	
2040		Underway, heading east will go at 320 m. Boat handling well	
2100		Humidity climbing - up to 74% - we'll use dehumidifier - not enough silica gel	
2100		Boat handling well - controlling depth with jib stick on #2 motor; propulsion + steering on motors 3+4 - turn mode.	
2225		Boat HANDLING WELL RUNNING @ 375 m (1200 ft) Heading S.E.	
2236		Small hydraulic oil leak - fitting to reservoir	
2255		Can see part of the truss bridge through port center viewport	
2300		AT 1600 ft Depth ^{of water} - commence Decent TO DEPTH - continuous inspection of bilges, penetrators, flange etc - also cycling hull valves.	
2315		Bottom. 1595 ft. Flooding STD VBT (partial) Ext. temp. 7°C.	
		Change 2 1 January 1969	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>19 Feb 69</u>	0000	Check bilges for water	DK
00-04		Check hull valves for proper position.	DK
Position: 15 mile 087° from Palm Beach inlet		Check LOX tanks for leaks.	—
Weather: on the bottom in 1600 ft. of water 20 kts. Sea statey		Vent Main Ballast Tanks.	DK
0005 Penetrator leak has stopped		Check emergency ballast hydraulic pressure.	DK
0021 Penetrator Leak main motor AFT - HS (some one leaking in previous DIVE) - Penetrator #19 - This is what caused the smell. all 3 legs of #4 motor read 0 wogs		Check VBT's for pressure buildup.	DK
0045 Underway for 1800 ft. water will proceed at 480 meters we are using #2 motor with joy stick and on float inverter with #3 motor on steel inverter - turn mode. Handling OK		Record air flask readings (flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
0130 72% humidity 55°F cabin temp 7°C ext. temp.	20740 02	Check equipment not in use in Off/Standby position (eg., Fathometer, Temperature Sensor, Compass, Sonar, Rudder position Indicator, Lights, Sink, Shower).	DK
0215 Resuming our descent to 1800 ft. of water		Check F.W. Valves shut	no
0218 Bottomed 1785 ft. no communications		Record battery readings	no
0225 REGARD COMM. WITH GRIFON inspected bilges, flange, penetrators etc + cycled hull valves		Carbon Dioxide % _____ Cabin Temperature <u>59</u> Cabin Pressure <u>1.03</u> Cabin Humidity <u>69%</u> Ext. temp 7°C	
0240 Lost Comm. Notice small amount of salt water in 2 fwd. bilges - near pilot + near trim pump	0100	Vent MBT's	no
0255 Proceeding to 500 m to regain comm. will point different direction. Stream gauge reading complete.		Check hydraulic pressure	DK
0306 Blow STR VBT - used 15 kg/cm ² comm. with Grifon on phone very weak AND NOT UNDERSTANDABLE	0200	Vent MBT's	
Coming up to 500 m	0300	Check hydraulic pressure	

Franklin Underway Log Sheet

Date	Time	Routine	Initial
19 Feb 69	0400	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Record air flask readings (flasks in service)	NK NK NO NK NK NO
04-08 Position: 17 miles East of Palm Beach		Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
Weather: ? Proceeding S.E. at 2 kts for 2000 ft. dive. Cannot communicate with motor on		Check equipment not in use in Off/Standby position. Record battery readings Check F.W. valves shut Carbon Dioxide % _____ Oxygen % <u>20.5</u> Cabin Temperature <u>53</u> Cabin pressure <u>103</u> Cabin humidity <u>75%</u> ext. 8°C	NK NK AH NO
0446 START Decent to 2000 ft 0455 Bottom - 2001 ft. to gage - 2011 to Keel		0500	
Commence taking strain gage readings Reservoir Sensors 1, 2, & 3 "on". No Comm. with Griffin We have about 1 kt. current from the south		Vent MBT's Check hydraulic pressure	
0535 Still no Comm. We will come up & turn to try to gain transmission of Griffin Skipped to mag #2		0600	
0537 START Ascent to 400 m. EXT. Temp on Bottom 6°C		Vent MBT's Check hydraulic pressure	
0600 AT 400 m. prepare to surface NO CONTACT WITH GRIFIN		0700	
0635 at 100 m - NO CONTACT WITH GRIFIN		Vent MBT's Check hydraulic pressure	
0640 Contact in CTFM port bow 345 yds			
0655 no comm with Griffin. We are coming up very slowly We are very heavy & using a board			
0715 tremendous amount of power to ascend. Surfaced.			
0730 Contact with Griffin in Radio - They are attempting to get a DF bearing			

Change 2
1 January 1969

Franklin Underway Log Sheet

Date _____	Time	Routine	Initial
08-12	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____ LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels.	
	0900	Vent MBT's Check hydraulic pressure	
	1000	Vent MBT's Check hydraulic pressure	
	1100	Vent MBT's Check hydraulic pressure	

See Memoirs Log

Franklin Underway Log Sheet

Date	Time	Routine	Initial
<u>19 Feb 69</u>	1200	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in Off/Standby position. Vent Main Ballast Tanks Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____	
12-16			
Position:		12 mi. East of Jupiter	
Weather:		Clean 25 Kts from North	
	1430	76% humidity	
		76° F	
		24 °C ext. temp	
		Dehum. has been off for 2 hours - back on now	
		1630	
	1300	Vent MBT's Check hydraulic pressure	
	1400	Vent MBT's Check hydraulic pressure	
	1500	Vent MBT's Check hydraulic pressure	

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial	
Date <u>19 Feb 69</u>	1600	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____		
16-20				
Position: <i>near Fla. East coast - about 5 mi. from Jupiter</i>				
Weather <i>Cool & clear 17 Kts from North</i>				
1630 <i>Rissail light mist noticed lots of water in scif - not too good - corrected by pumping thru water aft.</i>				
1645 <i>Tow not properly lined up - seems most of load on port shackle.</i>				
	1700		Vent MBT's Check hydraulic pressure	
	1800		Vent MBT's Check hydraulic pressure	
	1900		Vent MBT's Check Hydraulic pressure	

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>17 Feb</u> 20-24 Position: <u>3 mi. west of Jupiter</u> Weather: <u>light</u> <u>15 Kts from north - cool &</u> <u>Clear</u> 2220 SECURE BOAT AT PORT OF PALM BEACH RIG FOR SURFACE	2000	Check bilges for water Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air Flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut. Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____ Conduct contaminant checks _____	
	2100	Vent MBT's Check hydraulic pressure	
	2200	Vent MBT's Check hydraulic pressure	
	2300	Vent MBT's Check hydraulic pressure	

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>3-11-69</u></p> <p>12-16</p> <p>Position: <u>PORT of PALM BEACH</u></p> <p>Weather:</p>	<p>1200</p>	<p>Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____</p>	
<p>1415 UNDERWAY WITH TOW TO POSITION IN SLIP IN ACCORD. MISSION #13</p>		<p>Test emergency ballast alarm. Check equipment not in use in Off/Standby position. Vent Main Ballast Tanks Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____</p>	
<p>1450 IN POSITION TO DIVE - BOAT RIGGED</p> <p>PICCARD KAZ CAMPBELL CHETTY DORR AEBERSOLD</p>			
<p>1451 OPENED VENTS - DIVE Dehumidifier on</p>			
<p>1503 BOAT COMP' UNDER</p>	<p>1300</p>	<p>Vent MBT's Check hydraulic pressure</p>	
<p>1505 IN BOTTOM, USED MOTORS ONLY TO SLOW DESCENT</p>	<p>1400</p>	<p>Vent MBT's Check hydraulic pressure</p>	
<p>1510 Inspected bilges, fly boxes, penetrators</p>	<p>1500</p>	<p>Vent MBT's Check hydraulic pressure</p>	
<p>1530 Surfaced - Used 55 psi out of #1 flask to blow MBT's</p>			

1540 Offloaded 70 Bags of Lead.

1544 READY TO DIVE

1544 OPEN VENTS - DIVE

1547 hydraulic pressure up to 147 why?

Applying power to Dive

1556 Pump AFT TRIM TO END TRIM - 60% FWD

1600 Bottom offloaded 100# outside

1610 PARTIAL surfaced - only bubble cut

1615 Loaded 50# outside - DIVER'S over

Change 2
1 January 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>3-13-69</u>	0800	Replace LiOH panels Conduct thorough boat inspection. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast Tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (flasks in service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings. Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____ LOX pressure _____ Fwd _____ Aft _____ Record F.W. & LOX tank levels.	
08-12			
Position: <u>PORT of PALM BEACH</u> <u>SLIP # 2</u>			
Weather:			
08 1148 <u>READY FOR SEA</u> <u>ABOARD</u>			
M. VENCH KAZMIR CAMPBELL PICCARD HEBERSOLD DORR			
-49 <u>LIGHT off Dehumidifier</u>			
-54 <u>LIGHT off PILOT PAN.</u>			
1155 <u>UNDERWAY UNDER TOW BY CHASE</u> <u>BOAT</u>			
1159 <u>IN TURNING BASIN</u>			
	0900	Vent MBT's Check hydraulic pressure	
	1000	Vent MBT's Check hydraulic pressure	
	1100	Vent MBT's Check hydraulic pressure	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>3-13-69</u>	1200	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
12-16		Test emergency ballast alarm. Check equipment not in use in Off/Standby position. Vent Main Ballast Tanks Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature <u>65.5°F</u> Cabin Humidity <u>75%</u> EXT water Temp 19°C	1200 READW
Position:		Vent MBT's Check hydraulic pressure	
Weather:		Vent MBT's Check hydraulic pressure	
1204 Drop Tow From Chase Boat WAIT TO PICK UP "GR. FOW"		Vent MBT's Check hydraulic pressure	
1220 Pick up Tow From "GR. FOW" UNDER TOW			
1235 TRIM WATER 40% FWD PUMP ALL WATER AFT			
-1302 We will head SE about 4 mi past buoy 2LW for divert. Franklin was neutrally buoyant in slip 2LW at the Surface. 11 March. Density at The slip was 1.026 (67°F). We had both VOT's full. For today, we added 72 bags of lead (12# ea) and blew one VBT dry. We added another 10# when taking water samples.	1300 1400 1500		
1305 PASSED SEA BUOY WAY: 150°			
1330 When opening the fwd. hatch, we noticed an unusual amount of pressure in the boat		Change 2 1 January 1969	

Franklin Underway Log Sheet

13

Date	Time	Routine	Initial
13 Mar 69	1600	Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Vent Main Ballast tanks. Check emergency ballast hydraulic pressure. Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Check equipment not in use in Off/Standby position. Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____	
16-20			
Position: 4 mi. east of Palm Beach			
Weather 10 Kts. wind from N; clear			
1605 Bow heading South; we are drifting northward.			
Note: we added weight to boat when taking water samples - about 10 lbs			
1608 Rising a little			
1625 135 meters powering down CTFM O.O.C			
1632 Beginning our ascent to the surface UP TO 30m			
1637 REQUEST SURFACE CLEARANCE CLEAR TO SURFACE			
1640 SURFACE FROM 30m	1700	Vent MBT's Check hydraulic pressure	
1641 ON SURFACE BLOW MBT'S	1800	Vent MBT's Check hydraulic pressure	
1700 RADIO CHECK TO GRIFFON, OK.			
1710 Toilet (head) smells bad	1900	Vent MBT's Check Hydraulic pressure	
1750			
1820 Pump All TRIM WATER AFT.			
1835 HOLD IN TURNING BASIN WAITING TANKER TO CLEAR SLIP			
1700 Tow LIVE CAST off from Griffon			
1705 Chase Boat was tow AND BELLS - NOTE! AT MAX. PWR BOTH INVERTERS (AMPAMETERS) PUT OUT 90 AMPS		Change 2 1 January 1969	
1725 SECURED TOW FOR SURFACE NOTE! RUNNING LIGHTS TAKE .6 AMPS/LIGHT			

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>3-15-69</u></p> <p>12-16</p> <p>Position: <u>PORT OF PALM BEACH</u> <u>TURNING BASIN - LAKE WORTH</u></p> <p>Weather:</p> <p>1230 UNDERWAY TO RUN MOTOR & INVERTER TESTS ABOARD - AEA REP'S (2) BEINHULT CHESTY KAZMIR DARR SOLUNSON MULLEN CAMPBELL ELI ENRI PLOCIN</p> <p>1630 SECURE BOAT TEST'S WERE COMPLETED AND SATISFACTORILY</p>	<p>1200</p> <p>1300</p> <p>1400</p> <p>1500</p>	<p>Check bilges for water. Check hull valves for proper position. Check LOX tanks for leaks. Check emergency ballast hydraulic pressure Check VBT's for pressure buildup. Air flask readings (Flasks on service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____ Test emergency ballast alarm. Check equipment not in use in Off/Standby position. Vent Main Ballast Tanks Check F.W. valves shut Record battery readings Carbon Dioxide % _____ Oxygen % _____ Cabin Temperature _____ Cabin Humidity _____</p> <p>Vent MBT's Check hydraulic pressure</p> <p>Vent MBT's Check hydraulic pressure</p> <p>Vent MBT's Check hydraulic pressure</p>	

4-1

	Time	Routine	Initial
<p>Date <u>25 April 69</u></p> <p>12-16</p> <p>Position: <u>Slip #2 Port of Palm Beach</u></p> <p>Weather: <u>wind 13 kts from East overcast</u></p> <p>1201 <u>Rand, Quik, Kazimiers</u> <u>reviewed RFS checkoff.</u></p> <p>TSC: <u>19</u></p>	<p>1200</p>	<ul style="list-style-type: none"> -Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) <p>Flask #1 _____; #2 _____;</p> <p>#3 _____; #4 _____</p> <p>#5 _____; #6 _____</p> <ul style="list-style-type: none"> -Test emergency ballast alarm -Check equipment not in use in Off/Standby position -Vent Main Ballast Tanks -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen% _____ -Cabin Temperature _____ -Cabin Humidity _____ 	
<p>12-18 <u>in accordance with</u></p> <p><u>Test Dia #14</u></p> <p><u>covered w/ Slip #2</u></p> <p>12-19</p> <p>12-20</p>	<p>1300</p> <p>1400</p> <p>1500</p>	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves <ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves <ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
<p>12-21 <u>REN VENTS. Very light</u></p> <p><u>position indicator will be</u></p> <p><u>180</u></p> <p>12-22 <u>VENT VBT FLOODED to high level</u></p> <p><u>LOST SLIP</u></p> <p>12-23 <u>covered - will refill stat and</u></p> <p><u>drive water in afternoon</u></p> <p><u>D.K.</u></p>			

