

**FEDERAL WATERWAYS AND SHIPPING ADMINISTRATION**  
**Federal Waterways and Shipping Board Emden**  
**Reference number: 3.213.3/648**

**5<sup>th</sup> Addendum**  
**regarding river and waterways police approval**  
**[strom- und schiffahrtspolizeiliche Genehmigung – SSG]**  
**SSG – No. 06/03**

In response to your application dated 15 October 2008, the company E.ON Netz Offshore GmbH in Bayreuth, represented by the company OCEANTEAM Power & Umbilical GmbH, Schleusenstrasse 22a, 26382 Wilhelmshaven, has been issued a retroactive decision regarding river and waterways police approval, no. 06/03 dated 23 October 2003 (SSG), in accordance with Section 31 of the Federal Waterway Act [*Bundeswasserstraßengesetz – WaStrG*], relating to the cable-laying works for the wind farm “ALPHA-VENTUS”, taking place in the federal shipping lane, in the Terschelling-German Bight traffic separation scheme (TSS) between buoy pairs TG 9/10 and TG 11/12.

The addendum is only transferable with the agreement of the Federal Waterways and Shipping Board Emden [*Wasser- und Schifffahrtsamt – WSA*].

The addendum does not give authorization to infringe on the rights of third parties or to utilise items that belong to others, or premises and equipment that are the property of others; it shall not replace the administrative acts that are required in accordance with other statutory provisions. The retroactive decision shall also not replace the agreements under private law which are to be concluded with the federal authorities; it expressly does not authorize the use of premises and equipment that belong to the federal authorities.

**The following documents are binding for the addendum:**

1. Application dated 15 October 2008 submitted to the Federal Waterways and Shipping Board in Wilhelmshaven accompanied by Annexes (e-mail, floor plan, equipment pool)
2. SSG 06/03 dated 23 October 2006
3. Addendum 1 to 4 relating to SSG 06/03

**The 5<sup>th</sup> addendum will be issued under the following conditions and obligations:**

Insert after 3:

**4 Obligations and conditions for additional cable-laying works within the traffic separation scheme**

- 4.1 The work must be completed by 31 November 2008.
- 4.2 The retroactive decision only concerns the area located south of the separation zone of the TSS ("Eastbound Lane").
- 4.3 The works must only be carried out between sunrise and sunset and in good visibility conditions.
- 4.4 The commencement and completion of works, interruptions to work and any other events must be notified to the traffic centre of the Federal Waterways and Shipping Board in Wilhelmshaven via VHF (30-300 MHz) (channel 80, or 79) or by telephone (+49 (0) 4421/489282).
- 4.5 Two suitable support vessels must be used.
- 4.6 The support vessels and cable-laying vessels should be marked according to regulation 27 (b) of the International Regulations for Preventing Collisions.
- 4.7 The two support vessels must be positioned at different points (2 NM and 5 NM) to the west of the cable-laying vessel, on the southern edge of the TSS.
- 4.8 The traffic centre must always be able to contact the support vessels via VHF (30-300 MHz) (audio output/"stand by" on VHF (30-300 MHz) – channels 80, 16 or 79).
- 4.9 Vessels in the traffic route that run the risk of entering into the vicinity of the cable-laying vessel (constant bearing, etc.) must be contacted in good time. The vessels shall be contacted by means of VHF (30-300 MHz) (channel 16), AIS, Aldis lamp, white flares, Typhon, etc. If necessary, the support vessel must move in the opposite direction to the vessel in question.
- 4.10 The traffic centre must be informed immediately in the case of a near-miss.
- 4.11 The cable-laying vessel must broadcast a safety message on a working channel at a quarter to and a quarter past each hour whilst located in the TSS (after announcement on VHF (30-300 MHz) – channel 16). The traffic centre will

broadcast corresponding traffic information every 30 minutes on the hour and half past the hour.

**Note:**

If, during operation of the equipment, obstructions are caused to the condition required for shipping within the federal shipping lane or for the safety and passage of shipping, that are not included in the obligations and conditions of the approval and the retroactive decision, the Federal Waterways and Shipping Board may issue the contractor further obligations and conditions to rectify the damage.

**Expenses:**

A calculation of expenses will be issued separately.

**Reasons explaining the conditions and obligations:**

The conditions and obligations are necessary to maintain the federal shipping lane as a traffic route and to guarantee the safety and passage of shipping.

**Advice on legal remedies:**

This 5<sup>th</sup> addendum can be opposed against within one month of being announced. The opposition must be submitted to the Federal Waterways and Shipping Board Emden in Emden in writing or on record.

