



ÖSTERREICHISCHER HOCHSEEYACHTSPORT-VERBAND

# Beilagen

zu den Kartenaufgaben

## FB3

**(Nur für Übungszwecke, für die Praktische Navigation ungeeignet !)**

*Bitte keine Markierungen in diesen Blättern*

# FRANCE – ST. MALO

LAT 48°38'N LONG 2°02'W

TIME ZONE -0100

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

YEAR 2000

MAY			JUNE			JULY			AUGUST																					
Time	m																													
<b>1</b>	0458	10.3	<b>16</b>	0016	2.4	<b>1</b>	0024	2.1	<b>16</b>	0110	2.6	<b>1</b>	0053	1.9	<b>16</b>	0125	2.7	<b>1</b>	0233	1.0	<b>16</b>	0222	2.2							
	1143	2.8		0545	11.1		0555	11.5		0640	10.9		0624	11.7		0659	10.7		0800	12.4		0752	11.3		0800	12.4		0752	11.3	
M	1724	10.7	TU	1243	2.2	TH	1251	1.7	F	1330	2.6	SA	1320	1.6	SU	1343	2.8	TU	1454	1.1	W	1438	2.3		2018	12.8		2007	11.6	
				1810	11.4		1819	11.9		O	1859	11.2		●	1848	12.2		O	1916	11.1										
<b>2</b>	0010	2.6	<b>17</b>	0102	2.1	<b>2</b>	0118	1.6	<b>17</b>	0148	2.4	<b>2</b>	0150	1.4	<b>17</b>	0203	2.6	<b>2</b>	0324	0.8	<b>17</b>	0258	2.0		0324	0.8	<b>17</b>	0258	2.0	
	0544	11.1		0627	11.4		0644	12.1		0717	11.0		0718	12.2		0736	10.9		0847	12.6		0825	11.4		0847	12.6		0825	11.4	
TU	1234	2.0	W	1325	2.0	F	1343	1.3	SA	1405	2.5	SU	1415	1.3	M	1419	2.7	W	1541	1.1	TH	1512	2.2		1541	1.1	TH	1512	2.2	
	1807	11.5		1849	11.6	●	1906	12.4		1934	11.3		1939	12.6		1951	11.2		2102	12.9		2039	11.7		2102	12.9		2039	11.7	
<b>3</b>	0059	1.9	<b>18</b>	0141	2.0	<b>3</b>	0209	1.1	<b>18</b>	0223	2.4	<b>3</b>	0244	1.0	<b>18</b>	0239	2.4	<b>3</b>	0409	0.9	<b>18</b>	0332	1.9		0409	0.9	<b>18</b>	0332	1.9	
	0628	11.8		0705	11.5		0733	12.4		0752	11.0		0810	12.4		0810	11.0		0930	12.4		0857	11.5		0930	12.4		0857	11.5	
W	1323	1.4	TH	1401	2.0	SA	1432	1.0	SU	1438	2.5	M	1506	1.2	TU	1453	2.6	TH	1623	1.3	F	1546	2.1		1623	1.3	F	1546	2.1	
	1850	12.1	O	1924	11.7		1953	12.7		2007	11.3		2029	12.7		2024	11.3		2144	12.6		2111	11.7		2144	12.6		2111	11.7	
<b>4</b>	0147	1.4	<b>19</b>	0216	1.9	<b>4</b>	0258	1.0	<b>19</b>	0256	2.4	<b>4</b>	0335	1.0	<b>19</b>	0314	2.4	<b>4</b>	0450	1.2	<b>19</b>	0406	2.0		0450	1.2	<b>19</b>	0406	2.0	