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>25 Feb. 4/2000</u>	1600	-Check bilges, penetrators and main battery fuse boxes for water	
16-20		-Cycle MBT and VBT hull valves	
Position: <u>Step #2 Port</u>		-Check hull valves for proper position	
Weather: <u>WIND 10 KTS FROM EAST, OVERCAST</u>		-Check LOX tanks for leaks	
1620 rechecked RFS list		-Vent Main Ballast Tanks	
1633 BOTH INVERTERS ON MOTORS IN TURN MODE		-Check emergency ballast hydraulic pressure	
1635 UNDERWAY IN ACCORDANCE WITH TEST PLAN #17		-Check VBT's for pressure buildup	
1642 CAST OFF TOW LINE FROM PERSON		-Air flask readings (flasks in service)	
1644 ROTATED ALL FOUR MOTORS VERTI		Flask #1 _____; #2 _____;	
1647 ALL HANDS AT HATCHES CLOSED		#3 _____; #4 _____;	
1652 FLASK #2 ON LINE		#5 _____; #6 _____	
1655 RIG FOR DIVE COMPLETE TIME 1655		-Check equipment not in use in Off/Standby position	
1705 OPEN VENTS FOR DIVE		-Check F.W. valves shut	
1705 Using max power		-Record battery readings	
1707 Flooding 2 VBT's		-Carbon Dioxide % _____	
1717		-Oxygen % _____	
1721 Surged - with air on deck		-Cabin Temperature _____	
1736 Dive open vents	1700	-Cabin Humidity _____	
CANNOT GET DOWN WITHOUT USING MUCH POWER		-Vent MBT's	
LOADED 1860 # OF SHOT ON DECK	1800	-Check hydraulic pressure	
1743 STARTING TO DESCEND SLOWLY		-Cycle MBT and VBT hull valves	
1744 3' up bubble	1900	-Vent MBT's	
1745 Bottomed		-Check hydraulic pressure	
1753 slightly off bottom - trimming angle. Trimmed to 40° water in fwd. trim		-Cycle MBT and VBT hull valves	
1755 Testing liquid CTFM			
1805 Tested with VGC's, both hydrophones + #2 pingir			
all OK, #1 pingir not installed			
1812 Towed 1000 watt external sonar (mixed use)			
1819 installed checks			
CTFM drawn 3.5 away from			

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initials
<p>Date <u>23 April 71</u></p> <p>20-24</p> <p>Position: <u>Off of Cape Cod</u></p> <p>Weather:</p> <p><i>2015 - Checking for Foreman Gear.</i> <i>2017 - Throttle Valve Lamp</i> <i>Let's see if he</i> <i>handles himself - too much</i> <i>work.</i> <i>2018 - MARRIED</i> <i>2017 - SEVERAL INVERTERS</i></p>	<p>2000</p> <p>2100</p> <p>2200</p> <p>2300</p>	<ul style="list-style-type: none"> -Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air Flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ -Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Cabin Humidity _____ -Conduct contaminant checks <ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves <ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves <ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>2 May 69</u>	0800	-Replace LiOH panels -Conduct thorough boat inspection	
08-12		-Cycle MBT and VBT hull valves. -Check hull valves for proper position	
Position: <u>Port of Palm Beach</u>		-Check LOX tanks for leaks -Vent Main Ballast Tanks	
Weather <u>15-20 Kts from East</u>		-Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup	
1006 Underway in accord. with Mission #45 Test plan.		-Air flask readings (flasks in service)	
1015 ALL MOTORS HOSE UP		Flask #1 _____; #2 _____;	}
1041 OPEN VENTS - DIVE (# 27) IN TURNING BASIN		#3 _____; #4 _____;	
		#5 _____; #6 _____	
		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings	
1045 Apply power to go DOWN - WE WERE GOING BUT VERY SLOWLY		-Carbon Dioxide % _____	} 1041
1047 Bottomed. Checked for leaks		-Oxygen % <u>20.5</u>	
1050 SURFACE -		-Cabin Temperature <u>76°F</u>	
		-Cabin Humidity <u>68%</u>	
1114 OPEN VENTS - DIVE (# 28)		-LOX pressure _____	
		-Fwd _____ Aft _____	
		Record F.W. & LOX tank levels	
	0900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1000	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1100	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

ABOARD - KAZIMIR
DORR
GREGORY
AEBERSOLD
CAMPBELL

ABOARD KAZIMIR
DORR
AEBERSOLD

* A. VOLKER
* J. RYAN
* S. BROWN
* H. WESSELS
* A. SATTERWAHTE
* R. POTHIEV
* D. TILNEY

1116 Bottomed.
1137 Surfacing

Note: 0930 Deployed silica Gel

	Time	Routine	Initial
<p>Date <u>2 May 69</u></p>	1200	<ul style="list-style-type: none"> -Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) 	
<p>12-16</p>		<ul style="list-style-type: none"> Flask #1 _____; #2 _____; #3 _____; #4 _____ #5 _____; #6 _____ 	
<p>Position: <u>TURWING BASIN</u></p>		<ul style="list-style-type: none"> -Test emergency ballast alarm -Check equipment not in use in Off/Standby position -Vent Main Ballast Tanks -Check F.W. valves shut -Record battery readings 	
<p>Weather:</p>		<ul style="list-style-type: none"> -Carbon Dioxide % _____ -Oxygen% _____ -Cabin Temperature _____ -Cabin Humidity _____ 	
<p>1200 Diving</p>		<p>ABOARD FOR #29</p>	
<p>1204 Bottomed</p>		<p>J. STROTHMAN</p>	
<p>1237 Surfacing</p>		<p>J. KERIN</p>	
<p>240 Disentangled passengers</p>		<p>C. FRIEDLANDER</p>	
<p>241 Skipped from #2 to #1 air flask.</p>		<p>E. LAWE</p>	
<p>1258 Checked rigging for surface. Awaiting Grifon.</p>		<p>J. WILFORD</p>	
<p>1305 Secured Radio WRB429</p>		<p>R. DIETZ</p>	
<p>1309 UNDER TOW BY GRIFON</p>		<p>M. STUART</p>	
<p>1331 SEA BUOY 2 LW</p>	1300	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
<p>1400 Port MG Light carried away. Looks like wire broke at the light. To be safe we will return all OK's in penetrator #1 06 G - D.C. external underwater lights.</p>	1400	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
<p>1530 (Approx) Under depth 455 ft. - released tow line -</p>	1500	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
<p>1545 Noticed noise in fathometer - Checked penetrator - grounded. Decided to abort</p>			
<p>1630 Received tow line Under tow to Palm Beach</p>			

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>2 May 69</u>	1600	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service)	
16-20			
Position: <u>3 mi. East of Palm Beach</u>			
Weather: <u>Overcast 20 Kts Wind from East.</u>			
1637 UNDER TOW BY GRIFFON-		Flask #1 _____; #2 _____;	
1717 Entered Channel		#3 _____; #4 _____;	
1738 CASTOFF TOW		#5 _____; #6 _____	
1740 DROPPED SHOT BALLAST		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings	
1823 MOORED		-Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Cabin Humidity _____	
1825 Completed R/S To Surface.	1700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1800	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Change 3
21 March 1969

Date	Time	Routine	Initial
<p>16 May 69</p> <p>16-20</p>	1600	<ul style="list-style-type: none"> -Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) 	
<p>Position: Port of Palm Beach</p>			
<p>Weather: overcast 23 Kts Wind from East.</p>			
<p>1745 Completed RFS checkoff</p>		<p>Flask #1 _____; #2 _____;</p>	
<p>1806 Under way to Turning Basin</p>		<p>#3 _____; #4 _____;</p> <p>#5 _____; #6 _____</p>	
<p>1820 Conducting rudder tests in turning basin</p>		<ul style="list-style-type: none"> -Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings 	
<p>25 Fathometer not working properly</p>		<ul style="list-style-type: none"> -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Cabin Humidity _____ 	
<p>1920 Will abort</p>			
<p>1925 Underway for Slip #2</p>	1700	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
<p>1954 moved.</p>			
<p>WJG</p>	1800	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	1900	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	

OPER 218
DAY 5
Change 3
21 March 1969
SURFACE

	Time	Routine	Initial
Date <u>19 May 69</u>	0800	-Replace LiOH panels	
08-12		-Conduct thorough boat inspection	
Position: <u>Port of Palm Beach</u>		-Cycle MBT and VBT hull valves.	
Weather <u>Cloudy 12-18Kts SE winds</u>		-Check hull valves for proper position	
1035 RFS checkoff completed		-Check LOX tanks for leaks	
<u>Underway in accordance with mission plan 15+16</u>		-Vent Main Ballast Tanks	
10:50 UNDERWAY in accordance with mission plan #15+16		-Check emergency ballast hydraulic pressure	
11:25 UNDER TOW BY PREVIATOR		-Check VBT's for pressure buildup	
11:50 Passed Seabury		-Air flask readings (flasks in service)	
12:05 slight bit of water noticed in SAS		-Check VBT's for pressure buildup	
		-Air flask readings (flasks in service)	
		-Check equipment not in use in Off/Standby position	
		-Check F.W. valves shut	
		-Record battery readings	
		-Carbon Dioxide % _____	
		-Oxygen % _____	
		-Cabin Temperature _____	
		-Cabin Humidity _____	
		-LOX pressure _____	
		-Fwd _____ Aft _____	
		Record F.W. & LOX tank levels	
		-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
		-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

1430

	Time	Routine	Initial
Date <u>19 May 69</u>	1200	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service)	
12-16			
Position: <u>2 mi. S.E. of Buoy 2LW</u>		Flask #1 _____; #2 _____; #3 _____; #4 _____ #5 _____; #6 _____	
Weather: <u>Cloudy 10Kts. wind from SE.</u>		-Test emergency ballast alarm -Check equipment not in use in Off/Standby position -Vent Main Ballast Tanks -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen% _____ -Cabin Temperature _____ -Cabin Humidity _____	
1505 at surf. water			
1509 Completed Rig for dive Taking 0-set of strain gage readings			
1525 Diving			
1535 using power - divers need to take photos before its dark.			
1538 Finally under - used full power at 12 m for Philco Ford - using power to stay down.			
1542 at 17 m for Philco Ford (PF) still light need full power in 2 meters to stay down.			
1558 Flooding Stbd VBT			
<i>ADK</i>			
	1300	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1400	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1500	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

Date	Time	Routine	Initial
19 May 69	1600	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service)	OK
16-20			OK
Position: 5 mi. S.E. of Palm Beach			OK
Weather: Partly Cloudy SKTS Wind from SE			OK
1600 MBT 3 full night hot air 1610 noticed air bubbles from STD VBT while flooding. Secured air & flooded both VBT's		Flask #1 <u>190</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	OK
also lots of motor noise on fathometer		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings	OK
1620 advanced manual buoyancy 30 up little - probably due to drag line. (gun to top)		-Carbon Dioxide % <u>0.5</u> -Oxygen % <u>21.5</u>	OK
1624 at 37 meters We are conducting full inspection of boat - surge boxes, bilges, penetrators & flange. Deck plates had to be trimmed	1700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	OK
1630 Sensor 1, 2, 5 & 10 "in"	1800	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	OK
1635 at 42 meters for Philco Ford.			
1646 at 47 meters for Philco Ford.			
1650 note from beginning of dive - Ford hatch leaked slightly - had to replace low pressure seal. OK	1900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	OK
1700 now completed Philco Ford Experiment (Spent 1 hr + 20 min. on this non-interference job)			
1704 at 75 meters for calibration of Egan gear			
1712 Putting out L10H			
1724 TAKE WATER SAMPLE FOR Egan EXP.			
1737 Proceeding to 122 m. for Egan exp.			
1740 at 122 meters over			

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>19 May 69</u>	2000	-Check bilges, penetrators and main battery fuse boxes for water	DK
20-24		-Cycle MBT and VBT hull valves	DK
		-Check hull valves for proper position	DK
Position: <u>7101 of water about 5 mi East of Palm Beach</u>		-Check LOX tanks for leaks	DK
Weather: <u>Bunch</u>		-Vent Main Ballast Tanks	DK
		-Check emergency ballast hydraulic pressure	DK
		-Check VBT's for pressure buildup	DK
2000 Flask #1 down to 175.		-Air Flask readings (flasks in service)	DK
2007 Interference on TV - but it works		Flask #1 <u>175</u> ; #2 _____;	
		#3 _____; #4 _____;	
2008 Battery voltages		#5 _____; #6 _____	
D-29 B ₁ -112		-Check equipment not in use in Off/Standby position	DK
A ₁ -170 B ₂ -112		-Check F.W. valves shut	
A ₂ -170 C-12		-Record battery readings	
AH readings: A ₁ 182.18		-Carbon Dioxide % <u>0.5 upper</u>	
A ₂ 234.62		-Oxygen % <u>21.5</u>	
B ₁ 158.15		-Cabin Temperature <u>74</u>	
C 157.57		-Cabin Humidity <u>53%</u>	
B ₂ 162.18		-Conduct contaminant checks	
D 573.48		<u>1.03 Cabin prep</u>	
2014 Checked both UAC's with Privateer	2100	-Vent MBT's	
2032 took string voltage - see separate sheet		-Check hydraulic pressure	DK
Did not check Foreman exp. - no one knows how to operate it.		-Cycle MBT and VBT hull valves	
2050 Checked 8 motors with Simpson - megger not working well	2200	-Vent MBT's	
# 3 p.m. - OK MM #3 - OK		-Check hydraulic pressure	
# 4 p.m. - OK MM #4 - OK		-Cycle MBT and VBT hull valves	
# 1 p.m. - OK MM #1 - OK	2300	-Vent MBT's	
# 2 p.m. - OK MM #2 - OK		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
2134 Fuses arced on unused lights - Sted Lo fr 16 500W			
Port Lo fr 1 1000W			
Port Lo fr 12 500W			

Change 3
21 March 1969

Checked lights for grounds - ~~Port Lo fr~~
all these 3 are grounded over

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>20 May 1969</u>	0000	-Check bilges, penetrators and main battery fuse boxes for water	DK
00-04		-Cycle MBT and VBT hull valves	DK
Position: <u>5 mi. E of Palm Beach</u>		-Check hull valves for proper position	DK
Weather:		-Check LOX tanks for leaks <u>no check</u>	DK
0000 0000 Preparing to drift at 251 USIS guide rope. Blew STD VBT dry. This tank may have an air leak.		-Vent Main Ballast Tanks <u>no</u>	DK
0001 0001 Blowing. port VBT slightly Very little current - very dirty water - visibility poor		-Check emergency ballast hydraulic pressure	DK
0015 0015 Difficult to get exact readings buoyancy - guide rope may have broken off.		-Check VBT's for pressure buildup	DK
20 Losing a little hydraulic pressure - reads 137 - pumped it up to 140.		-Record air flask readings: Flask #1 <u>155</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	DK
0032 we will let ourselves ascend to see if the rope stops us. Ext. temp 14°C - makes us light.		-Check equipment not in use in Off/Standby position	DK
0045 Fatho trace beginning to flatter out at 130' off bottom	0100	-Check F.W. valves shut	DK
0048 Lots of weird marine ^{life} here		-Record battery readings	DK
0111 still drifting - very slowly descending. Day light now 118 feet.	0200	-Carbon Dioxide % <u>07</u>	
0120 Iodine coffee is UNSAT.		-Cabin Temperature <u>62</u>	
0130 Flooding from SAS - 1 sinkful we steadied at 100 ft. above bottom - quite stable.	0300	-Cabin Pressure <u>1.01</u>	
0143 Descending 30 ft. off bottom & still descending over		-Cabin Humidity <u>63</u> <u>or 22%</u>	
	0100	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0200	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0300	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

Change 3
21 March 1969

	Time	Routine	Initial
Date <u>MAY 28, 1969</u>	0800	<ul style="list-style-type: none"> -Replace LiOH panels -Conduct thorough boat inspection -Cycle MBT and VBT hull valves. -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ -Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Cabin Humidity _____ -LOX pressure _____ -Fwd _____ Aft _____ Record F.W. & LOX tank levels 	
08-12			
Position:			
Weather			
11:05 UNDERWAY			
11:15			
11:28 in Turning Basin - Waiting for Privateer			
11:41 UNDER TOW			
11:44 PUMPED ALL PITCH TRIM WATER AFT 50 PROPULSION SECURED.			
11:58 TOPAZ CG INSTRUMENT TURNED ON TO CHECK S/W VENTS: ONLY #1 LIGHT TURNS ON - GOOD -			
11:59 TOPAZ SECURED.			
	0900	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	1000	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	1100	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>20 May 1969</u>	0400	-Check bilges, penetrators and main battery fuse boxes for water	
04-08		-Cycle MBT and VBT hull valves	
Position: <u>5 mi East of Palm Beach</u>		-Check hull valves for proper position	
Weather:		-Check LOX tanks for leaks	
0400 at 100 m. Doing VBT Air Cons. Test		-Vent Main Ballast Tanks	
0400 Will NOT Do PORTABLE PANEL (TEST, then 4.40) HAVE ONLY (1) INVERTER		-Check emergency ballast hydraulic pressure	
0409 Decend TO 182 m Flood VBT's		-Check VBT's for pressure buildup	
0435 Flooding stud VBT seems to have very little effect on depth.		-Record air flask readings (flasks in service)	
0442 preparing for speed run. We are at 140 meters - slowly as a rock.		Flask #1 _____; #2 _____;	
0515 no voltage reading from probe.		#3 _____; #4 _____;	
0545 Blew down SRS but when opened vent - water kept coming in - under hatch probably slightly off its seat. at 160 meters waiting to surface - a squall in		#5 _____; #6 _____	
		-Check equipment not in use in Off/Standby position	
		-Record battery readings	
		-Check F.W. valves shut	
		-Carbon Dioxide % <u>less than 12.7</u>	
		-Oxygen % <u>22%</u>	
		-Cabin Temperature <u>58°F</u>	
		-Cabin Pressure <u>1 atm</u>	
		-Cabin Humidity <u>70%</u>	
		EXT Temp <u>18°C</u>	
	0500	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0600	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0700	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

The area.