[Stamp:] Federal  
Waterways and  
Shipping Board  
Emden

Federal Waterways and Shipping Board Emden  
On behalf of  
[signature]  
Memmen  
Construction Authority Officer [*Bauamtmann*]



# BUNDESGESETZBLATT

## FÜR DIE REPUBLIK ÖSTERREICH

Jahrgang 1981

Ausgegeben am 13. April 1981

71. Stück

189. Verordnung: Seeschiffahrts-Verordnung

### 189. Verordnung des Bundesministers für Verkehr vom 8. April 1981 über die Seeschiffahrt (Seeschiffahrts-Verordnung)

Auf Grund der §§ 15 Abs. 1 und 4, 25 Abs. 2, 28 Abs. 2, 29 Abs. 5, 33 Abs. 3, 34, 35 und 36 Abs. 2 des Seeschiffahrtsgesetzes, BGBl. Nr. 174/1981, und zwar hinsichtlich des § 25 Abs. 2 Z 2 im Einvernehmen mit dem Bundesminister für Justiz, der §§ 28 Abs. 2, 34 und 36 Abs. 2 im Einvernehmen mit dem Bundesminister für soziale Verwaltung und des § 34 auch im Einvernehmen mit dem Bundesminister für Gesundheit und Umweltschutz sowie der §§ 5 und 8 des Bundesgesetzes zur Erfüllung des Internationalen Übereinkommens von 1960 zum Schutz des menschlichen Lebens auf See, der Regeln zur Verhütung von Zusammenstößen auf See sowie des Internationalen Freibord-Übereinkommens von 1966, BGBl. Nr. 382/1972, wird verordnet:

#### TEIL A

#### Grundsätzliche Bestimmungen

##### I. ABSCHNITT

##### Allgemeines

##### Anwendungsbereich

§ 1. (1) Die Bestimmungen der Teile B bis K dieser Verordnung finden auf österreichische Seeschiffe nach Maßgabe der §§ 16, 27, 41, 44, 59, 75, 82, 151, 169 und 184 Anwendung.

(2) Die Bestimmungen des Teils I dieser Verordnung finden auf Besatzungsmitglieder österreichischer Seeschiffe nach Maßgabe des § 189 Anwendung.

(3) Die Bestimmungen des Teils M dieser Verordnung finden auf österreichische Staatsbürger nach Maßgabe des § 194 Anwendung.

##### Begriffsbestimmungen

§ 2. Im Sinne dieser Verordnung gilt als

1. „Österreichisches Seeschiff“: ein Seeschiff, das nach dem Seeschiffahrtsgesetz zur Seeschiffahrt zugelassen ist (im folgenden kurz Schiff genannt);

2. „Seeschiff“: ein Fahrzeug, das nach Größe, Bauart und Ausrüstung für Fahrten auf See verwendet werden kann (Fahrgastschiff, Frachtschiff, Jacht, Sonderfahrzeug). Als solches gilt nicht ein Ruder- und Paddelboot, Schlauchboot sowie ein Bootstyp, der in der Regel nur für Fahrten in unmittelbarer Nähe der Küste verwendbar ist;
3. „Fahrgastschiff“: ein Fahrzeug, das für die Beförderung von mehr als zwölf Fahrgästen bestimmt ist;
4. „Frachtschiff“: ein Fahrzeug, das für die Beförderung von Gütern bestimmt ist;
5. „Jacht“: ein Fahrzeug, das für Sport- oder Vergnügungszwecke bestimmt ist;
  - a) Motorjacht: ein Fahrzeug, das seinen Antrieb vornehmlich durch einen Motor erhält, unabhängig davon, ob auch eine Stützbesegelung vorhanden ist,
  - b) Segeljacht: ein Fahrzeug, das seinen Antrieb vornehmlich durch Wind erhält, auch wenn ein Motor eingebaut oder angehängt ist. Darunter fallen auch die sogenannten Motorsegler;
6. „Sonderfahrzeug“: ein Fahrzeug, das nicht unter Z 3 bis 5 fällt, insbesondere
  - a) ein Fahrzeug, das für die Beförderung von zwölf oder weniger Fahrgästen bestimmt ist,
  - b) ein Fahrzeug ohne eigenen Antrieb, wie Leichter, Prahm,
  - c) Schlepper, Fischereifahrzeug, Barkasse,
  - d) schwimmendes Gerät, wie Bagger, Schwimmkran, Ramme, Bohrinsel, Hubinsel;
7. „Watt- oder Tagesfahrt“: die Fahrt in Küstennähe und auf geschützten Gewässern, wie Golfen, Förden und Watten. Die Watt- oder Tagesfahrt erstreckt sich auf einen Bereich von 2 Seemeilen, gemessen von der Küste, das ist vom Festland bzw. von Inseln (Fahrbereich 1);
8. „Küstenfahrt“: die Fahrt zwischen nahegelegenen Häfen entlang der Küste. Die Küstenfahrt erstreckt sich auf einen Bereich von 20 Seemeilen, gemessen von der Küste (Fahrbereich 2);

men, Geburtsdatum, Geburtsort, Staatsangehörigkeit, amtlichem Identitätsausweis, ordentlichem Wohnsitz und Datum der Einschiffung.