	0711	12.3		0740	11.5		0820	12.5		0826	11.0		0900	12.3		0844	11.0		1010	12.0		0930	11.5		1010	12.0		0930	11.5	
TH	1409	1.0	F	1433	2.0	SU	1518	1.1	M	1510	2.6	TU	1553	1.3	W	1527	2.6	F	1701	1.7	SA	1618	2.2		1701	1.7	SA	1618	2.2	
	●	1931	12.6		1956	11.7		2039	12.7		2039	11.2		2116	12.6		2057	11.3		2223	12.0		2144	11.5		2223	12.0		2144	11.5
<b>5</b>	0232	1.0	<b>20</b>	0248	2.0	<b>5</b>	0345	1.0	<b>20</b>	0329	2.5	<b>5</b>	0423	1.1	<b>20</b>	0348	2.4	<b>5</b>	0527	1.8	<b>20</b>	0439	2.2		0527	1.8	<b>20</b>	0439	2.2	
	0753	12.6		0813	11.4		0908	12.3		0859	10.8		0946	12.1		0917	11.0		1047	11.4		1003	11.2		1047	11.4		1003	11.2	
F	1453	0.8	SA	1503	2.1	M	1603	1.4	TU	1541	2.8	W	1638	1.6	TH	1559	2.7	SA	1737	2.4	SU	1651	2.5		1737	2.4	SU	1651	2.5	
	2012	12.8		2027	11.5		2125	12.4		2111	10.9		2201	12.2		2130	11.1		2301	11.3		2219	11.1		2301	11.3		2219	11.1	
<b>6</b>	0315	0.9	<b>21</b>	0319	2.1	<b>6</b>	0431	1.3	<b>21</b>	0402	2.7	<b>6</b>	0508	1.5	<b>21</b>	0421	2.5	<b>6</b>	0601	2.6	<b>21</b>	0513	2.6		0601	2.6	<b>21</b>	0513	2.6	
	0835	12.6		0844	11.2		0955	11.8		0933	10.6		1031	11.6		0951	10.8		1125	10.6		1039	10.8		1125	10.6		1039	10.8	
SA	1534	0.9	SU	1532	2.4	TU	1647	1.9	W	1612	3.1	TH	1721	2.1	F	1632	2.8	SU	1813	3.1	M	1727	3.0		1813	3.1	M	1727	3.0	
	2053	12.7		2057	11.2		2211	11.8		2145	10.6		2246	11.6		2204	10.9		2341	10.4		2256	10.6		2341	10.4		2256	10.6	
<b>7</b>	0357	1.0	<b>22</b>	0349	2.5	<b>7</b>	0517	1.9	<b>22</b>	0435	3.0	<b>7</b>	0551	2.1	<b>22</b>	0456	2.8	<b>7</b>	0637	3.4	<b>22</b>	0551	3.1		0637	3.4	<b>22</b>	0551	3.1	
	0917	12.3		0915	10.8		1044	11.2		1008	10.3		1116	11.0		1026	10.6		1207	9.9		1119	10.3		1207	9.9		1119	10.3	
SU	1614	1.3	M	1559	2.9	W	1734	2.5	TH	1645	3.4	F	1805	2.7	SA	1708	3.1	M	1854	3.8	TU	1810	3.5		1854	3.8	TU	1810	3.5	
	2134	12.3		2127	10.8		2301	11.1		2221	10.2		2331	11.0		2241	10.5		2343	10.0		2343	10.0		2343	10.0		2343	10.0	