0625 C1 string volts 0.1 V
 (took string voltage commencing
 0615 - also AH ready
 probably B1-1 miswired into panel.

Change 3
 21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>28 May 69</u>	1200	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____ #5 _____; #6 _____	
12-16			
Position:			
Weather:			
1201) PASSING SEA BUOY 2LW			
1208 CONDUCTING RADIO CHECK WITH PRIVATEER - NO REPLY			
1215 aft hatch leaking slightly Tightened up - seems OK		-Test emergency ballast alarm -Check equipment not in use in Off/Standby position -Vent Main Ballast Tanks -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen% _____ -Cabin Temperature _____ -Cabin Humidity _____	
1230 slight bit of S.W. in Fwd. trim bly			
1235 80° F. 69% HUMIDITY			
1240 Swell of noise in anti sinking point in sail very bad.			
1320 Completed 15th Dive	1300	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
1330 too much EM1 in UOC (from AH inverter)	1400	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
1340 noticed interference in fathos. when std. inv. on.	1500	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
1350 open vents - Dive - Dive #31 Radio comm. with PRIVATEER VERY POOR. NO PROB. WITH GRIFON RADIO			
1400 - using power Trim - about 300 lbs heavy at 10 volts.			
1425 - Proceeding deeper - photogray finished Regaining SE transit at 1/2 speed (using rudder) over			

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>28 May 69</u>	1600	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service)	DK DK DK DK
16-20			
Position: <u>5 mi. west of Palm Beach</u>			DK DK
Weather: <u>15-20 Kts from North</u> <u>Partly cloudy</u>			DK
1600 Transiting SE		Flask #1 <u>185</u> ; #2 _____;	
1605 Set screw for Digital Voltmeter stuck beyond		#3 _____; #4 _____;	
1615 Deployed LIHT		#5 _____; #6 _____	
1640 F/W LEAKING INTO AFT BILGE		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % <u>0.5</u> -Oxygen % <u>21</u>	DK DK
Sea Water Sensors 1, 2, 5, 9, 10 OK		-Cabin Temperature <u>80° F</u> -Cabin Humidity <u>64%</u>	
1700 Water depth about 800 ft. Will do Egan Exp. while descending 75 meters, too much light - well so deeper	1700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
1717 WATER UNDER MAIN FB#4			
1720 DEPTH ¹²² 122 Meters Boat very stable	1800	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	DK DK
1730 WATER UNDER FB#4 DETERMINED TO BE SOAPY FRESH WATER	1900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
RANGE TO GO TO 2000 FT IS 15.5 NM			
1735 PROCEEDING TO 151 M.			
1737 AT 151 Meters.			
1800 70ft. altitude descending very slowly - guide rope must be touching humidity 56% Temp. 76 Secured Dehumidifier over			Change 3 21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>28 May</u>	2000	-Check bilges, penetrators and main battery fuse boxes for water	DK
20-24		-Cycle MBT and VBT hull valves	DK
		-Check hull valves for proper position	DK
Position: <u>Approx. 8 mi. east of Palm Beach</u>		-Check LOX tanks for leaks	DK
Weather: <u>18 Kts. wind S=7ft seas</u>		-Vent Main Ballast Tanks	DK
<u>Transiting S.E. - full speed</u>		-Check emergency ballast hydraulic pressure	VIC
<u>Standard speed on 2 motors at 100 meters depth</u>		-Check VBT's for pressure buildup	DK
2030 <u>Deck is filthy dirty * * !!</u>		-Air Flask readings (flasks in service)	
2050 <u>ALL BILGES (EXCEPT UNDER BOXES) WIPED DRY</u>		Flask #1 <u>180</u> ; #2 _____;	
<u>R.H. = 71% Deploy MORE SILICA</u>		#3 _____; #4 _____;	
2132 <u>Princeton asked us to stop - they lost a piece of gear.</u>		#5 _____; #6 _____	
<u>2148 Continuing transit @ 125 METERS</u>		-Check equipment not in use in Off/Standby position	DK
<u>Temp 75°F, Hum 67%</u>		-Check F.W. valves shut	DK
<u>DEPTH OF BOTTOM 1136 FT.</u>		-Record battery readings	
2005 <u>H.W. Junk #1 cooled off</u>		-Carbon Dioxide % <u>0</u>	
		-Oxygen % <u>21.5</u>	
		-Cabin Temperature <u>70.5°F</u>	
		-Cabin Humidity <u>70%</u>	
		-Conduct contaminant checks	
		<u>Ext. temp. 21°C</u>	
2038 <u>Position in 10th cell (370 ft)</u>	2100	-Vent MBT's	DK
<u>DEPTH of water 1240</u>		-Check hydraulic pressure	DK
		-Cycle MBT and VBT hull valves	DK
2032 <u>we'll feed (via jumper) power normally used to rotate #2 P.M. to #2 P.M. (position motor).</u>	2200	<u>CABIN PR. - 1.03</u>	
<u>No Lock - trouble must be external to boat. Re-wrapped #1 P.M. - ok</u>		-Vent MBT's	
		-Check hydraulic pressure	
2045 <u>Shifting # motor 1 - have 800 AH out of A2 we will use 50 and 25 volts for low limits.</u>	2300	-Cycle MBT and VBT hull valves	DK
		-Vent MBT's	DK
		-Check hydraulic pressure	DK
		-Cycle MBT and VBT hull valves	DK
2110 <u>1316 FT</u>			
2322 <u>Fathometer occasionally shows deeper depth - it jumps -</u>			
2337 <u>This accompanied by a high pitched alarm.</u>			

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>29 May 69</u>	0000	-Check bilges, penetrators and main battery fuse boxes for water	DK
00-04		-Cycle MBT and VBT hull valves	DK
Position: <u>Approx 18. mi. East of Palau Beach</u>		-Check hull valves for proper position	DK
Weather: <u>—</u>		-Check LOX tanks for leaks	DK
0000 Transiting SE. at 100 meters, Standard speed 2 metres		-Vent Main Ballast Tanks	DK
BOTTOM DEPTH 1430 FT.		-Check emergency ballast hydraulic pressure 137.5 kg/cm ²	DK
0025 19 LT. ON, INDICATES INVERTER LOW VOLTAGE. CUT SPEED TO APPROX 1/2 TO REMAIN AT 300V. This produces 50 mch EMI, Fathometer is useless		-Check VBT's for pressure buildup	b/c
0035 Water depth 1500 ft. - we are at 100 meters		-Record air flask readings: Flask #1 _____; #2 <u>185</u> ; #3 _____; #4 _____; #5 _____; #6 _____	
0045 Refak #2 motor vertical stop propulsion Bz string at 800 A-Hz		-Check equipment not in use in Off/Standby position	DK
0100 PREPARING TO OPEN SAS -	0100	-Check F.W. valves shut	DK
0115 Fathometer getting worse - keep shifting speed		-Record battery readings	
0120 HOLDING AT 120 M. VERY STABLE. AWAITING WORD FROM PRIVATEER SURFACE WATER DEPTH 1440 FT (240 FATHOMS) FRANKLIN " " 1686 FT. We will postpone SAS & continue out.	0100	-Carbon Dioxide % <u>0.8</u> <small>est. temp. 28°C</small>	
0145 UNDER WAY AGAIN AFTER BETHE ADVISED OF BATTERY CAPACITY	0200	-Cabin Temperature <u>79°F</u>	
0148 108m + 252 Fath = 1717 ft		-Cabin Pressure <u>1.03</u>	
0150 O ₂ READING = 22% LOWER FLOW TO 1.15 L/MIN	0300	-Cabin Humidity <u>66%</u> - Oxygen % <u>21.8</u>	
0224 108m + 252 Fath = 1842 FT. Temp 78°F, RH 69%	0100	-Vent MBT's	
0235 BOTH hemispheres dry - 66% humidity 79°F		-Check hydraulic pressure	
108m + 256 FATH 1886 FT.		-Cycle MBT and VBT hull valves	DK
0255 MFB 1 floor panel fits badly	0200	-Check hydraulic pressure	DK
		-Cycle MBT and VBT hull valves	DK

Change 3
21 March 1969

SHIPS LOG 4-4

DATE 11 JUNE 1969 Time ROUTINE INITIAL

0000 NORMAL ROUTINE 000 - Check Bilges ⊗
 Check of BEN FRANKLIN INSPECT BOAT
 COMPLETE - EVERYTHING NORMAL - CYCLE HULL VALVES ⊗
 PICCARD & DORR HAVE WATCH
 AIR FLASK READINGS - Check HULL VALVES
 #1-183 #2-165 #3-174 FOR POSITION
 #4-179 #5-180 #6-182 ETC -

CABIN PRESS - 1.01 ATM CABIN TEMP - 64°F CABIN HUMID - 60.2%
 CO₂% - 1%

UQC CHECK - OK

0030 Reading on CURRENT METER indicates approx ave. CURRENT
 of 125 Meter Direction Reads 025°
~~of 125 KTS~~

UQC CHECK OK

0100 Normal watch ROUTINE - ALL NORMAL

UQC CHECK - OK

0130 UQC CHECK - OK

0145 WATCH RELIEVED - AEBERSOLD & KUHN
 EVERYTHING NORMAL - H. DORR

02'04 UQC CHECK - OK

CURRENT METER 100 KTS 215° (70)

02'30 BOAT CHECK - ALL NORMAL

03'00 BOAT CHECK - ALL NORMAL TEMP. 60°F
 HUM. 65%
 WATER 7°C

0305 CURRENT METER 0.1 KT 250°
 UQC CHECK - OK TRANSDUCER CHECK; UPPER UNIT GIVES BETTER RESULTS

0330 UQC CHECK - OK
 BOAT CHECK - ALL NORMAL

0355 CURRENT METER 0.1 KT 300°

04'00 BOAT CHECK - ALL NORMAL - NOTE: DEAD ROPE HAS NOT BEEN SEEN
 SINCE BOAT CAME TO BOTTOM.

04'30 BOAT CHECK - ALL NORMAL, WATCH RELIEVED - E. Shover
 DON KAZMIR AND REY GREGORY

74-08 CONT. SHEET (3)

0705 MAZ, DORE, GREGORY OUT.
SURFACE ROLLING QUITE SEVERE

0728 UNDER TOW - AFT hatch leaking while in surface

0730 VIB vent hose in scud came loose. Also

7P1 sound power phone in op

CHECK BOTH ~~ARE~~ AEG VOLTMETERS - CALIBRATE

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>11 June 69</u>	0400	-Check bilges, penetrators and main battery fuse boxes for water	
04-08		-Cycle MBT and VBT hull valves	
Position: <u>Approx. 7 mi. east of Palm Beach</u>		-Check hull valves for proper position	
Weather: <u>Calm seas</u>		-Check LOX tanks for leaks	
<u>3-5 Kts wind from East</u>		-Vent Main Ballast Tanks	
0504 Comm. Check		-Check emergency ballast hydraulic pressure	
0530 Comm. Check		-Check VBT's for pressure buildup	
0540 Changed capacitor (f. i. t. a.) for AH system and eliminated EMI from inverter to Gostrude.		-Record air flask readings (flasks in service)	
0550 Since we bottomed, current has been negligible		Flask #1 _____; #2 _____;	<i>see handwritten Log sheet</i>
0610 Und. phone transmission at night walk up The crew should be kept to a minimum.		#3 _____; #4 _____;	
0615 Cannot find AEG book - someone must have removed it prior to getting underway.		#5 _____; #6 _____	
0650 Ext. temp 5°C Cabin pr. 1.02 Kslcm ² O ₂ % - 19.8 % Temp. - 56°F humidity - 70 %		-Check equipment not in use in Off/Standby position	
0655 Turned on dehumidifier (only 600 lbs of silica gel deployed.)		-Record battery readings	
Sure is cold - we'll need plenty of warm clothing for Drift mission		-Check F.W. valves shut	
0735	0500	-Carbon Dioxide % _____	
hugged main & posit. motors		-Oxygen % _____	
#1 p.m. - 1000 megs		-Cabin Temperature _____	
#2 p.m. - 1000 megs		-Cabin Pressure _____	
#1 mm - 50 megs		-Cabin Humidity _____	
#2 mm - 50 megs	0500	-Vent MBT's	
#3 mm - 50 megs		-Check hydraulic pressure	
#4 mm - grounded		-Cycle MBT and VBT hull valves	
	0600	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0700	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

Change 3
21 March 1969

W J Kay

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>JUNE 10, 1969</u>			
16-20	1600	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
Position:			
Weather:			
1753 All crew Below Conducting RFD check * water in aft bay (B-1 area) tastes fresh - crab-			
> 1800 COMMENCE DIVING - GOING VERY SLOW STERN HEAVY. WATER DEPTH DECREASING (WAS 350' at arrival) NOW AT 230 FT. PUMPED WATER FWD 85% to GET SUICHT TRIM ANGLE POWER IN MODE #1 - BIG SWITCH VERT. THROTTLE SELECTOR IN CRUISE MODE			
1815- SAIL UNDER IN 15 MIN - No Power - GO TO 30 METERS 1816 DROP STB SHOT 5 SEC 1817 DROP STB SHOT 5 SEC TEMP 32°F; 66% RH 1820 DROP PORT SHOT 5 SEC 1821 DROP PORT SHOT 5 SEC 1822 ROTATE MOTORS #3 & 4 HORIZ. COMMENCE CRUISE @ 135 DEGREES 1823 DROP STB SHOT 5 SEC 1825 DROP PORT SHOT 5 SEC * NO. 3 MOTOR WILL NOT RUN * NO. 4 MOTOR RUNS NO MATTER WHAT POSITION OF TGGLE DROP STB SHOT 5 SEC DROP PORT SHOT 5 SEC. STILL TOO HEAVY DROP STB SHOT 5 SEC DROP PORT 5		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Cabin Humidity _____	
	1700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1800	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
SHIFTED TO TURN MODE AND THEN TO CRUISE MODE MOTORS #3 & 4 WORK OK NOW. DROP PORT 5 SEC DROP STB 5 SEC			