(2) Die Eintragungen gemäß Abs. 1 Z 2 bzw. Z 3 sind durch Unterschrift zu bestätigen.

(3) Beendet ein Besatzungsmitglied den Dienst an Bord, so ist es in der Musterrolle unter Angabe des Datums und der Gründe des Ausscheidens zu streichen.

(4) Verläßt eine Person gemäß Abs. 1 Z 3 nach Beendigung der Reise das Schiff, so ist sie aus der Musterrolle unter Angabe des Datums zu streichen.

(5) Die Minderjährigkeit eines Besatzungsmitgliedes ist in der Spalte sonstige Bemerkungen anzuführen.

#### Form

§ 186. (1) Die Eintragungen sind unter fortlaufender Nummer mit Tinte oder Kugelschreiber zu fertigen und haben in deutscher oder englischer Sprache zu erfolgen.

(2) Die Musterrolle ist, bevor sie in Gebrauch genommen wird, mit fortlaufenden Seitenzahlen zu versehen. Das Herausreißen von Blättern ist unstatthaft. Etwaige Änderungen der Eintragungen sind durch einfaches Durchstreichen so zu bewirken, daß das Durchstrichene leserlich bleibt, Radieren ist nicht erlaubt. Nachträgliche Einschaltungen und Zusätze sind ausdrücklich als solche unter Beifügung des Datums zu bezeichnen.

#### Aufbewahrung

§ 187. (1) Die Musterrolle ist in gutem Zustand zu halten und insbesondere vor Schmutz und Nässe zu schützen.

(2) Musterrollen sind fünf Jahre, von dem Tag der letzten Eintragung an gerechnet, aufzubewahren. Die Aufbewahrung kann an Bord oder an Land erfolgen. Werden sie an Land aufbewahrt, so ist dafür anstelle des Kapitäns der Reeder verantwortlich.

#### Führung

§ 188. (1) Die Führung der Musterrolle obliegt dem Kapitän; er hat dafür zu sorgen, daß die vorgeschriebenen Eintragungen von dem von ihm bestimmten Offizier durchgeführt werden.

(2) Bei Seeunfällen hat der Kapitän oder der von ihm bestimmte Offizier, soweit es nach Lage der Dinge geschehen kann, für die Rettung der Musterrolle zu sorgen.

## TEIL L

### Ärztliche Untersuchung

#### Anwendungsbereich

§ 189. (1) Die Vorschriften dieses Teils gelten für Besatzungsmitglieder aller Schiffe, ausgenommen Jachten.

(2) Niemand darf zur Beschäftigung auf einem Schiff nach Abs. 1 angeheuert werden, der seine Eignung für die Arbeit auf See, für die er verwendet werden soll, nicht nachgewiesen hat.

#### Gegenstand der ärztlichen Untersuchung

§ 190. Die ärztliche Untersuchung hat nach dem Muster der Anlage 27 unter Berücksichtigung des Alters der untersuchten Person und der Natur der zu leistenden Arbeit festzustellen, ob

1. die untersuchte Person nicht an einer Krankheit oder einem Gebrechen leidet, die sich durch die Arbeit auf See verschlimmern oder sie hierfür ungeeignet machen oder die Gesundheit anderer Personen an Bord gefährden könnten;
2. das Gehör und Sehvermögen der untersuchten Person voll befriedigen und ihr Farbenunterscheidungsvermögen für die zu leistenden Dienste ausreicht.

#### Nachuntersuchung

§ 191. (1) Eine neuerliche ärztliche Untersuchung hat stattzufinden, wenn ein Besatzungsmitglied eine schwere Krankheit oder einen schweren Unfall erlitten hat oder wenn er durch sein Verhalten an Bord zur Vermutung Anlaß gibt, daß sein Hör-, Seh- oder Farbenunterscheidungsvermögen abgenommen hat; mindestens jedoch alle fünf Jahre.

(2) Handelt es sich bei dem Besatzungsmitglied um einen Minderjährigen, so hat eine Nachuntersuchung gemäß Abs. 1 längstens nach einem Jahr stattzufinden.

#### Inhalt des ärztlichen Zeugnisses

§ 192. Über die ärztliche Untersuchung gemäß § 190 ist ein Zeugnis nach dem Muster der Anlage 27 auszustellen, das folgende Angaben zu enthalten hat:

1. Familienname, Vornamen, Geburtsdatum, Geburtsort, ordentlichen Wohnsitz und vorgesehene Verwendung der untersuchten Person;
2. Angaben der untersuchten Person über Unfälle, schwere Erkrankungen, epileptische Anfälle und durchgeführte Impfungen; diese Angaben sind von der untersuchten Person durch Unterschrift zu bestätigen;
3. die Ergebnisse der ärztlichen Untersuchung gemäß § 190;

4. Ort und Datum der ärztlichen Untersuchung;
5. Name, Anschrift und Unterschrift des untersuchenden Arztes;
6. die Gültigkeitsdauer des ärztlichen Zeugnisses.