<b>8</b>	0438	1.5	<b>23</b>	0418	2.9	<b>8</b>	0606	2.5	<b>23</b>	0511	3.3	<b>8</b>	0635	2.7	<b>23</b>	0533	3.1	<b>8</b>	0028	9.6	<b>23</b>	0638	3.6		0028	9.6	<b>23</b>	0638	3.6	
	1001	11.7		0947	10.3		1136	10.5		1046	9.9		1202	10.4		1104	10.2		0722	4.1		1211	9.8		0722	4.1		1211	9.8	
M	1655	2.0	TU	1628	3.4	TH	1825	3.1	F	1724	3.8	SA	1851	3.3	SU	1748	3.4	TU	1303	9.2	W	1906	4.0		1303	9.2	W	1906	4.0	
	2218	11.6		2159	10.2		2355	10.5		2302	9.8					2322	10.1		1951	4.4						1951	4.4			
<b>9</b>	0522	2.2	<b>24</b>	0449	3.4	<b>9</b>	0701	3.0	<b>24</b>	0554	3.7	<b>9</b>	0021	10.3	<b>24</b>	0616	3.4	<b>9</b>	0134	8.9	<b>24</b>	0048	9.5		0134	8.9	<b>24</b>	0048	9.5	
	1048	10.9		1022	9.8		1235	9.9		1131	9.5		0723	3.3		1150	9.9		0824	4.6		0743	4.1		0824	4.6		0743	4.1	
TU	1739	2.8	W	1659	3.9	F	1924	3.6	SA	1811	4.1	SU	1255	9.8	M	1837	3.8	W	1422	8.9	TH	1327	9.4		1422	8.9	TH	1327	9.4	
	2307	10.8		2235	9.7		2353	9.5		2353	9.5		1945	3.8					2109	4.7		2028	4.2		2109	4.7		2028	4.2	
<b>10</b>	0611	2.9	<b>25</b>	0527	3.9	<b>10</b>	0058	10.0	<b>25</b>	0646	3.9	<b>10</b>	0120	9.7	<b>25</b>	0015	9.7	<b>10</b>	0302	8.7	<b>25</b>	0220	9.3		0302	8.7	<b>25</b>	0220	9.3	
	1145	10.1		1103	9.3		0803	3.4		1228	9.3		0818	3.8		0709	3.7		0946	4.6		0911	4.1		0946	4.6		0911	4.1	
W	1834	3.5	TH	1740	4.4	SA	1343	9.6	SU	1911	4.2	M	1401	9.4	TU	1248	9.6	TH	1547	9.0	F	1503	9.5		1547	9.0	F	1503	9.5	
				2322	9.1		2031	3.8					2048	4.0		1939	4.0		2229	4.4		2202	3.9		2229	4.4		2202	3.9	
<b>11</b>	0008	10.0	<b>26</b>	0616	4.3	<b>11</b>	0209	9.7	<b>26</b>	0058	9.3	<b>11</b>	0230	9.4	<b>26</b>	0123	9.5	<b>11</b>	0418	9.0	<b>26</b>	0353	9.7		0418	9.0	<b>26</b>	0353	9.7	
	0715	3.5		1201	8.8		0910	3.5		0750	3.9		0924	4.0		0817	3.8		1101	4.3		1038	3.6		1101	4.3		1038	3.6	
TH	1258	9.5	F	1839	4.7	SU	1455	9.7	M	1338	9.3	TU	1513	9.4	W	1402	9.6	F	1651	9.6	SA	1627	10.2		1651	9.6	SA	1627	10.2	
	1946	4.0					2140	3.7		2024	4.2		2158	4.0		2058	4.0		2332	3.8		2320	3.1		2332	3.8		2320	3.1	
<b>12</b>	0127	9.6	<b>27</b>	0031	8.8	<b>12</b>	0320	9.8	<b>27</b>	0213	9.4	<b>12</b>	0342	9.4	<b>27</b>	0244	9.6	<b>12</b>	0515	9.6	<b>27</b>									