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>29 May 69</u>	0400	-Check bilges, penetrators and main battery fuse boxes for water	Continues
04-08		-Cycle MBT and VBT hull valves	OK
Position: <u>2.3 mi East of Palm Beach</u>		-Check hull valves for proper position	OK
Weather: <u>8-15 Kts from East Seas 4-6 ft.</u>		-Check LOX tanks for leaks	OK
0400 Descending to 800'		-Vent Main Ballast Tanks	OK
0408 Both VBT's Full @ 150 meters POWERING DOWN		-Check emergency ballast hydraulic pressure	OK
0425 COMPLETE READINGS AT 800 FT (250M) GOING DOWN		-Check VBT's for pressure buildup	OK
ADD 1 SINK FULL (20#) THROUGH SIS		-Record air flask readings (flasks in service)	
0422 at 355 m going to 364-378 meters		-Record air flask readings (flasks in service)	
0435 ADD 1 SINK FULL		Flask #1 _____; #2 <u>180</u> ;	
0426 ADD 1 SINK FULL - at 378 m.		#3 _____; #4 _____;	
0439 ADD 1 SINK FULL		#5 _____; #6 _____	
0440 COMPLETE READINGS AT 1200 FT GOING TO 1600 FEET (500 METERS)		-Check equipment not in use in Off/Standby position	OK
0441 ADD 1 SINK FULL		-Record battery readings	OK
0446 ADD 1 SINK FULL		-Check F.W. valves shut	OK
0452 ADD 1 SINK FULL		-Carbon Dioxide % <u>0.5</u>	OK
0456 ADD 1 SINK FULL		-Oxygen % <u>22</u>	OK
0459 ADD 1 SINK FULL		-Cabin Temperature <u>79</u>	OK
0500 FINISH READINGS AT 1600 FT 1600 FT	0500	-Cabin Pressure <u>1.05</u>	OK
STD HI FR. 16 250W LIGHT NOT WORKING LIGHTS CHECKED		-Cabin Humidity <u>64%</u>	OK
SONAR ON, TV ON		-Vent MBT's	OK
0508 ADD 1 SINK FULL		-Check hydraulic pressure <u>137.</u>	OK
Adding water via SAS has little effect at deep depths (500 meters)		-Cycle MBT and VBT hull valves	OK
0510 TV Camera Grounded out BOTTOM AT 1828 FT. ROTATE AFT MOTORS INDIVIDUALLY - NOT ENOUGH VOLTAGE TO ROTATE THEM TO BOTTOM	0600	-Vent MBT's	OK
	0700	-Check hydraulic pressure	OK
		-Cycle MBT and VBT hull valves	OK

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>MAY 29 / 69</u>	0800	<ul style="list-style-type: none"> -Replace LiOH panels -Conduct thorough boat inspection -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ -Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Cabin Humidity _____ -LOX pressure _____ -Fwd _____ Aft _____ Record F.W. & LOX tank levels 	
08-12			
Position:			
Weather			
	0900	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	1000	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	1100	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	

*Under way by Privateer
Dorr Topside, Rest of
crew is sacked out
AK*

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>MAY 29, 1969</u>	1200	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____ #5 _____; #6 <u>98</u>	ak
12-16			
Position:			
Weather:			
<u>ENTER TOW ETA 1800.</u>			
1330 <u>ABBERSOLD TOPSIDE, DOCK COMES BELOW</u>			
1440 <u>Checked bilges for water. Use must fix deck plates to fit better.</u>		-Test emergency ballast alarm -Check equipment not in use in Off/Standby position -Vent Main Ballast Tanks -Check F.W. valves shut -Record battery readings -Carbon Dioxide % <u>0.5</u> -Oxygen% <u>23.5</u> -Cabin Temperature <u>81</u> -Cabin Humidity <u>75</u>	ak ak ak ak
1530 <u>GERTRUDE LOUD SPEAKER FALLS DOWN - HITS RUHN</u>			
	1300	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1400	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1500	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>MAY 29, 1969</u>	1600	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 <u>98</u>	
16-20			
Position: <u>Off Juno Beach 1 1/2 miles off shore</u>			
Weather:			
<u>1800 Entered Palm Beach Inlet</u>			
<u>1820 DIVER REPORTS DRAG CHAIN IS GONE</u>		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % <u>23.5</u> -Cabin Temperature <u>82</u> -Cabin Humidity <u>71</u>	
<u>1830 MAKING PREPARATIONS TO TOW BF WITH RUBBER BOAT PERSON TO DRAG</u>			
<u>19⁰⁵ SECURED</u>	1700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
<u>U. H. G.</u>	1800	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>10 June 69</u>	2000	-Check bilges, penetrators and main battery fuse boxes for water	K
20-24		-Cycle MBT and VBT hull valves	K
Position: <u>about 5 mi. east of Palm Beach</u>		-Check hull valves for proper position	K
Weather: <u>5-12 Kts wind</u>		-Check LOX tanks for leaks	K
2000 transiting S.E. at 100 meters		-Vent Main Ballast Tanks	K
2001 Change depth to 120 m. WATER DEPTH 550 FT		-Check emergency ballast hydraulic pressure	K
2014 Ext. water temp down to 11°C Boat was dark 300 lbs heavy when water temp. > 20°C now she is light.		-Check VBT's for pressure buildup	K
2017 taking water in STD VBT		-Air Flask readings (flasks in service)	
2024 water condensing on hemispheres humidity down to 55% DRAG ROPE IS VISIBLE 130H. + 304 ft = 604 ft water		Flask #1 _____; #2 <u>180</u> ;	
2025 PREPARE TO DESCEND. FINISH TRANSIT. PROCEEDING DOWN SWITCH ON LANDING LTS. SWITCH ON TFM		#3 _____; #4 _____;	
2029 on bottom - 185 meters. 606 ft. corrected.		#5 _____; #6 _____	
2040 Secured propulsion		-Check equipment not in use in Off/Standby position	K
2045 Disconnected battery charging penetrators - a precaution in case of a leak in charging penetrators		-Check F.W. valves shut	K
48 PREPARING TO RELEASE SAS WITH MESSAGE TO ZARKOVSKY + BIRTHDAY GREETINGS TO MADAME PICCARD. CURRENT APPEARS TO BE FROM NORTH BUT WATER SAYS FROM SOUTH @ 1.0 KT. BF FACING W. 270°		-Record battery readings	K
2/11 SAS BALL AWAY - END FLASHING		-Carbon Dioxide % <u>0.5</u>	
2/13 SAS ^{ALL} SEEN ON SURFACE DT 2 min 15 sec @ STD BEAM @ PERIPHERY 30 YARD		-Oxygen % <u>21.5</u>	
2/17 SAS EXERCISE COMPLETED.		-Cabin Temperature <u>85°F</u>	
		-Cabin Humidity <u>67</u>	
		-Conduct contaminant checks <u>NO</u>	
		Cabin pr. 1.04	
	2100	-Vent MBT's	K
		-Check hydraulic pressure	K
		-Cycle MBT and VBT hull valves	K
	2200	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	2300	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

Change 3
21 March 1969

Franklin Underway Log Sheet

4-4

	Time	Routine	Initial
Date: <u>June 10, 1969</u>	0000 1200	-Check bilges, penetrators and main battery fuse boxes for water	
0000 1200 - 1600		-Cycle MBT and VBT hull valves -Check hull valves for proper position	
Position:		-Check LOX tanks for leaks -Vent Main Ballast Tanks	
Weather:		-Check emergency ballast hydraulic pressure	
15 ³⁰ A ₁ :.65 A ₂ :.61 B ₁ :0.2 B ₂ :.93 C:.02 D:.30 1530 UNDERWAY T=80°F, RH=56%		-Check VBT's for pressure buildup	
1535 TRIMED. ALL WATER AFT FOR TOWING		-Record air flask readings: Flask #1 _____; #2 _____;	
1554 UNDER TOW		#3 _____; #4 _____; #5 _____; #6 _____	
1607 ENERGISE TOPAZ C5 CHECK RUDDER POSITION POSITION: MIDSHIP SECURED C5		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings	
1620 SECURED PROPULSION		-Carbon Dioxide % _____	
1637 PASSING SEA BUOY 2LW		-Cabin Temperature _____	
1728 ENERGISE PROPULSION TURN MODE - ALL 4 MOT. ON		-Cabin Pressure _____	
1731 DISCONNECTED TOW		-Cabin Humidity _____	
1750 TRIM WATER 50%-50%	1300 0130	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
<i>[Signature]</i>	1400 0200	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1500 0300	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>11 June 69</u>	0800	-Replace LiOH panels	NO
08-12		-Conduct thorough boat inspection	
Position: <u>Approx. 7 mi East of Palm Beach</u>		-Cycle MBT and VBT hull valves	K
Weather <u>Calm, 2 kts wind clear</u>		-Check hull valves for proper position	K
0830 TAKE BATTERY GRD READINGS		-Check LOX tanks for leaks	K
0915 Piccard: shot a photo from viewport in fwd. hem. std side aft using:		-Vent Main Ballast Tanks	K
Std LO fr 1 100w watt halogen		-Check emergency ballast hydraulic pressure	K
ASA - 320 Super Ektachrome f stop - } #6 on lens		-Check VBT's for pressure buildup	K
Shutter speed - } 2.8 at 1/8 sec		-Air flask readings (flasks in service)	K
On the bottom in relatively clear water with both std 100w watt halogens # 8.5 on lens.		Flask #1 _____; #2 <u>163</u> ;	
with ASA 125U Blomhelt		#3 _____; #4 _____;	
1 100w watt - #8 on lens.		#5 _____; #6 _____	
2 100w watt #9.5 (f2.8 at 1/60)		-Check equipment not in use in Off/Standby position	External temp. 8.0°C
COMPL. GRD READINGS CALCUC. GROUND LEADINGS SHOW		-Check F.W. valves shut	
ZERO (DISTANCE) ON <u>B1-2</u> and <u>C-1</u> .		-Record battery readings	
0945		-Carbon Dioxide % <u>0.5</u>	
0950 #1 MOTOR POS. UNSAT. JAMS		-Oxygen % <u>19.0</u>	
MOST OF THE TIME 30 JOGGLES WITH NO RESPONSE, OUT OF COMMISSION 90% APPLYING LOAD TO MOT. 1 + 2.		-Cabin Temperature <u>56°F</u>	
B1-2 28.9V no load	0900	-Cabin Humidity <u>67%</u>	
26.0V full speed motor 1 + 2		-LOX pressure <u>200</u>	
C-1 28.4V no load		-Fwd _____ Aft _____	
25.9V full speed motor 1 + 2 (150amps)		Record F.W. & LOX tank levels	Cabin pressure <u>112</u>
0955. TURNING DEMUMPIER ON	1000	-Vent MBT's	
<u>1010</u> <u>PAN FLIT</u> <u>O.O.C.</u>		-Check hydraulic pressure	
	1100	-Cycle MBT and VBT hull valves	
		-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>11 June 69</u>	1200	-Check bilges, penetrators and main battery fuse boxes for water	K
12-16		-Cycle MBT and VBT hull valves	K
Position: <u>Approx. 7 mi. East of Palm Beach</u>		-Check hull valves for proper position	K
Weather: <u>Calm</u>		-Check LOX tanks for leaks	K
1330 Commenced communication tests with Privates		-Check emergency ballast hydraulic pressure	K
1345 successfully tested hot plate. - how about that!		-Check VBT's for pressure buildup	K
1510 Checked both pingers with Privates. #2 pinger o-o-c.		-Air flask readings (flasks in service)	
		Flask #1 _____; #2 <u>162</u> ; #3 _____; #4 _____; #5 _____; #6 _____	K
		-Test emergency ballast alarm	NO
		-Check equipment not in use in Off/Standby position	K
		-Vent Main Ballast Tanks	K
		-Check F.W. valves shut	K
		-Record battery readings	NO
		-Carbon Dioxide % _____	
		-Oxygen% <u>20.5</u>	
		-Cabin Temperature <u>56°F</u>	
		-Cabin Humidity <u>65%</u>	
		-Cabin pressure <u>1.02</u>	
PICCARD + HUNN PLAYING CHESS	1300	-Vent MBT's	K
ABBERSOLD + HUNN PLAYING CHESS		-Check hydraulic pressure	K
		-Cycle MBT and VBT hull valves	K
	1400	-Vent MBT's	K
		-Check hydraulic pressure	K
		-Cycle MBT and VBT hull valves	K
	1500	-Vent MBT's	K
		-Check hydraulic pressure	K
		-Cycle MBT and VBT hull valves	K

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>11 June 69</u>	1600 0000	-Check bilges, penetrators and main battery fuse boxes for water	K
16-20 16-20		-Cycle MBT and VBT hull valves	K
Position: <u>Approx 7 mi East of Palm Beach</u>		-Check hull valves for proper position	K
Weather: <u>Calm</u>		-Check LOX tanks for leaks	K
1630 Prepare to depart bottom		-Vent Main Ballast Tanks	K
Blow some water from STB VBT		-Check emergency ballast hydraulic pressure	K
Blew Dry STB - skill on Bottom		-Check VBT's for pressure buildup	K
Flask #2 reads <u>150 kg/cm²</u>		-Record air flask readings:	K
Drop shot STB <u>5 sec</u> positive Cloud		Flask #1 <u> </u> ; #2 <u>62</u> ;	K
Drop shot STB <u>5 sec</u> positive		#3 <u> </u> ; #4 <u> </u> ;	K
Drop shot Port <u>5 sec</u> positive		#5 <u> </u> ; #6 <u> </u>	K
Drop shot Port <u>5 sec</u> positive		-Check equipment not in use in Off/Standby position	K
Drop shot Port <u>5 sec</u> positive		-Check F.W. valves shut	K
Drop shot Port <u>5 sec</u>		-Record battery readings	NO
Drop shot Port <u>5 sec</u>		-Carbon Dioxide % <u>0.5</u>	K
Drop shot Port <u>5 sec</u>		-Cabin Temperature <u>56</u>	K
Drop shot Port <u>5 sec</u>		-Cabin Pressure <u>1.02</u>	K
Drop shot Port <u>5 sec</u>		-Cabin Humidity <u>64</u>	K
1655 Hovering 10 ft off Bottom	1700 0100	O ₂ 70 - 20.5%	K
guide rope nearly		-Vent MBT's	K
Drifting very slowly 13 ft off Bottom		-Check hydraulic pressure	K
Ascending very slowly		-Cycle MBT and VBT hull valves	K
* Compass out of Commission	1800 0200	-Vent MBT's	K
At a standstill		-Check hydraulic pressure	K
Drop shot STB 5 sec		-Cycle MBT and VBT hull valves	K
lot of EPRI from Port T5 Light	1900 0300	-Vent MBT's	K
1730 @ 180 meters 60 ft off Bottom		-Check hydraulic pressure	K
Proceed to surface		-Cycle MBT and VBT hull valves	K
Shift to #6 air flask 183 kg/cm ²			
1755 30 meters - cleared to surface			
801 SURFACE - BLOW MBT TO 100 kg/cm ²			
1822 UNDER TOW HEADING 230°			
1826 SECURED PROPULSION + TOPAZ			
SW SENSORS LIT: 1, 2, 5, 9, 10, 14			