#### Gültigkeitsdauer

§ 193. Die Gültigkeitsdauer des ärztlichen Zeugnisses beträgt höchstens fünf Jahre, für Minderjährige höchstens ein Jahr, gerechnet vom Zeitpunkt der Ausstellung. Läuft die Gültigkeitsdauer eines Zeugnisses während einer Reise ab, so bleibt es bis zu deren Ende in Kraft.

### TEIL M

#### Seediensbücher

##### Anwendungsbereich

§ 194. (1) Die Vorschriften dieses Teils gelten für österreichische Staatsbürger, die sich auf Schiffen, ausgenommen Jachten, verheuern.

(2) Österreichische Staatsbürger müssen unter der Voraussetzung des Abs. 1 mit einem Seediensbuch versehen sein.

(3) Österreichische Staatsbürger, die sich auf ausländischen Seeschiffen, ausgenommen Jachten, verheuern, können auf Antrag ein Seediensbuch erhalten.

##### Ausstellung

§ 195. (1) Das Seediensbuch wird vom Bundesminister für Verkehr nach dem Muster der Anlage 28 ausgestellt.

(2) Der Antrag auf Ausstellung ist unter Vorlage eines Heuervertrages, eines amtlichen Identitätsausweises, der Geburtsurkunde, des Staatsbürgerschaftsnachweises, einer Meldebestätigung sowie allfälliger Befähigungsausweise schriftlich beim Bundesminister für Verkehr zu stellen.

(3) Das Seediensbuch hat folgende Angaben zu enthalten: Geschäftszahl der Ausstellung, Nummer des Seediensbuches, Familienname, Vornamen, Geburtsdatum, Geburtsort, Staatsangehörigkeit, ordentlichen Wohnsitz, Personsbeschreibung, Lichtbild, Unterschrift des Inhabers, allfällige Befähigungsausweise sowie Ort und Datum der Ausstellung.

##### Eintragungen

§ 196. (1) Der Kapitän eines Schiffes hat im Seediensbuch folgende Eintragungen vorzunehmen und durch Unterschrift und Bordstempel zu bestätigen:

1. Bei Beendigung des Dienstverhältnisses die Art der Verwendung an Bord, Name, Größe und Registerhafen des Schiffes, Name des

Kapitäns und der Reederei, Ort und Datum des Dienstan- bzw. des Dienstaustrittes sowie Fahrtgebiet des Schiffes oder die wichtigsten Häfen;

2. neu erworbene Befähigungsausweise;
3. Änderungen des ordentlichen Wohnsitzes.

(2) Hat sich ein österreichischer Seemann auf einem ausländischen Seeschiff verheuert, so hat er dessen Kapitän um die Vornahme der Eintragungen gemäß Abs. 1 zu ersuchen.

(3) Wenn der Kapitän eines ausländischen Seeschiffes dem Inhaber eines Seediensbuches die Eintragungen gemäß Abs. 1 Z 2 und 3 verweigert, so können diese auf Ansuchen auch vom Bundesminister für Verkehr eingetragen werden.

(4) Handelt es sich beim Inhaber eines Seediensbuches um den Kapitän eines Schiffes, so hat er die Eintragungen gemäß Abs. 1 Z 1 und 2 durch den Reeder bestätigen zu lassen.

##### Verzeichnis der Seediensbücher

§ 197. (1) Das Bundesministerium für Verkehr hat ein Verzeichnis über die ausgestellten Seediensbücher zu führen.

(2) Das Verzeichnis gemäß Abs. 1 ist nach Seediensbuchnummern geordnet und enthält die Geschäftszahl der Ausstellung, den ordentlichen Wohnsitz des Seemannes, dessen Dienstangehörigkeit zur See und Angaben über Befähigungsausweise sowie allfällige sonstige Angaben und Bemerkungen. Das Verzeichnis enthält außerdem eine alphabetisch geordnete Aufstellung der Namen der Inhaber mit zugehöriger Seediensbuchnummer.

##### Erneuerung von Seediensbüchern

§ 198. (1) Sind sämtliche Blätter des Seediensbuches ausgefüllt, oder ist dieses aus einem anderen Grunde unbrauchbar oder das darin enthaltene Lichtbild unkenntlich geworden, so kann sein Inhaber das Seediensbuch dem Bundesminister für Verkehr zwecks Ausstellung eines neuen Seediensbuches oder Beglaubigung des neuen Lichtbildes vorlegen. Ist ein Seediensbuch in Verlust geraten, so hat der Seemann um Ausstellung eines neuen Seediensbuches anzusuchen. In diesem Ansuchen ist der Verlust des bisherigen Seediensbuches glaubhaft zu machen.