## FRANCE, NORTH COAST

No.	PLACE	Lat. N.	Long. W.	TIME DIFFERENCES				HEIGHT DIFFERENCES (IN METRES)				M.L. Z <sub>0</sub> m.
				High Water Zone -0100	Low Water	MHWS	MHWN	MLWN	MLWS			
1600	<b>CHERBOURG</b>	(see page 78)		<b>0300</b> and <b>1500</b>	<b>1000</b> and <b>2200</b>	<b>0400</b> and <b>1600</b>	<b>1000</b> and <b>2200</b>	<b>6.4</b>	<b>5.0</b>	<b>2.5</b>	<b>1.1</b>	
1596	Rade de la Capelle	49 25	1 05	+0115	+0050	+0130	+0117	+0.8	+0.9	+0.1	+0.1	4.40
1597	Iles Saint Marcouf	49 30	1 08	+0118	+0052	+0125	+0110	+0.6	+0.7	+0.1	+0.1	4.28
1598	St. Vaast-la-Hougue	49 34	1 16	+0120	+0050	+0120	+0115	+0.3	+0.5	0.0	-0.1	4.12
1599	Barfleur	49 40	1 15	+0110	+0055	+0052	+0052	+0.1	+0.3	0.0	0.0	3.94
1600	<b>CHERBOURG</b>	49 39	1 38	STANDARD PORT				See Table V				3.81
1601	Omonville	49 42	1 50	-0010	-0010	-0015	-0015	-0.1	-0.1	0.0	0.0	3.77
1602	Goury	49 43	1 57	-0100	-0040	-0105	-0120	+1.7	+1.6	+1.0	+0.3	5.06
1614	<b>ST. MALO</b>	(see page 82)		<b>0100</b> and <b>1300</b>	<b>0800</b> and <b>2000</b>	<b>0300</b> and <b>1500</b>	<b>0800</b> and <b>2000</b>	<b>12.2</b>	<b>9.3</b>	<b>4.2</b>	<b>1.5</b>	
1609	Iles Chausey	48 52	1 49	+0005	+0005	+0015	+0015	+0.8	+0.7	+0.6	+0.4	7.37
1610	Dielette	49 33	1 52	+0045	+0035	+0020	+0035	-2.5	-1.9	-0.7	-0.3	5.44
1611	Carteret	49 22	1 47	+0030	+0020	+0015	+0030	-1.6	-1.2	-0.5	-0.2	5.86
1611a	Portbail	49 18	1 45	+0030	+0025	+0025	+0030	-0.8	-0.6	-0.2	-0.1	6.30
1611b	St. Germain sur Ay	49 14	1 36	+0025	+0025	+0035	+0035	-0.7	-0.5	0.0	+0.1	6.48
1611c	Le Senequet	49 05	1 40	+0015	+0015	+0023	+0023	-0.3	-0.3	+0.1	+0.1	6.62
1611d	Regneville sur Mer	49 01	1 33	+0010	+0010	+0030	+0020	+0.4	+0.3	+0.2	0.0	7.05
1612	Granville	48 50	1 36	+0005	+0005	+0020	+0010	+0.7	+0.5	+0.3	+0.1	7.15
1613	Cancale	48 40	1 51	-0002	-0002	+0010	+0010	+0.8	+0.6	+0.3	+0.1	7.20
1614	<b>ST. MALO</b>	48 38	2 02	STANDARD PORT				See Table V				6.78
1614a	Ile des Hebihens	48 37	2 11	-0002	-0002	-0005	-0005	-0.2	-0.2	-0.1	-0.1	6.65
1614b	St. Cast	48 38	2 15	-0002	-0002	-0005	-0005	-0.2	-0.2	-0.1	-0.1	6.64
1615	Erquy	48 38	2 28	-0010	-0005	-0023	-0017	-0.6	-0.5	0.0	0.0	6.51
1616	Dahouet	48 35	2 34	-0010	-0010	-0025	-0020	-0.9	-0.7	-0.2	-0.2	6.32
1617	Le Legue (Buoy)	48 34	2 41	-0005	-0005	-0025	-0015	-0.8	-0.5	-0.2	-0.1	6.40
1618	Binic	48 36	2 49	-0008	-0008	-0030	-0015	-0.8	-0.7	-0.2	-0.2	6.35