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>11 June 69</u></p> <p>0458</p> <p>20-24</p> <p>Position: 12 mi. east of Palm Beach, Trans. Ing. S.E.</p> <p>Weather: Wind from East at 9 Kts.</p>			
2025			
<p>Port running, light a.o.c.</p> <p>Compass seems OK now</p>			
2100			
<p>Conduct 2100 checks</p> <p>Everything Normal.</p>			
00			
<p>Conduct checks</p> <p>Everything Normal -</p> <p>O₂ is 23% CO₂ = 1%</p> <p>RADIO check SAT.</p>			
2230			
<p>Watch Relieved</p> <p>H-DORR</p>			
2300			
<p>Conduct Radio check</p> <p>O₂ is = 23%</p> <p>CO₂ less than 1%</p> <p>Bilges - Dry</p> <p>Roll - ± 3°</p> <p>Pitch - ± 1°</p>			
2400			
<p>Conduct Radio check</p> <p>all normal</p> <p>Bilges dry</p> <p>O₂ = 23%, CO₂ 1%</p> <p>Watch relieved</p> <p>M.J.Y.</p>			
	2000		
	0400	<ul style="list-style-type: none"> -Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Record air flask readings (flasks in service) <p>Flask #1 _____; #2 _____;</p> <p>#3 _____; #4 _____;</p> <p>#5 _____; #6 _____</p>	
		<ul style="list-style-type: none"> -Check equipment not in use in Off/Standby position -Record battery readings -Check F.W. valves shut -Carbon Dioxide % <u> </u> -Oxygen % <u>23</u> -Cabin Temperature <u>75</u> -Cabin Pressure <u> </u> -Cabin Humidity <u>68%</u> 	
	2100		
	0500	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	2200		
	0600	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	2300		
	0700	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12 June 69</u>	0000	-Check bilges, penetrators and main battery fuse boxes for water	
00-04 and 04-08		-Cycle MBT and VBT hull valves	
Position: <u>Approx. 12 mi. east of Palm Beach</u>		-Check hull valves for proper position	
Weather:		-Check LOX tanks for leaks	
0000 WATCH BY AEBERSOLD		-Vent Main Ballast Tanks	
0106 RADIO CHECK OK.		-Check emergency ballast hydraulic pressure	
CO ₂ @ 1%		-Check VBT's for pressure buildup	
TEMP. 80° F		-Record air flask readings:	
HUMIDITY 68%		Flask #1 _____; #2 _____;	
BILGES DRY		#3 _____; #4 _____;	
0130 WATCH RELIEVED BY KUHN		#5 _____; #6 _____	
0200 WATER DEPTH 260 FATH = 1560 FT.		-Check equipment not in use in Off/Standby position	
TEMP 80 °F		-Check F.W. valves shut	
RH = 70%		-Record battery readings	
WATER TEMP = 27.5 °C		-Carbon Dioxide % _____	
RADIO CHECK - OK		-Cabin Temperature _____	
BILGES DRY		-Cabin Pressure _____	
0215 DEHUMIDIFIER ON		-Cabin Humidity _____	
0230 RADIO CHECK - OK <u>AK</u>	0100	-Vent MBT's	
0305 WATCH RELIEVED BY GREGORY		-Check hydraulic pressure	
0330 WATER DEPTH 300 FATH = 1800 FT		-Cycle MBT and VBT hull valves	
TEMP 82	0200	-Vent MBT's	
RH 69%		-Check hydraulic pressure	
WATER TEMP 23.5 °C		-Cycle MBT and VBT hull valves	
RADIO CHECK -	0300	-Vent MBT's	
BILGES DRY		-Check hydraulic pressure	
DEHUMIDIFIER ON		-Cycle MBT and VBT hull valves	
0430 RADIO CHECK - OK RGB		OSU - CO ₂ 0.5%	
0455 Battery string C - voltage way down, C-1 string seems to be reversed - string voltage reads 99 - go to opposite polarity + set 23 (fluctuating). Depused C-1 + shifted to mode 4 - Single inverter operation.		O ₂ 23%	
		Temp. 82	
		Hum. 61%	
		Cabin pr. 105	
		Change 3	
		21 March 1969	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12 June 69</u>	04:00	-Check bilges, penetrators and main battery fuse boxes for water	
04-08		-Cycle MBT and VBT hull valves	
Position: <u>23 mi. east of Palm Beach</u>		-Check hull valves for proper position	
Weather: <u>Calm.</u>		-Check LOX tanks for leaks	
0820 AT 90 meters descending to 625 meters.		-Vent Main Ballast Tanks	
0823 Flooded 1 sinkful in SAS		-Check emergency ballast hydraulic pressure	
0826 Flooded 1 sinkful in SAS		-Check VBT's for pressure buildup	
0830 Flooded 1 sinkful in SAS		-Record air flask readings (flasks in service)	
0837 Flooded 1 sinkful in SAS		Flask #1 _____; #2 _____;	
42. Flooded 1 sinkful in SAS		#3 _____; #4 _____;	
0845 AT 375 meters descending		#5 _____; #6 _____	
0848 Flooded 1 sinkful in SAS		-Check equipment not in use in Off/Standby position	
0851 Flooded 1 sinkful in SAS		-Record battery readings	
Depth 440m = 1400 } 2120 120 fath 720 }		-Check F.W. valves shut	
Depth 485- Forward Salvage leaking - Secured -		-Carbon Dioxide % _____	
0900 Depth 500 METERS - DESCENDING USING POWER		-Oxygen % _____	
0907 Depth 2000 feet and holding Bottom is 30 feet Max Depth 635 meters Rate of Descent not working well on down. During descent, hull valves were cycled continuously. All areas were inspected continuously. Boat too light to sit on bottom.	0500	-Cabin Temperature _____	
		-Cabin Pressure _____	
		-Cabin Humidity _____	
	0600	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0700	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
#1 UQC PHONE JACK INOPERATIVE			

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12 JUNE 1969</u>	0800	-Replace LiOH panels -Conduct thorough boat inspection	
08-12		-Cycle MBT and VBT hull valves -Check hull valves for proper position	
Position:		-Check LOX tanks for leaks -Vent Main Ballast Tanks	
Weather:		-Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup	
0930 DEPTH 390 METERS ASCENDING PRESS. VBT 47 (STB) <u>Blow</u> FLASK #2 151 Kg/cm		-Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
DEPTH 360 Flask #2 127 Kg/cm		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings	
0936 Rested remaining external lights at 300 meters - all OK		-Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature <u>78 °F</u> -Cabin Humidity <u>49 %</u> -LOX pressure _____	
STABILIZED AT 130 METERS BLOW PORT VBT Power up.		-Fwd _____ Aft _____ water 110c at 370 meters Record F.W. & LOX tank levels	
Boat is cold & heavy - she was hot & light during descent.	0900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
0959 Surfaced. Cur radius has an unusual amount of static - also Provolet sounds weak	1000	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
1024 UNDER TOW	1100	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date <u>12 JUNE 1969</u>	1200	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____ #5 _____; #6 _____	
12-16			
Position: <u>Surfaced - under tow enroute Palm Beach. Approx 18 mi. east of P.B. inlet.</u>			
Weather: <u>east of P.B. inlet.</u>			
12:54 SHUT VENT VALVE FRESH WATER TANK # 3 (LEAK)			
12:00 DORR & KAZIMIR RETURN FROM LAUNCH ABOARD PRIVATEER. GREGORY & AEBERSOLD OVER CHECK BOAT ALL NORMAL			
	1300	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1400	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1500	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

	Time	Routine	Initial
Date 12 12 JUNE 1969	1600	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
16-20			
Position:			
Weather:			
UNDER TOW			
KAZIMIR E. DORR			
ABOARD			
BOAT CHECK 20X			
	1700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1800	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

Change 3
21 March 1969

Franklin Underway Log Sheet

	Time	Routine	Initial
<p>Date <u>12 June 1969</u></p> <p>20-24</p> <p>Position: Approx 1mi North Jupiter Light</p> <p>Weather: <u>clear</u></p> <p>2000 DORR & KAZIMIR ABOARD. ALL NORMAL.</p>	2000	<ul style="list-style-type: none"> -Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air Flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ -Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Cabin Humidity _____ -Conduct contaminant checks 	
<p><u>13 June 1969</u></p> <p>0110 ENTER Channel PASS ZLW</p> <p>0030 in TURNING Basin</p> <p>0045 Disconnect TOW From PRIVATEER</p> <p>0125 SECURE BOAT</p>			
	2100	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	2200	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	
	2300	<ul style="list-style-type: none"> -Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves 	

4.3

	Time	Routine	Check
Date <u>24 June</u>	1600	-Check bilges, penetrators and main battery fuse boxes for water	
16-20		-Cycle MBT and VBT hull valves	
Position: <u>Port of Palm Beach</u>		-Check hull valves for proper position	
Weather: <u>Warm (clear), calm.</u>		-Check LOX tanks for leaks	
19:26		-Vent Main Ballast Tanks	
19:30		-Check emergency ballast hydraulic pressure	
19:47		-Check VBT's for pressure buildup	
19:49		-Air flask readings (flasks in service)	
ENERGIZE THROUGH ALL 4 MOTORS IN TURN MADE.		Flask #1 _____; #2 _____	
UNDERWAY		#3 _____; #4 _____	
UNDER TOW		#5 _____; #6 _____	
PUMP ALL TRIM WATER AFT.		-Check equipment not in use in Off/Standby position	
		-Check F.W. valves shut	
		-Record battery readings	
		-Carbon Dioxide % _____	
		-Oxygen % _____	
		-Cabin Temperature _____	
		-Sea water temp. _____	
		-Cabin Humidity _____	
		-Cabin Pressure _____	
	1700	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	1800	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	O ₂ % _____
	1900	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

Revision 1

12 May 1969

Franklin Underway Log Sheet

	Time	Routine	Check
Date	24 JUNE 69		
20-24	2000	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air Flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
Position:	INLET OF PALM BEACH		
Weather:	WARM, CLEAR, CALM.		
20'01	TURN ON RUNNING LIGHTS		
20'02	SECURED PROPULSION		
20'07	PASSING SEA BUOY 2LW		
20'09	DIRECTION : 170°		
20'25	We have 600# of silica gel dehydrator deployed 67% humidity		
20'27	WATER TEMP. 30° C		
20'45	#2 hot water tank heater on		
20'50	humidity 73° Temp 83°		
21'00	E. ARBERGOLD WATCH RELIEVED BY DR. PICCARD		
21'07	radio check with Princeton ok		
22'00	bilge checked - ok. humidity, 73% temp. 84° F sea 31° C.		
22'02	radio check with Princeton ok		
22'30	J. Piccard watch relieved by Harold Don.		
22'30	Assumed WATCH - All Normal H. DORR		
22'35	PUT OUT LIQH PANELS		
23'00	Radio check - Privateer bilge check - humidity - 72% Temp - 83° F Sea - 31° C		
24'00	WATCH RELIEVED BY F. BUSBY Radio check - Privateer		
	2100	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	2200	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	2300	-Vent MBT's O ₂ % _____ -Check hydraulic pressure -Cycle MBT and VBT hull valves	
			Revision 1 12 May 1969

Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>25 JUNE 1969</u>	0000		
00-04			
Position: APPROX 30-40 mi. SOUTH of PALM BEACH. HEADING 180°			
Weather: CLEAR, CALM SEA STATE 1 to 2 0000hrs. Temp: 82°F Humidity: 71%			
Watch relieved: R. Busby on from H. PARK			
0100 - Temp. 85°F, Humidity 68%			
- Bilges dry			
- O ₂ 21%			
- Radio check (5X5)			
0200 Temp 82 Humidity 69%			
218 - 02			
0230 FOUND HOT WATER BREAKER OUT. RESET - 160° STARTED			
0300 TEMP 82 Humidity 69%			
RADIO (5X5)			
WATER TEMP. 31°C			
WATCH BY E. REBERSOLD			
0312 HOT WATER BREAKER OUT TEMP. 180°F - RESET			
0325 HEAD ON 135° 140° 1/2 BOTTOM 412 FEET	0100		
0400 RADIO CHECK (5ONS)			
TEMP. 85°F			
HUMID. 71.5%	0200		
SEA 31°C			
	0300		

- Check bilges, penetrators and main battery fuse boxes for water
- Cycle MBT and VBT hull valves
- Check hull valves for proper position
- Check LOX tanks for leaks
- Vent Main Ballast Tanks
- Check emergency ballast hydraulic pressure
- Check VBT's for pressure buildup
- Record air flask readings:
Flask #1 _____; #2 _____;
#3 _____; #4 _____;
#5 _____; #6 _____
- Check equipment not in use in Off/Standby position
- Check F.W. valves shut
- Record battery readings
- Carbon Dioxide % _____
- Oxygen % _____
- Cabin Temperature _____
- Cabin Pressure _____
- Sea Water Temp _____
- Cabin Humidity _____
- Vent MBT's
- Check hydraulic pressure
- Cycle MBT and VBT hull valves
- Vent MBT's
- Check hydraulic pressure
- Cycle MBT and VBT hull valves O₂ % _____
- Vent MBT's
- Check hydraulic pressure
- Cycle MBT and VBT hull valves

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>25 JUNE 69</u> 04-08	0400	-Check bilges, penetrators and main battery fuse boxes for water. -Cycle MBT and VBT hull valves	
Position: <u>30-90 MI SOUTH-EAST OF W.P.B.</u>		-Check hull valves for proper position -Check LOX tanks for leaks	
Weather: <u>SEA STATE IV 1-2</u>		-Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure	
04'06 HEAD ON 140° BILGES DRY		-Check VBT's for pressure buildup	
04'16 HOT WATER BREAKER OUT RESET - TEMP. 190° F		-Record air flask readings (flasks in service)	
04'24 HOT WATER BREAKER OUT. Secured ^{leading}		Flask #1 _____; #2 _____;	
04'26 BOTTOM 264 FATHOMS		#3 _____; #4 _____;	
04'30 E. <u>Shard</u>		#5 _____; #6 _____	
0435 Boat very hot and humid - quite uncomfortable. Accuracy of humidity gage is questionable - should be checked against SERDEX		-Check equipment not in use in Off/Standby position -Record battery readings -Check F.W. valves shut -Carbon Dioxide% <u>0.5%</u> -Oxygen % <u>21.3%</u>	
0440 humidity 79% - previous reading probably in error		-Cabin Temperature _____ -Sea Water Temp. _____	
0445 broke out 100 bags (small 8 unit) from behind pilots' console. These bags were already opened but were stuffed in a small area. Weight unknown.		-Cabin Pressure _____ -Cabin Humidity _____	
0500 broke out 100 bags (small type) from behind pilot area.	0500	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
hum. 75% Temp. 84°	0600	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves <u>O₂ 21.8%</u>	
Note - heating of hot water tank has generated lots of heat water temperature - 30°C	0700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
0515 Posit. 19 mi East of Boynton Beach			
0545 Spread out another 100 bags of silica gel			
0600 spread out another 50 bags of silica gel			
Temp. 86° humidity <u>72%</u>			