(2) Ein gemäß Abs. 1 neu ausgestelltes Seediensbuch erhält die Seediensbuchnummer der Erstaussfertigung; die Zahl der Ausfertigung ist daneben zu vermerken. Geschäftszahlen bereits ausgestellter Seediensbücher sowie Angaben über den Grund der Neuausstellung sind vom Bundesminister für Verkehr unter „Eintragungen und Bemerkungen“ anzuführen.

RS

## ARZTLICHES TAUGLICHKEITSZEUGNIS MEDICAL CERTIFICATE OF FITNESS

nach den Vorschriften der Verordnung über die Seeschifffahrt (Seeschifffahrts-Verordnung), BGBl. Nr. 189/1981  
in accordance with the provisions of the Decree respecting Navigation (Navigation Decree), BGBl. Nr. 189/1981

Die Gültigkeitsdauer des ärztlichen Tauglichkeitszeugnisses beträgt höchstens fünf Jahre, für Minderjährige höchstens ein Jahr, gerechnet vom Zeitpunkt der Ausstellung. Läuft die Gültigkeitsdauer während einer Reise ab, so bleibt das Zeugnis bis zu deren Ende in Kraft.

The duration of the validity of the medical certificate of fitness lasts no more than five years, for minors one year, from the date of issue. If the validity expires during a voyage, the certificate maintains its validity until the end of this voyage.

### I. Angaben zur Person Personal data

Familienname: Family name:	Vornamen: Christian names:
Geburtsdatum: Date of birth:	Geburtsort: Place of birth:
Ordentlicher Wohnsitz: Home address:	Verwendung an Bord: Capacity on board:

### II. Angaben des Untersuchten Information obtained from the person under examination

Haben Sie schon Unfälle erlitten? Wenn ja, wann und welche? Have you had any prior accidents? If yes, when and of what kind?
Schwere Erkrankungen? Wenn ja, welche und wie lange? Serious illnesses? If yes, which and for how long?
Haben Sie schon Anfälle, die mit Bewusstlosigkeit einhergehen, gehabt? Have you had any attacks combined with unconsciousness?
Welchen Impfungen sind Sie unterzogen worden? Wenn ja, wann? What kind of vaccinations have you had? If yes, when?
Unterschrift des Untersuchten Signature of person under examination



### III. Mindestanforderungen an Seh-, Hör- und Farbenunterscheidungsvermögen Minimum requirements for seeing, hearing and colour differentiation

Sehvermögen (nach Snellerischem Prinzip und Dezimal-system) Keenness (Snellen principle and decimal system)	Hörvermögen Hearing		Farbenunterscheidungsvermögen Colour differentiation	
	Besseres Auge Better eye	Anderes Auge Other eye		
<b>1. Deckdienst Deck service</b>				
Erste Untersuchung ohne Brille first test without eye glasses	1,0	0,7	Flüstersprache beiderseits auf 5 m whispering on both sides at 5 m distance	Normaler Farbensinn, geprüft mit pseudoisochromatischen Proben, bei Zweifelfällen untersucht mittels Anomaloskop normal colour sense, tested with pseudoisochromatic samples, in case of doubt with anomaloscope
Periodische Untersuchungen mit Brille, wenn erforderlich periodical examinations with eye glasses, if necessary	0,7	0,5	Flüstersprache beiderseits auf 3 m, gewöhnlicher Gesprächston beiderseits auf 5 m whispering on both sides at 3 m distance, normal tone of conversation on both sides at 5 m distance	wie oben as above
Brillenträger müssen dabei ohne Brille sehen users of eye glasses must be able to see without eye glasses	0,5	0,3		
<b>2. Maschinendienst Engine service</b>				
Erste Untersuchung mit Brille, wenn erforderlich first test with eye glasses, if necessary	0,7	0,4	gewöhnlicher Gesprächston beiderseits auf 5 m normal tone of conversation on both sides at 5 m distance	Befriedigender Farbensinn: Unterscheidung der vollen Farben rot, blau, grün und gelb satisfactory colour sense: differentiation of full colours red, blue, green and yellow
Brillenträger müssen dabei ohne Brille sehen users of eye glasses must be able to see without eye glasses	0,4	0,2		
Periodische Untersuchungen mit oder ohne Brille periodical examinations with or without eye glasses	mit beiden Augen zusammen with both eyes in total 0,5		Umgangssprache muß gut verstanden werden common language must be easily understood	wie oben as above
<b>3. Radiodienst Radio service</b>				
	wie Maschinendienst same as engine service		wie Deckdienst same as deck service	wie Maschinendienst same as engine service
<b>4. Allgemeiner Dienst General service</b>				
(Küche und Service) (galley and servicing)	genügend Sehvermögen mit oder ohne Brille, um den Dienst befriedigend ausüben zu können sufficient eye sight with or without eye glasses in order to fulfill the job satisfactorily		Umgangssprache muß gut verstanden werden common language must be easily understood	nicht erforderlich not required
	Untersuchung nur bei Verdacht auf mangelhaftes Seh- oder Hörvermögen Examination only if there are doubts as to sufficient sight and hearing abilities			