1619	Portrieux	48 38	2 49	-0010	-0005	-0025	-0015	-1.0	-0.7	-0.2	-0.1	6.30
1620	Paimpol	F 48 47	3 02	-0005	-0010	-0035	-0025	-1.4	-0.9	-0.4	-0.1	6.12
1621	Ile de Brehat	48 51	3 00	-0008	-0013	-0040	-0037	-1.8	-1.3	-0.4	-0.2	5.89
1622	Les Heaux de Brehat	48 55	3 05	-0018	-0017	-0050	-0050	-2.4	-1.7	-0.6	-0.2	5.61
1623	Lezardrieux	48 47	3 06	-0010	-0010	-0047	-0037	-1.7	-1.3	-0.5	-0.2	5.90
1624	Port Beni	48 51	3 10	-0017	-0022	-0100	-0045	-2.4	-1.6	-0.5	-0.1	5.70
1625	Treguier	48 47	3 13	-0005	-0010	-0055	-0040	-2.3	-1.6	-0.6	-0.2	5.72
1625a	Perros-Guirec	48 49	3 28	-0030	-0040	-0115	-0055	-2.9	-1.9	-0.8	-0.2	5.45
1626	Ploumanac'h	48 50	3 29	-0023	-0033	-0112	-0053	-2.9	-1.9	-0.6	-0.1	5.49
1638	<b>BREST</b>	(see page 86)		<b>0000</b> and <b>1200</b>	<b>0600</b> and <b>1800</b>	<b>0000</b> and <b>1200</b>	<b>0600</b> and <b>1800</b>	<b>6.9</b>	<b>5.4</b>	<b>2.6</b>	<b>1.0</b>	
1628	Trebeurden	48 46	3 35	+0100	+0110	+0120	+0100	+2.3	+1.9	+0.9	+0.4	5.48
1628a	Locquirec	48 42	3 38	+0058	+0108	+0120	+0100	+2.2	+1.8	+0.8	+0.3	5.39
1628b	Anse de Primel	48 43	3 50	+0100	+0110	+0120	+0100	+2.1	+1.7	+0.8	+0.3	5.32
<i>Rade de Morlaix</i>												
1629	Morlaix (Chateau du Taureau)	48 41	3 53	+0055	+0105	+0115	+0055	+2.0	+1.7	+0.8	+0.3	5.27
1630	Roscoff	F 48 43	3 58	+0055	+0105	+0115	+0055	+1.9	+1.6	+0.8	+0.3	5.25
1631	Ile de Batz	48 44	4 00	+0045	+0100	+0105	+0055	+2.0	+1.6	+0.9	+0.4	5.25
1631a	Brignogan	48 40	4 19	+0040	+0045	+0058	+0038	+1.5	+1.2	+0.6	+0.2	4.92
<i>L'Aber Vrac'h</i>												
1632	Ile Cezon	48 36	4 34	+0030	+0030	+0040	+0035	+0.8	+0.7	+0.2	0.0	4.46
1633	Aber Benoit	48 35	4 37	+0022	+0025	+0035	+0020	+1.0	+0.9	+0.4	+0.2	4.68
1633a	Portsall	48 34	4 43	+0015	+0020	+0025	+0015	+0.6	+0.5	+0.1	0.0	4.37
1633b	L'Aber-Ildut	48 28	4 45	+0010	+0010	+0023	+0010	+0.4	+0.3	0.0	0.0	4.22
<i>Ushant (Ouessant)</i>												
1634	Baie de Lampaul	48 27	5 06	+0005	+0005	-0005	+0003	0.0	-0.1	-0.1	0.0	3.95

### SEASONAL CHANGES IN MEAN LEVEL

No.	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sep. 1	Oct. 1	Nov. 1	Dec. 1	Jan. 1
1540 - 1571	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	+0.1	+0.1	+0.1	0.0
1572 - 1581a	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	+0.1	+0.1	0.0	0.0	0.0
1581b - 1602	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	+0.1	+0.1	+0.1	0.0
1609 - 1638	Negligible												