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>25 June 69</u>	0800	-Replace LiOH panels -Conduct thorough boat inspection -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 <u>172</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ -Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % <u>21%</u> -Sea Water Temp. <u>6.5</u> -Cabin Humidity <u>52% / 92%</u> -Cabin Pressure <u>1.03</u> -LOX pressure <u>75 PSI</u> -Fwd _____ Aft _____ -Record F.W. & LOX tank levels	<u>20</u> K K K — K K K K K K
08-12			
Position: <u>20 mi east of Boynton Beach</u>			
Weather: <u>Clear + calm</u>			
0800 at 570 meters 7°C still a little heavy - about 300 lbs.			
0805 Bottomed 587 meters 6.5°C			
0808 Dragging sidescamp - flooding stbd VBT			
0820 we hear pressure very well on the bottom - using star OBC			
0820 we melted out shot for 2 min. 15 sec on 1350 lbs. (?)			
0845 Tested external lights Inop. Both MG Port hi fr 1 250 Stbd hi fr 1 250 Port Lo fr 2 250 Stbd Lo fr 2 250 SCU Port Lo fr 1 250			
0900 Tested TV #2 - beautiful!			
1000 Temp 68°F Hum. 53% Ext. temp. 7°C	0900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
1020 Blow STB VBT - Dry	1000	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves O ₂ % <u>20.3</u>	
1022 sensor 1, 2, 5, 9, 10 "m"			
10'28 DROP STBD 10"	1100	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
10'29 " SHOT PORT 10"		NOTE: If motors have been idle, meggar before using. Revision 1	
10'31 " STBD 10"			
10'32 " PORT 10"			
10'33 " STBD 10"			
10'35 " PORT 10"			
10'35 BEGIN TO RAISE UP			

Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>25 June 69</u>	1200	-Check bilges, penetrators and main battery fuse boxes for water	
12-16		-Cycle MBT and VBT hull valves	
Position: <u>20 mi East of Palm Beach</u>		-Check hull valves for proper position	
Weather: <u>Calm & clear</u>		-Check LOX tanks for leaks	
1200 Busby OFF - Biller aboard.		-Check emergency ballast hydraulic pressure	
1222 CLEAR TO DIVE		-Check VBT's for pressure buildup	
Open VENTS - DIVE		-Air flask readings (flasks in service)	SURPACED
Starting stability experiment		Flask #1 _____; #2 _____;	
SALT WATER SENSOR LITS 12,598		#3 _____; #4 _____;	
10 ABS ON		#5 _____; #6 _____	
1232 Descending		-Test emergency ballast alarm	
1255 Seen to be stabilizing at 180 meters - just what we want.		-Check equipment not in use in Off/Standby position	
1307 210 meters descending very slowly		-Vent Main Ballast Tanks	
1316 DROP SHOT STBD 3"		-Check F.W. valves shut	
1330 Spread out 200 more 8unit		-Record battery readings	
Veys of silica get from behind pilot area humidity 76% Temp 72°F		-Carbon Dioxide % _____	
Ext. Temp. 17.5°C		-Oxygen % _____	
1335 DROP SHOT STBD 3 SEC		-Cabin Temperature _____	
1400 heaved hoppers		-Sea water temp. _____	
1 mms 15mg 3 mms 15mg		-Cabin Humidity _____	
2 mms 20mg 4 mms 25mg		-Cabin Pressure _____	
1 PM 30mg 3 PM 50mg	1300	-Vent MBT's	
2 PM 30mg 4 PM 50mg		-Check hydraulic pressure	
1415 71°F Interm. Temp 16°C ext. temp. 73% humidity		-Cycle MBT and VBT hull valves	
1420 Drop Shot 2.5 SEC	1400	-Vent MBT's	
PORT TANK		-Check hydraulic pressure	R
1444 Drop Shot 2.5 SEC		-Cycle MBT and VBT hull valves	O ₂ 7% 21%
PORT TANK	1500	-Vent MBT's	
1455 SHIPS head has been in General Direction North.		-Check hydraulic pressure	
VARY EACH SIDE OF DUE N. BY		-Cycle MBT and VBT hull	
± 10°			
1500 INT. TEMP - 71°F R.H. = 70.5%		Revision 1	
VAC CHECK - GOOD		12 May 1969	

Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>25 June 69</u>	1600	-Check bilges, penetrators and main battery fuse boxes for water	K
16-20		-Cycle MBT and VBT hull valves	K
Position: <u>20 mi. East of Palm Beach</u>		-Check hull valves for proper position	K
Weather: <u>Calm & Clear.</u>		-Check LOX tanks for leaks	K
1600 Conducting Stability Experiment		-Vent Main Ballast Tanks	K
Humidity 68° Temp 69°		-Check emergency ballast hydraulic pressure	K
1715 Earlier we drifted parallel with current with bow pointed north. We did vary a little left & right, now we are pointed East		-Check VBT's for pressure buildup <u>630 std.</u>	K
1830 at 242 meters. Humidity 68.5		-Air flask readings (flasks in service)	K
Temp. 67.5		Flask #1 <u>136</u> ; #2 _____	
1912 Fathometer works very well for depth measurement ping-pong off surface.		#3 _____; #4 _____	
1915 252 meters 67.5 % humidity		#5 _____; #6 _____	
67.5 °F		-Check equipment not in use in Off/Standby position	K
1917 Both ext. Temp. probes jumped up to about 40°C		-Check F.W. valves shut	K
1919 Both readings about 20°C		-Record battery readings	
1940 Check for HYDRAZINE-Reading 0.25PPM		-Carbon Dioxide % <u>0.8%</u>	
Check for METHYL BROMIDE		-Oxygen % <u>21%</u>	
No Apparent Reading.		-Cabin Temperature <u>70°</u>	
<i>L. Hagan</i>		-Sea water temp. <u>16.5</u>	
		-Cabin Humidity <u>69.5</u>	
		-Cabin Pressure <u>1.07</u>	
	1700	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	1800	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves - O ₂ % <u>21%</u>	
	1900	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>25 June 1969</u>	2000	-Check bilges, penetrators and main battery fuse boxes for water	D
20-24		-Cycle MBT and VBT hull valves	D
Position:		-Check hull valves for proper position	D
Weather:		-Check LOX tanks for leaks	D
2015 Check's cycle vents & ^{HULL} VALVE.		-Vent Main Ballast Tanks	D
Boat appears to have gotten Heavy after cycle valves - Boat is dropping (slow) BUT steady		-Check emergency ballast hydraulic pressure	D
2100 UQC Check SXS		-Check VBT's for pressure <u>64kg/cm²</u> buildup	SXS
2130 UQC check good		-Air Flask readings (flasks in service)	
2200 Still RUNNING STABILITY TEST		Flask #1 <u>137</u> ; #2 <u>-</u> ;	
Boat still Descending at a slow BUT STEADY RATE		#3 _____ ; #4 _____ ;	
~ 10 meters/HR Depth 220m		#5 _____ ; #6 _____	
Temp = 66°F		-Check equipment not in use in Off/Standby position	D
R. Humid = 65%		-Check F.W. valves shut	D
2210 Foul smell in Head after Pumping. Run Blower in attempt To lose this Aroma.		-Record battery readings	
Put (2) cups of MICRO-GARD in WASTE TANK		-Carbon Dioxide % <u>0.1</u>	
2215 Run DRAGGER check FOR HYDRAZINE - No change		-Oxygen % <u>21.2%</u>	
Reading is 0.25 PPM		-Cabin Temperature <u>15.4°C</u> (^{WSP} 20° ship)	
2230 UQC check - SXS upper xDUCT		-Sea water temp <u>67°F</u>	
2300 The boat is still Descending slowly. Drop shot for 5 sec check ascent		-Cabin Humidity <u>66%</u>	
Drop shot for 10 sec (if ascent is normal) check ascent		-Cabin Pressure <u>1.04</u>	
This will give a good feel for shot/US ascent rate & stability point		-Conduct contaminant checks	
2301 UQC check - Good		2100 -Vent MBT's	
2330 UQC check - Good		-Check hydraulic pressure	
Boat still drifting ALL IS NORMAL		-Cycle MBT and VBT hull valves	
NO LEAKS; NO PROBLEMS. Humidity is going well. IT IS 65% WITH A Temp. of 65.5°F		2200 -Vent MBT's	
NO ADDITIONAL SILCA GEL PUT OUT		-Check hydraulic pressure	
2400 UQC check - SXS		-Cycle MBT and VBT hull valves	
All NORMAL		2300 -Vent MBT's	

H. Dorff 6/25/69

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	Time	Routine	Check
Date <u>26 JUNE 1969</u>	0000	-Check bilges, penetrators and main battery fuse boxes for water	<input checked="" type="checkbox"/>
00-04		-Cycle MBT and VBT hull valves	<input checked="" type="checkbox"/>
Position:		-Check hull valves for proper position	<input checked="" type="checkbox"/>
Weather:		-Check LOX tanks for leaks	<input checked="" type="checkbox"/>
0000 Compl Boat checks		-Vent Main Ballast Tanks	-
01:20 Drop & Hot 100m Port Side		-Check emergency ballast hydraulic pressure	<input checked="" type="checkbox"/>
0345 Flooding Port VBT		-Check VBT's for pressure buildup	<input checked="" type="checkbox"/>
0348 Light at 700m.		-Record air flask readings:	<input checked="" type="checkbox"/>
lost indication on the main motor		Flask #1 <u>135</u> ; #2 _____	<input checked="" type="checkbox"/>
0406 British penetrator leaking in B-6 - very slight dripping 548 m.		#3 _____ ; #4 _____	
0410 Returning to shallow depth under power. We will not be able to stabilize at less than 2000ft. No change in leak rate.		#5 _____ ; #6 _____	
0414 Ext. tem. 8.34°C		-Check equipment not in use in Off/Standby position	<input checked="" type="checkbox"/>
0421 Blow Port VBT		-Check F.W. valves shut	<input checked="" type="checkbox"/>
0421 LEAK RATE on penetrator ⁱⁿ B6 increasing slightly		-Record battery readings	<input checked="" type="checkbox"/>
Come up under Power to 100m.		-Carbon Dioxide % <u>1.0</u>	<input checked="" type="checkbox"/>
0425 at 100m - Leak has almost stopped.		-Oxygen % <u>21.5</u>	<input checked="" type="checkbox"/>
0430 ROTATE FWD MOTORS Horiz. to START SPEED RUN		-Cabin Temperature <u>65</u>	<input checked="" type="checkbox"/>
0435 LEAK has stopped		-Cabin Pressure <u>1.4</u>	<input checked="" type="checkbox"/>
LINE UP TEST EQUIP FOR SPEED RUN		-Sea Water Temp <u>15.55</u>	<input checked="" type="checkbox"/>
		-Cabin Humidity <u>64.5</u>	<input checked="" type="checkbox"/>
	0100	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0200	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
	0300	-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

H. D. R.

Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>26 June 1969</u>	0400	-Check bilges, penetrators and main battery fuse boxes for water	D
04-08		-Cycle MBT and VBT hull valves	D
Position:		-Check hull valves for proper position	D
Weather:		-Check LOX tanks for leaks	D
- For 0400 to 0435 see last sheet		-Vent Main Ballast Tanks	
0510 0445 START SPEED RUN		-Check emergency ballast hydraulic pressure	D
0514 SECURE FORMAN SET UP - AREA NO READINGS		-Check VBT's for pressure buildup	D
FATHOMETER SECURED - NOT FUNCTIONING - To much ELEC. NOISE		-Record air flask readings (flasks in service)	
To READ.		Flask #1 <u>112</u> ; #2 _____ ;	
AMP HR READINGS		#3 _____ ; #4 _____ ;	
A ₁ = 372.68 B ₁ = 267.22 C = 401.20		#5 _____ ; #6 _____	
A ₂ = 439.79 B ₂ = 541.29 D = 1523.50		-Check equipment not in use in Off/Standby position	D
0530 Completed Speed Run.		-Record battery readings	
Could not get full speed out of stld inverter - C1 string voltage low		-Check F.W. valves shut	D
23.7 under load, 25.7 no load		-Carbon Dioxide% <u>---</u>	
0534 Transfiring leads on motors 1 & 2		-Oxygen % <u>21.7</u>	
100 amps.		-Cabin Temperature <u>68°F</u>	
0545 Checked for hydraulic - got 0.3 ppm (approx)		-Sea Water Temp. <u>22.70°C</u> (WASP)	
0558 Mascinator trips - motor bad	0500	-Cabin Pressure <u>1.04</u>	
0615 further checking shows + minor SWITCH lead - motor OK.		-Cabin Humidity <u>60%</u>	
0647 Temp 75° humidity 55%	0600	-Vent MBT's	K
0755 approaching low voltage limit in A group (50.7 volts lower)		-Check hydraulic pressure	K
Time to Surface.		-Cycle MBT and VBT hull valves	K
	0700	O ₂ % <u>22.5</u>	K
		-Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

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Franklin Underway Log Sheet

Time Routine Check

Date 26 JUNE 1969

08-12

Position:

Weather:

0800 SECURE TOPAZ
Temp - 76°F
Humid - 56%
BOAT has been running
IN MODE I FOR THE
WHOLE TRANSIT,
CABIN PRESSURE 105
a little high

0805 O₂ = 22.0%
0825 Surface
0825 UNDER TOW TO Palm Beach
0826 SECURED PROPULSION
0832 Send 4 CREW TO PRIVATEER
FOR BREAKFAST & REST
ABOARD ARE DORR & GREGORY
0915 Compl PARTIAL RIG FOR
SURFACE
0930 LOWER O₂ FLOW TO .5L/min
1000 DRAG chain still with us.

1100 Compl inspection of Boat All
NORMAL. DRAG chain still here.
A SCHOOL OF SMALL MULLET LIKE FISH
ARE WITH US FOR APPROX 1HR (still here)
They remain slightly AFT & UNDER THE AFT
hemi. They seem to be getting a free ride
AS their only swimming motion is UP
& DOWN TO REMAIN IN PLACE

1200 Compl inspect of Boat
All NORMAL DRAG chain is
still with us
Temp. - 81°F
Humid. - 55%
O₂ - 22%
HULL VENT IS open -

0800 -Replace LiOH panels
-Conduct thorough boat
inspection
-Cycle MBT and VBT hull
valves
-Check hull valves for pro-
per position
-Check LOX tanks for leaks
-Vent Main Ballast Tanks
-Check emergency ballast
hydraulic pressure
-Check VBT's for pressure
buildup
-Air flask readings
(flasks in service)
Flask #1 _____; #2 _____;
#3 _____; #4 _____;
#5 _____; #6 _____
-Check equipment not in use
in Off/Standby position
-Check F.W. valves shut
-Record battery readings
-Carbon Dioxide % _____
0900 -Oxygen % 22.5
-Sea Water Temp. _____
-Cabin Humidity 58%
-Cabin Pressure 105
-LOX pressure 75 PSI
-Fwd 1/4 Full Aft 1/4 Full
-Record F.W. & LOX tank
levels
CABIN TEMP - 79°F
0900 -Vent MBT's
-Check hydraulic pressure
-Cycle MBT and VBT hull
valves
-O₂ % _____
1000 -Vent MBT's
-Check hydraulic pressure
-Cycle MBT and VBT hull
valves
1100 -Vent MBT's
-Check hydraulic pressure
-Cycle MBT and VBT hull
valves
NOTE: If motors have been
idle, meggar before
using.