IV. Ergebnis der ärztlichen Untersuchung  
Medical test result

1. Allgemeine Körperbeschaffenheit  
General physical state

Größe: Height:	Gewicht: Weight:
Brustumfang eingeatmet: Chest measurement inhaled:	Brustumfang ausgeatmet: Chest measurement exhaled:

2. Kopf  
Head

Pupillen: Pupils:	Zunge: Tongue:
Tonsillen: Tonsils:	Zähne: Teeth:

3. Hals  
Throat

Narben: Scars:	Drüsen: Glands:
Kropf: Goitre:	

4. Thorax  
Thorax

Symmetrie: Symmetry:	Verformungen: Deformities:
Elastisch oder starr: Elastic or stiff:	

5. Lungen  
Lungs

Perkussion: Percussion:	Auskultation: Excultation:
Durchleuchtungsbefund: X-ray results:	Sind die Lungen gesund? Are the lungs healthy?

6. Herz  
Heart

Grenzen: Limits:	Herztöne und -geräusche: Cardiac sounds:
Puls: Pulse:	Blutdruck: Blood pressure:
Ist das Herz gesund und leistungsfähig? Is the heart healthy and fit?	

7. Abdomen  
Abdomen

Palpation, Druckempfindlichkeit der Magen- und Blinddarmgegend: Palpation, pressure sensitivity in the realm of stomach and appendix:	
Leber (Gallensteine): Liver (gallstones):	Milz: Spleen:

**8. Hernien (Bruch)**  
Herniae

Sind welche vorhanden? Are there any?	Sind sie reponibel? Can they be reposed?
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**9. Nieren**  
Kidneys

Druckempfindlichkeit: Pressure sensitivity:	
Urin: Urin:	
Eiweiß: Protein:	Zucker: Glucose:

**10. Genitalorgane**  
Genital organs

Hydrocele, Varicocele: Hydrocele, varicocele:	Leistendrüsen: Inguinal glands:
Geschlechtskrankheiten: Venereal diseases:	

**11. Extremitäten**  
Extremities

Deformitäten: Deformities:	Krampfadern: Varicose veins:
Plattfüsse: Flat feet:	

**12. Nervensystem**  
Nervous system

Stand und Gang bei geschlossenen Augen: Standing and walking with eyes closed:
Reflexe: Reflexes:
Bestehen Zeichen für nervöse Anlagen oder Alkoholismus? Are there indications of nervous disposition or alcoholism?
Epilepsie: Epilepsy:

**13. Augen**  
Eyes

Schärfte ohne Brille: Eye sight without eye glasses:	rechts: right:	links: left:
Schärfte mit Brille: Eye sight with eye glasses:	rechts: right:	links: left:
Farbensinn: Colour sensitivity:	Prüfungssystem: Testing system:	
Besteht eine Augenkrankheit? Is there any eye illness?		

**14. Ohren**  
**Ears**

Hörweite bei Flüstersprache: Hearing distance when whispering:	rechts: right:	links: left:
Hörweite bei gewöhnlichem Gesprächston: Hearing distance in ordinary conversation:	rechts: right:	links: left:
Besteht eine Ohrenkrankheit? Is there any ear illness?		

**15. Eventuelle weitere Befunde und Bemerkungen:**  
**Other test certificates and remarks:****16. Tauglichkeit**  
**Fitness**

Ist der Untersuchte für den vorgesehenen Dienst tauglich? Is the person tested fit for the specific position?
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Ort und Datum der Untersuchung: Place and date of examination:
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Name und Anschrift des untersuchenden Arztes: Name and address of the testing doctor:
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Unterschrift des Arztes Signature of doctor
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# 2012 年から導入される新規定

## IMO 指令が適用になる具体的なタイミングや船舶の種類について

2012 年 7 月からスタートする段階的な導入プランに基づいて、世界中の船舶に、電子海図表示システムを搭載することが法令で義務付けられます。

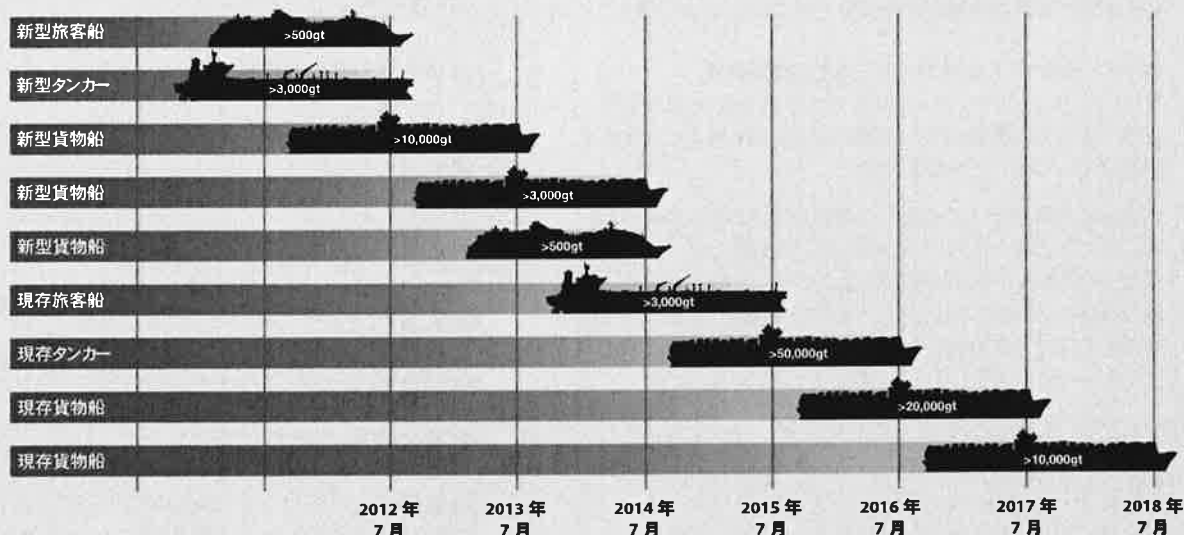
この法令では、船舶の種類や大きさによって段階的な導入が行われ、最終的には、ほとんどすべての大型商船や旅客船に適用されるようになります。

下図に、船舶の種類ごとに、搭載の義務化が適用されるスケジュールを示しました。

### お客様の船団に与える影響

新造船への ECDIS 搭載のタイミングは、船舶の竜骨が設置された日が基準となります。現存の船舶の場合は、種類や大きさごとに設定されている適用開始日以降に行われる最初の検査の前に、ECDIS を搭載することが求められます。

現時点では、重量が総トン数 10,000 未満の現存貨物船舶には、ECDIS を搭載する必要はありません。その他、旗国によっては、義務化実施日から 2 年以内に廃船される船舶は、免除の対象となります。



2008 年 12 月発行の IMO 回報からのデータ  
最新の更新状況やニュースについては、[www.admiralty.co.uk](http://www.admiralty.co.uk) をご確認ください。

### 適切な戦略とコンサルティング

2008年12月\*に発行されたIMO文書には、海運会社がECDISの導入に際して、リスクを考慮した戦略を立てることの重要性が明記されています。また、ECDISの手順やトレーニングの策定については、船員らとの広範な協議を行うことが推奨されています。

### 重要な旗国間の相違点

ECDISについては、旗国各国が独自の輸送要件を発表しています。旗国の間には重要な相違点があり、船団内の船舶にかかるこうした違いを明らかにする必要があります。こうした相違点は通常、バックアップシステム要件のほか、「紙海図の適切なfolio」などといった、IMO定義の解釈に関連するものがほとんどです。

また船級協会が、旗国に代わってECDISの設置検査を行うことになっています。こうした検査の要件は、実際の輸送要件、特にバックアップシステムや冗長システムに関する点について、より包括的な内容となっていることに留意してください。できるだけ早い時期に、当該の船級協会に連絡して具体的なアドバイスを得たり、検査要件のコピーを入手するのが賢明です。そうすることで、設置における要件を詳しく理解するとともに、設置に向けた計画や検討の時間を十分に取ることができます。

### ポート・ステート・コントロールに関する重要事項

また、ポート・ステート・コントロールの全要件を完全に理解し、必要なすべての情報がすぐに準備できるよう、検査に備えた手順を確立しておくことが重要です。

検査官や保険担当者から追加の要件が出されることもあるため、ECDISの導入に向けての戦略を立てる際には、こうした当事者との協議を行うことが賢明と言えます。そうすることで、こうした要件に確実に対応できると同時に、船舶士が関連する検査要件に向けての準備を行うことができます。



### 法的要件のチェックリスト

- 船団内の各船舶に対する、ECDIS指令の適用日を確認する
- 各船舶の修繕スケジュールをベースに、設置に最適な日を特定する
- 各旗国のECDIS輸送要件を特定する
- ECDISの調査における船級協会の要件を特定する
- ポート・ステート・コントロールに必要な文書と手順を確定する
- 検査官のECDIS要件を確認する
- 保険担当者のECDIS要件を確認する
- 関連の資料を収集する
- 船舶職員にECDISの参考資料を送付し、法的要件に関する説明を行う