H. DORR
6/26/69

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>26 JUNE 1969</u>	1200	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves	<input checked="" type="checkbox"/>
12-16			
Position: <u>18 mi East of Fort Pierce</u>		-Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Weather: <u>Calm Clear</u>		-Air flask readings (flasks in service)	
1220 <u>Dorr & Gregory to Privater -</u> <u>Biller & Kaymer to Franklin</u>		Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
1705 <u>Two cold water showers taken - humidity up to 70% in passageway outside of showers</u>		-Test emergency ballast alarm -Check equipment not in use in Off/Standby position -Vent Main Ballast Tanks -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Sea water temp. _____ -Cabin Humidity _____ -Cabin Pressure _____	
1715 <u>While taking flask battery ground readings, Digital voltmeter not working</u>			
	1300	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1400	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves - <u>6.7%</u>	
	1500	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull	

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>26 JUNE 1969</u>	1600	-Check bilges, penetrators and main battery fuse boxes for water	
16-20		-Cycle MBT and VBT hull valves	
Position: 1mi off Beach Beach ^{NORTH} of STUART		-Check hull valves for proper position	
Weather:		-Check LOX tanks for leaks	
1845 DORR & GREGORY BACK KAZIMIR & BILLEN over to PRIVATEER		-Vent Main Ballast Tanks	
1847 Blow MBT WORKING ON DUM. Running 1/2 lbs on.		-Check emergency ballast hydraulic pressure	
2040 Took battery string voltages and ground readings. C-1 string seems bad - three side pegs meter. No load voltage 27.22 Voltage under load < 25.0		-Check VBT's for pressure buildup	
<u>27 June 1969</u> 0600 Circling near sea buoy to Palm Beach inlet.		-Air flask readings (flasks in service) Flask #1 _____; #2 _____ #3 _____; #4 _____ #5 _____; #6 _____	
<hr/>	1700	-Check equipment not in use in Off/Standby position	
0700 In training basin.		-Check F.W. valves shut	
Line handlers aboard, want to GO IN		-Record battery readings	
0725 LITE OFF PROPULSION	1800	-Carbon Dioxide % _____	
0750 PROPULSION SECURED Compl Req for THE SURFACE		-Oxygen % _____	
0755 BOAT SECURED	1900	-Cabin Temperature <u>82°F</u>	
		-Sea water temp. _____	
		-Cabin Humidity <u>63%</u>	
		-Cabin Pressure _____	

H. Dorr

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>30 June 69</u> 12-16	1200	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup. -Air flask readings (flasks in service)	
Position: <u>Port of Palm Beach</u>		-Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup.	
Weather: <u>Partly Cloudy</u> <u>12 kts. wind from East</u>		-Air flask readings (flasks in service)	
12:15 TURN ALL 4 MOTORS HORIZONTAL		-Air flask readings (flasks in service)	
12:17 ENERGISE 4 MOTORS TURN MODE		-Air flask readings (flasks in service)	
12:19 UNDERWAY - <u>MISSION PLAN # 21</u> <u>NAVIGATION CHECKOUT.</u>		Flask #1 _____; #2 _____;	
12:40 UNDER TOW BY PRIVATEER		#3 _____; #4 _____;	
12:48 SECURED, PROPULSION		#5 _____; #6 _____	
13:00 PASSING THE SEA BUOY 2LW		-Test emergency ballast alarm	
13:34 TOW LINE BROKEN ON PRIVATEER		-Check equipment not in use in Off/Standby position	
13:35 TOW ENERGISE 4 MOTORS. TURN MODE		-Vent Main Ballast Tanks	
Returned entire towline to Privateer		-Check F.W. valves shut	
1357 Under tow, A strain gage link had been added to the towline on Privateer for this underway time - link failed - became unscrewed.		-Record battery readings	
1400 Aft hatch leaking while under tow		-Carbon Dioxide % _____	
1550 RIG FOR DIVE COMPT		-Oxygen % _____	
Ready TO DIVE - WAIT CLEARANCE	1300	-Cabin Temperature _____	
1551 open vents - DIVE		-Sea water temp. _____	
1552 Guide rope hung up - not fully deployed.		-Cabin Humidity _____	
1610 37 meters + descending	1400	-Cabin Pressure _____	
Sensor 1, 2, 3, 5, 9, 10 "cm"		-Vent MBT's	
Aft hatch <u>OK</u>		-Check hydraulic pressure	
<i>[Signature]</i>	1500	-Cycle MBT and VBT hull valves	
<i>[Signature]</i>		-Vent MBT's	
<i>[Signature]</i>		-Check hydraulic pressure	
<i>[Signature]</i>		-Cycle MBT and VBT hull valves	

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Franklin Underway Log Sheet

		Time	Routine	Check
Date <u>30 June 69</u>		1600	-Check bilges, penetrators and main battery fuse boxes for water	✓
16-20		1700	-Cycle MBT and VBT hull valves	✓
Position: <u>about 7 mi. East of Jupiter</u>			-Check hull valves for proper position	✓
Weather: <u>20 kts. from East</u>			-Check LOX tanks for leaks	✓
<u>Cloudy</u>			-Vent Main Ballast Tanks	✓
1615	100 meters descending		-Check emergency ballast hydraulic pressure	✓
1625	130 meters		-Check VBT's for pressure buildup	✓
	Dr. Htd. shot: 10 sec. stbd.		-Air flask readings (flasks in service)	
	10 sec. port.		Flask #1 _____; #2 _____	
1630	drilled 5 sec stbd		#3 _____; #4 _____	
	5 sec port		#5 _____; #6 <u>100</u>	
1637	drilled 5 sec stbd. Ext. temp. 12°		-Check equipment not in use in Off/Standby position	✓
	depth 170 meters		-Check F.W. valves shut	✓
1640	drilled 5 sec port		-Record battery readings	NO
1645	" 3 sec stbd. ext. temp. 11°		-Carbon Dioxide % <u>0.5</u>	
1647	" 30 ft above bottom.		-Oxygen % <u>21</u>	
1649	" 3 sec port. Heaving at 30 ft. altitude.		-Cabin Temperature <u>80</u>	
1649	approaching bottom for a landing		-Sea water temp. <u>12°C.</u>	
17.00	5" port. not drilled	1700	-Cabin Humidity <u>56.70</u>	
17.01	5" st. "		-Cabin Pressure <u>1.03</u>	
17.03	5" st. " "	1800	-Vent MBT's	
17.04	5" port.		-Check hydraulic pressure	
1711	3" port " "		-Cycle MBT and VBT hull valves	
1712	3" st. " "	1900	-Vent MBT's	
1713	5" st. " "		-Check hydraulic pressure	
1719	VBT st. on 2-3 "		-Cycle MBT and VBT hull valves	
1730	Ascending to 30 meters for all clear to surface.			
1732	Surfacing			
1745	Disintegrated DWT, Picard + P. ²⁵ - Embarked Busby, Haring + Faggot.			

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>30 June</u>	2000	-Check bilges, penetrators and main battery fuse boxes for water	✓
20-24		-Cycle MBT and VBT hull valves	✓
Position: <u>about 5 mi. East of Jupiter</u>		-Check hull valves for proper position	✓
Weather: <u>15-20 Kts wind from East.</u>		-Check LOX tanks for leaks	✓
(Ext. Temp <u>11.5°C</u> Wasp reads <u>9.8</u> . Upper probe reads <u>13°</u>)		-Vent Main Ballast Tanks	✓
2015 Busby bumped his head on escape trunk for 4th time.		-Check emergency ballast hydraulic pressure	✓
2204 Compared upward fathometer with depth gage.		-Check VBT's for pressure buildup.	✓
Fatho. - 70 fathoms		-Air Flask readings (flasks in service)	
Gage - 139 meters		Flask #1 <u>165</u> ; #2 _____;	
2205 Checked external lights.		#3 _____; #4 _____;	
1 inop. both mixed gas		#5 _____; #6 _____	
Port Lo fr 2 (250)		-Check equipment not in use in Off/Standby position	✓
Std Lo fr 2 (250)		-Check F.W. valves shut	✓
Port Lo fr 16 (500)		-Record battery readings <u>NO</u>	
Std Lo fr 2 (500)		-Carbon Dioxide % <u>1.0</u>	
Std Hi fr 16 (250)		-Oxygen % <u>21.0</u>	
2240 Tested Plankton sampler as per operating instructions. When pumping counterclockwise, water moved from right to left left and some bubbles appeared. When pumping stopped, water rushed rapidly from right to left as if we had a vacuum on the right side like maybe a blockage on the inlet.	2100	-Cabin Temperature <u>76° F</u>	
		-Sea water temp. <u>11.5</u>	
		-Cabin Humidity <u>59%</u>	
		-Cabin Pressure <u>1.03</u>	
		-Conduct contaminant checks <u>NO</u>	
	2200	-Vent MBT's	✓
		-Check hydraulic pressure	✓
		-Cycle MBT and VBT hull valves	✓
	2300	-Vent MBT's O ₂ % <u>20.8</u>	✓
		-Check hydraulic pressure	✓
		-Cycle MBT and VBT hull valves	✓

2345 Tested TV - OK. Used TV to aim 70 mm cameras. Photographed Ling Cod + Crat using strobe.

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>1 July 69</u> 00-04	0000	-Check bilges, penetrators and main battery fuse boxes for water ✓ -Cycle MBT and VBT hull valves ✓	
Position: <u>Afloat 6 mi East of Jupiter</u>		-Check hull valves for proper position ✓ -Check LOX tanks for leaks ✓	
Weather: <u>20 Kts from East</u>		-Vent Main Ballast Tanks ✓ -Check emergency ballast hydraulic pressure ✓	
0000 <u>noticed some salt water in aft bilge - may be from hatch leak when on surface.</u>		-Check VBT's for pressure buildup ✓ -Record air flask readings: ✓	
0051 hydraulic pressure 136 Kg/cm ² no water in aft bilge.		Flask #1 <u>163</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
0105 Relieved by R. Gregory.		-Check equipment not in use in Off/Standby position ✓	
0130 RADIO CHECK D. Faymi		-Check F.W. valves shut ✓	
0130 68 HUMIDITY 60° TEMP		-Record battery readings <u>NO</u>	
0200 TOOK L... READING		-Carbon Dioxide % <u>0.5</u>	
) HYDRAULIC PRESS, 136		-Oxygen % <u>20.9</u>	
0400 RELIEVED BY ERWIN		-Cabin Temperature <u>62°</u> -Cabin Pressure <u>1.02</u> -Sea Water Temp <u>12°</u> -Cabin Humidity <u>68%</u>	
	0100	-Vent MBT's <u>NO</u> -Check hydraulic pressure ✓ -Cycle MBT and VBT hull valves ✓	
	0200	-Vent MBT's -Check hydraulic pressure <u>136</u> ✓ -Cycle MBT and VBT hull valves <u>0.2% 21%</u>	
	0300	-Vent MBT's -Check hydraulic pressure <u>136</u> ✓ -Cycle MBT and VBT hull valves	

Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>July 1</u>	0400	-Check bilges, penetrators and main battery fuse boxes for water ✓ -Cycle MBT and VBT hull valves ✓ -Check hull valves for proper position ✓ -Check LOX tanks for leaks ✓ -Vent Main Ballast Tanks ✓ -Check emergency ballast hydraulic pressure ✗ -Check VBT's for pressure buildup ✓ -Record air flask readings (flasks in service) Flask #1 <u>162</u> ; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____ -Check equipment not in use in Off/Standby position -Record battery readings 0300 -Check F.W. valves shut -Carbon Dioxide% <u>0.5</u> -Oxygen % <u>21</u> -Cabin Temperature <u>59</u> -Sea Water Temp. <u>8.72°C</u> -Cabin Pressure <u>1</u> ABS -Cabin Humidity <u>70%</u>	
04-08			
Position: <u>0600 G MILES EAST JUPITER</u>			
Weather: <u>SUB HEADING 300°</u>			
0412 HYDRAULIC PRESSURE <u>135 kg/cm²</u>			
0430 PUMP UP TO <u>140 kg/cm²</u>			
0430 PHONE CHECK O.K.			
0500 NORMAL CHECKS - PHONE CHECK O.K.			
0530 PHONE CHECK O.K.			
0600 PHONE CHECK O.K. NORMAL CHECKS			
0630 PHONE CHECK O.K.			
0700 NORMAL CHECKS - PHONE CHECK O.K.			
WATCH RELIEVED BY <u>KAZIMIR</u> <u>S. Obernd</u>			
0715 noticed very slight leak around penetrator #2-10, line to air flask #6. It seems to be coming from the low pressure seal.			
0720 <u>0735</u> Tightened penetrator <u>#2</u> <u>(#1)-10.</u> <u>W. J. Key</u>			
	0500	-Vent MBT's ✗ -Check hydraulic pressure ✗ -Cycle MBT and VBT hull valves ✗	
	0600	-Vent MBT's ✗ -Check hydraulic pressure ✗ -Cycle MBT and VBT hull valves <u>0.2% 21.2</u>	
	0700	-Vent MBT's ✗ -Check hydraulic pressure ✓ -Cycle MBT and VBT hull valves ✗	

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>1 July 69</u>	0800	-Replace LiOH panels	NO
08-12		-Conduct thorough boat inspection	✓
Position: <u>Approx 6 mi East of Jupiter</u>		-Cycle MBT and VBT hull valves	✓
Weather: <u>Calm, raining</u>		-Check hull valves for proper position	✓
		-Check LOX tanks for leaks	✓
		-Vent Main Ballast Tanks	✓
		-Check emergency ballast hydraulic pressure	✓
0820 humidity too high - 76.5%		-Check VBT's for pressure buildup	✓
0830 Deployed 15 more bags (80 unit type)		-Air flask readings (flasks in service)	
0840 Penetrator leak just about stopped.		Flask #1 <u>160</u> ; #2 _____;	
		#3 _____; #4 _____;	
		#5 _____; #6 _____	
1000 Compared fathometer with up looking transducer with depth gauge. gauge 141 meters. FATH. 390 ft.		-Check equipment not in use in Off/Standby position	✓
		-Check F.W. valves shut	✓
		-Record battery readings	NO
		-Carbon Dioxide % <u>0.6</u>	
		-Oxygen % <u>22.3</u>	
		-Sea Water Temp. <u>8.9 °C</u>	
		-Cabin Humidity <u>76.5</u>	
		-Cabin temp. <u>56</u>	
		-Cabin Pressure <u>1.02</u>	
		-LOX pressure _____	
		-Fwd _____ Aft _____	
		-Record F.W. & LOX tank levels	HI
1010 Preparing to swing ship for magnetometer calibration - will compare Magneson Compass with portable compass. Data sheet attached. Portable compass set on deck in center of passage way, frame 2.			
1023 BLOW PORT VBT	0900	-Vent MBT's	✓
1028 Ascending to 100' altitude. Boat quite heavy.		-Check hydraulic pressure	✓
		-Cycle MBT and VBT hull valves	✓
1035 Drilled shot: 5 sec Port	1000	-Vent MBT's	✓
" " 5 sec Stbd.		-Check hydraulic pressure	✓
1036 " " 5 sec Port		-Cycle MBT and VBT hull valves	✓
" " 5 sec Stbd.		0.7% <u>22.5</u>	✓
1037 " " 5 sec Port	1100	-Vent MBT's	
" " 5 sec Stbd.		-Check hydraulic pressure	
1038 " " 5 sec Port		-Cycle MBT and VBT hull valves	
" " 5 sec Stbd.		NOTE: If motors have been idle, meggar before using.	
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Ext. Temp. 11.6 °C
Depth 115 meters

Franklin Underway Log Sheet

		Time	Routine	Check
Date <u>1 July 61</u>		1200	-Check bilges, penetrators and main battery fuse boxes for water	
12-16			-Cycle MBT and VBT hull valves	
Position: <u>9 mi N.E. of Jugula</u>			-Check hull valves for proper position	
Weather: <u>Calm, Cloudy</u>			-Check LOX tanks for leaks	
1201	at 80 meters preparing to surface		-Check emergency ballast hydraulic pressure	
1213	Powering up to surface		-Check VBT's for pressure buildup	
1221	OPEN THE HATCH		-Air flask readings (flasks in service)	
1243	UNDER TOW BY PRIVATEER		Flask #1 _____; #2 _____;	
1251	SECURED PROPULSION (Enroute P.B.)		#3 _____; #4 _____;	
1300	Disembarked Gregory, Bushy, Haig, and Fugget.		#5 _____; #6 _____	
1315	Aft hatch not heating		-Test emergency ballast alarm	
2011	TURN ON RUNNING LIGHTS		-Check equipment not in use in Off/Standby position	
2230	TURNING AROUND THE SEA BUOY 24W		-Vent Main Ballast Tanks	
2240	RUNNING INSIDE CHANNEL OF P.B.		-Check F.W. valves shut	
2304	TOW LINE OFF		-Record battery readings	
2340	SECURED PROPULSION AND MOORED		-Carbon Dioxide % _____	
<i>S. [Signature]</i>		1300	-Oxygen % _____	
			-Cabin Temperature _____	
			-Sea water temp. _____	
			-Cabin Humidity _____	
			-Cabin Pressure _____	
		1300	-Vent MBT's	
			-Check hydraulic pressure	
			-Cycle MBT and VBT hull valves	
		1400	-Vent MBT's	
			-Check hydraulic pressure	
			-Cycle MBT and VBT hull valves	
		1500	-Vent MBT's	
			-Check hydraulic pressure	
			-Cycle MBT and VBT hull valves	

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>JULY 3, 1969</u> 12-16	1200	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves -Check hull valves for proper position -Check LOX tanks for leaks -Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service) Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
Position: <u>PORT OF PAUL BEACH #2</u>		-Test emergency ballast alarm -Check equipment not in use in Off/Standby position -Vent Main Ballast Tanks -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Cabin Temperature _____ -Sea water temp. _____ -Cabin Humidity _____ -Cabin Pressure _____	
Weather: <u>CLEAR, CALM, WARM</u>			
14:20 ENERGISE 4 MOTORS - TURN MODE			
14:22 UNDERWAY IN AGLORD. MISSION #22 SENSOR LIGHTS ON : h 5 h 6 h 8			
14:46 SECURED PROPULSION			
14:46 RUNNING INSIDE THE TURNING BASIN UNDER TOW			
15:35 ENERGISE 4 MOTORS, TURN MODE			
15:55 UNDER TOW BY PRIVATEER			
15:56 SECURED PROPULSION <i>S. Abner</i>			
	1300	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1400	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1500	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull	

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Franklin Underway Log Sheet

		Time	Routine	Check
Date <u>3 JULY 1969</u>		1600	-Check bilges, penetrators and main battery fuse boxes for water -Cycle MBT and VBT hull valves	
16-20			-Check hull valves for proper position -Check LOX tanks for leaks	
Position: <u>INLET OF POUL BEACH</u>			-Vent Main Ballast Tanks -Check emergency ballast hydraulic pressure	
Weather: <u>CLEAR, CALM, WARM</u>			-Check VBT's for pressure buildup -Air flask readings (flasks in service)	
16:08	PASSING SEA BUOY 2 LN BEAM 170°		Flask #1 _____; #2 _____	
16:19	SALT WATER SENSOR # 1 "m"		#3 _____; #4 _____	
16:35	DROP SHOT STBD 50"		#5 _____; #6 _____	
16:37	" " PORT 50"			
	MARK # 7.5 STBD # 6.0 PORT		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings	
16:55	SHUT FRESH WATER TANK # 1 WATER CONTAMINATED OPEN TANK # 2 AND FLUSH FLUSHED 2 GALLONS THRU GALLEY SINK		-Carbon Dioxide % _____	
17:30	Still only # 1 S.W. sensor "m"		-Oxygen % _____	
18:29	SECURED COMPASS - THE MASTER COMPASS IN THE BAIL IS TO HOT		-Cabin Temperature _____	
18:50	Embarked Bushy, Dayh, May, Merrifield, Kaymer, Arnold, and Gregory aboard		-Sea water temp. _____	
19:07	TOW LINE DISCONNECTED	1700	-Cabin Humidity _____ -Cabin Pressure _____	
19:14	HEAT VENTS OPEN, RFD completed	1700	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
19:25	Sensors 5 & 9 "m"	1800	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
19:28	using Power (Dive # 38)		O ₂ % _____	
19:31	Fully submerged	1900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
19:32	Pumped All Trim Water Forward and still have a Bubble			
19:33	Double shot 10 sec Starboard			
19:34	" " " 10 sec Port			
	" " " 10 sec Starboard			
	" " " 10 sec Port			

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Continued on back

Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>3 JULY 1969</u>	2000	-Check bilges, penetrators and main battery fuse boxes for water	
20-24		-Cycle MBT and VBT hull valves	
Position: <u>5 mi S-E OF PALM BEACH</u>		-Check hull valves for proper position	
Weather: <u>165° 10 mi. from Palm Beach inlet</u>		-Check LOX tanks for leaks	
<u>Calm, partly cloudy.</u>		-Vent Main Ballast Tanks	
2004 DEPLOYED LIGH. PANELS Commenced NAVOCEANO Checkout (also NASA)		-Check emergency ballast hydraulic pressure	
2200 Sighted large shark near #1 motor. Ext. temp. 10.2°C Cabin temp 72°F Cabin pressure 1.02 humidity 57.5%		-Check VBT's for pressure buildup.	
2235 Checked for Hydrazine - 0.3 parts per million.		-Air Flask readings (flasks in service)	
2330 Calibrated Egan experiment at 120 meters.		Flask #1 _____; #2 _____; #3 _____; #4 _____; #5 _____; #6 _____	
		-Check equipment not in use in Off/Standby position	
		-Check F.W. valves shut	
		-Record battery readings	
		-Carbon Dioxide % _____	
		-Oxygen % _____	
		-Cabin Temperature _____	
		-Sea water temp. _____	
		-Cabin Humidity _____	
		-Cabin Pressure _____	
		-Conduct contaminant checks	
		2100 -Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
		2200 -Vent MBT's	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	
		2300 -Vent MBT's <u>O₂ % 20.05</u>	
		-Check hydraulic pressure	
		-Cycle MBT and VBT hull valves	

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Franklin Underway Log Sheet

Time Routine Check

Date 4 July 69

00-04

Position: 165° 10' W 10 mi from

Palm Beach Inlet

Weather: Calm, Cloudy

0015 F. Busby hit his head on escape trunk for 3rd time This dive

0100 WATCH RELIEVED BY PETERSON
 0122 PUT ON AGAIN BEACON
 0130 U/W PHONE CHECK O.K.
 0200 U/W PHONE CHECK O.K.
 0230 " " " "
 0300 " " " "
 0330 " " " "

- 0000 -Check bilges, penetrators and main battery fuse boxes for water ✓
- Cycle MBT and VBT hull valves ✓
- Check hull valves for proper position ✓
- Check LOX tanks for leaks ✓
- Vent Main Ballast Tanks ✓
- Check emergency ballast hydraulic pressure ✓
- Check VBT's for pressure buildup ✓
- Record air flask readings: ✓
- Flask #1 _____; #2 174;
- #3 _____; #4 _____;
- #5 _____; #6 _____
- Check equipment not in use in Off/Standby position ✓
- Check F.W. valves shut ✓
- Record battery readings 10
- Carbon Dioxide % 0.5
- Oxygen % 20.3
- Cabin Temperature 67°
- Cabin Pressure _____
- Sea Water Temp 11.4°C
- Cabin Humidity 62%
- 0100 -Vent MBT's ✓
- Check hydraulic pressure ✓
- Cycle MBT and VBT hull valves ✓
- 0200 -Vent MBT's ✓
- Check hydraulic pressure ✓
- Cycle MBT and VBT hull valves 0.7% 20.1
- 0300 -Vent MBT's ✓
- Check hydraulic pressure ✓
- Cycle MBT and VBT hull valves ✓

Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>4 JULY 1969</u>	0400	-Check bilges, penetrators and main battery fuse boxes for water X	
04-08		-Cycle MBT and VBT hull valves X	
Position: <u>165° 10 mi FROM PALM BEACH INLET</u>		-Check hull valves for proper position X	
Weather:		-Check LOX tanks for leaks X	
04'00 <u>BEAR LITTLE SALT WATER IN BILGE FRAME #1 AND #2</u> <u>U/W PHONE CHECK OK.</u> <u>WATCH RELIEVED BY GREGORY S. Cabant</u>		-Vent Main Ballast Tanks X	
0500 <u>lost 1,000 WATT DC LIFE STBD SIDE LO FR-1</u> <u>TEMP 60°</u> <u>Humidity 66%</u> <u>62% 20.5% - 180 - 0605</u>		-Check emergency ballast hydraulic pressure X	
0630 <u>PSI hox 185 - (LOX)</u>		-Check VBT's for pressure buildup X	
0700 <u>64 Humidity</u> <u>60 TEMP</u> <u>11° OUTSIDE LOWER</u>		-Record air flask readings (flasks in service)	
<u>WATCH RELIEVED BY Dow K.</u>	0500	Flask #1 _____; #2 <u>162</u> ; #3 _____; #4 _____; #5 _____; #6 _____	
		-Check equipment not in use in Off/Standby position X	
		-Record battery readings X	
		-Check F.W. valves shut X	
		-Carbon Dioxide% <u>0.5%</u>	
		-Oxygen % <u>20.1%</u>	
		-Cabin Temperature <u>62°F</u>	
		-Sea Water Temp. <u>11.4°C</u>	
		-Cabin Pressure <u>1.02</u>	
		-Cabin Humidity <u>65%</u>	
	0600	-Vent MBT's ✓	
		-Check hydraulic pressure <u>136</u>	
		-Cycle MBT and VBT hull valves	
		-Vent MBT's ✓	
		-Check hydraulic pressure <u>136</u>	
		-Cycle MBT and VBT hull valves <u>0.2% 20.5</u>	
		-Vent MBT's ✓	
		-Check hydraulic pressure <u>136</u>	
		-Cycle MBT and VBT hull valves	

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>4 JULY 1969</u> 08-12	0800	-Replace LiOH panels -Conduct thorough boat inspection	✓ ✓
Position: <u>165° 10 mi FROM PALM BEACH INLET</u>		-Cycle MBT and VBT hull valves -Check hull valves for proper position	✓ ✓
Weather: <u>GOOD SEA 0/01</u>		-Check LOX tanks for leaks -Vent Main Ballast Tanks	✓ ✓
0720 Checked for hydrazine. Found 6.1 ppm on 1st try, none on 2nd try.		-Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service)	✓ ✓ ✓
0800 Privateer out to 4400 ^{feet} yards Communications <u>POOR</u>		Flask #1 _____; #2 <u>172</u> ; #3 _____; #4 _____; #5 _____; #6 _____	
0845 Checked for hydrazine - found just a tiny trace - maybe 0.1 ppm WJG		-Check equipment not in use in Off/Standby position ✓ -Check F.W. valves shut ✓ -Record battery readings <u>NO</u>	
Log continued next sheet		-Carbon Dioxide % <u>0.5</u> -Oxygen % <u>20.7</u> -Sea Water Temp. <u>Approx 8°C</u> -Cabin Humidity <u>65.5%</u> -Cabin Pressure <u>1.02</u> -LOX pressure <u>57°F</u> -Fwd <u>180°</u> Aft _____	
		-Record F.W. & LOX tank levels <u>NO</u>	
	0900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
	1000	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves <u>0.2%</u>	
	1100	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	

NOTE: If motors have been idle, meggar before using.

Revision 1

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Franklin Underway Log Sheet

	Time	Routine	Check
Date <u>4 July 69</u> 08-12 (cont.)	0800	-Replace LiOH panels -Conduct thorough boat inspection	
Position: <u>16.5° 14' W from</u> <u>port of Palm Beach</u>		-Cycle MBT and VBT hull valves -Check hull valves for proper position	
Weather: <u>Cal m</u>		-Check LOX tanks for leaks -Vent Main Ballast Tanks	
0922 Preparing to drift about 10-20 ft. altitude. Blowing STD VBT		-Check emergency ballast hydraulic pressure -Check VBT's for pressure buildup -Air flask readings (flasks in service)	
0925 Blowing joint VBT		Flask #1 _____; #2 _____;	
0930 Drilled shot 100 th std. (10 sec.) 100 th port (10 sec.) 10 sec. std. 10 sec. port. 5 sec. std.		#3 _____; #4 _____; #5 _____; #6 _____	
0935 D gray at 25 volts! Can't get Fathometer up to 24 v.		-Check equipment not in use in Off/Standby position -Check F.W. valves shut -Record battery readings -Carbon Dioxide % _____ -Oxygen % _____ -Sea Water Temp. _____ -Cabin Humidity _____ -Cabin Pressure _____	
0936 Drilled shot:		-LOX pressure _____	
Ext. temp. 13.5°C 5 sec port 5 sec std.		-Fwd _____ Aft _____	
Internal 59°F 5 sec port		-Record F.W. & LOX tank levels	
0940 Ascending			
0945 Drilled shot 2 sec std. altitude 15 ft	0900	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves	
0952 Drilled 1 sec port.	1000	-Vent MBT's -Check hydraulic pressure	✓
0955 Conducting sonar training for May + Anderson		-Cycle MBT and VBT hull valves O ₂ % <u>21.1</u>	✓
0912 About 70 amps out of D group - meter on battery monitor is pegged.	1100	-Vent MBT's -Check hydraulic pressure -Cycle MBT and VBT hull valves NOTE: If motors have been idle, meggar before using.	

Franklin Underway Log Sheet

Date 4 July

12-16

Position: 165° 10 mi. from P. Beach

1 mbst

Weather: Calm

Time Routine Check

- 1200 -Check bilges, penetrators and main battery fuse boxes for water
 -Cycle MBT and VBT hull valves
 -Check hull valves for proper position
 -Check LOX tanks for leaks
 -Check emergency ballast hydraulic pressure
 -Check VBT's for pressure buildup.
 -Air flask readings (flasks in service)
 Flask #1 _____; #2 _____;
 #3 _____; #4 _____;
 #5 _____; #6 _____
 -Test emergency ballast alarm
 -Check equipment not in use in Off/Standby position
 -Vent Main Ballast Tanks
 -Check F.W. valves shut
 -Record battery readings
 -Carbon Dioxide % _____
 -Oxygen % _____
 -Cabin Temperature _____
 -Sea water temp. _____
 -Cabin Humidity _____
 -Cabin Pressure _____

1206 Proceeding to 30 meters

1212 Clear to surface. Using full speed in 2 meters.

1250 Disembarked Brady, Blair, Tray - entangled Epler, Hogan, Terana, Costin & Backman

1252 Ready to dive - Sounding 312 ft.

1255 Diving (Dive #39)

1300 Divers in water

1304 Hammerhead spotted - Divers surfaced - OK,

1312 on bottom 92 meters

1327 ascending

1335 Surfaced. Flooding just VBT

1350 Disembarked - Costin, Hogan, Terana, & Backman
 Entangled - Rand, Sorensen, Pollio, Tyler, and Heckman

1351 Diving. Sounding 140 ft Using notes 1+2 (Dive #40)

1355 hovering at full pumps 15 meters for divers to take photos - Raising port VBT

- 1300 -Vent MBT's
 -Check hydraulic pressure
 -Cycle MBT and VBT hull valves

- 1400 -Vent MBT's
 -Check hydraulic pressure
 -Cycle MBT and VBT hull valves O₂ % _____

- 1500 -Vent MBT's
 -Check hydraulic pressure
 -Cycle MBT and VBT hull

1401 Descending to bottom.

1405 Bottomed. Too much current.

1409 ascending to 15 meters Blowing both VBT's

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 12 May 1969