\* SN.1/Circ.276 紙海図から電子海図表示システム (ECDIS) 航行への移行、IMO、2008年12月

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# FEDERAL LAW GAZETTE

## FOR THE REPUBLIC OF AUSTRIA

1981 edition

Issued on 13 April 1981

Document 71

### 189th Ordinance: Maritime Shipping Ordinance [*Seeschiffahrts-Verordnung*]

#### 189th Ordinance of the Federal Minister for Transport of 8 April 1981 on Maritime Shipping (Ordinance on Maritime Shipping)

On the basis of Article 15 paragraphs 1 and 4, Article 25 paragraph 2, Article 28 paragraph 2, Article 29 paragraph 5, Article 33 paragraph 3, Article 34, Article 35 and Article 36 paragraph 2 of the Austrian Maritime Shipping Act [*Seeschiffahrtsgesetz*], Federal Law Gazette No 174/1981, and with regard to Article 25 paragraph 2 number 2 by mutual agreement with the Federal Minister of Justice, Article 28 paragraph 2, Article 34 and Article 36 paragraph 2 by mutual agreement with the Federal Minister for Social Administration and Article 34 also by mutual agreement with the Federal Minister for Health and Environmental Protection and Articles 5 and 8 of the Federal Act on Fulfilment of the 1960 International Convention for the Safety of Life at Sea, the regulations for preventing collisions at sea and the International Load Line Convention, 1966, Federal Law Gazette No 382/1972, the following is decreed:

#### PART A

#### Fundamental provisions

#### SECTION I

#### General remark

#### Scope

**Article 1(1)** The provisions of Parts B to K of this Ordinance shall be applicable to Austrian seagoing ships in accordance with Articles 16, 27, 41, 44, 59, 75, 82, 151, 169 and 184.

(2) The provisions of Part L of this Ordinance shall be applicable to crew members on Austrian seagoing ships in accordance with Article 189.

(3) The provisions of Part M of this Ordinance shall be applicable to Austrian nationals in accordance with Article 194.

#### Definitions

**Article 2** For the purposes of this Ordinance, the following definitions shall apply:

1. "Austrian seagoing ship": a seagoing ship that is approved for maritime shipping in accordance with the Maritime Shipping Act (hereinafter referred to as a "ship");
2. "Seagoing ship": a vessel of a size and design and with equipment enabling it to be used for maritime transport (passenger ship, cargo ship, yacht, special vessel). This shall not include rowing boats and

canoes, rubber dinghies or types of boats that can generally only be used for trips in the direct proximity of the coast;

3. "Passenger ship": a vessel intended for the transport of more than twelve passengers;
4. "Cargo ship": a vessel intended for the transport of goods;
5. "Yacht": a vessel intended for the purposes of sport or leisure;
  - a) Motor yacht: a vessel that draws its principal source of propulsion from an engine, irrespective of whether back-up sails are also present,
  - b) Sailing yacht: a vessel that draws its principal source of propulsion from wind, even if an engine is installed or attached. This also includes vessels known as motor sailers;
6. "Special vessel": a vessel that does not fall under numbers 3 to 5, in particular
  - a) a vessel intended for the transport of twelve passengers or fewer,
  - b) a vessel without its own source of propulsion, such as a lighter, barge
  - c) a tug, fishing vessel, launch,
  - d) floating equipment, such as dredgers, floating cranes, pile drivers, drilling platforms, elevating platforms;
7. "Tidal flats navigation or day cruising": navigation close to the coast and in sheltered waters, such as bays, fjords and tidal flats. Tidal flats navigation or day cruising extends over an area of 2 nautical miles, measured from the coast, namely from the mainland and/or from islands (navigation area 1);
8. "Coastal navigation": navigation between nearby harbours along the coast. Coastal navigation extends over an area of 20 nautical miles, measured from the coast (navigation area 2);

men, Geburtsdatum, Geburtsort, Staatsangehörigkeit, amtlichem Identitätsausweis, ordentlichem Wohnsitz und Datum der Einschiffung.

(2) The entries pursuant to paragraph 1 number 2/number 3 must be confirmed with a signature.

(3) When a crew member ends his service on board, he must be deleted from the ship's articles, stating the date and the reason for leaving.

(4) If a person in accordance with paragraph 1 number 3 leaves the ship after the journey, he must be deleted from the ship's articles, stating the date.

(5) The fact that a crew member is under the age of majority must be noted in the column "Other comments".

### Format

**Article 186(1)** The entries shall be made under consecutive numbers, using ink or ball-point pen, and must be written in German or English.

(2) Before the ship's articles are first used, they must be marked with consecutive page numbers. Tearing out pages is prohibited. Any changes to entries must be made by simply striking out the original entry so that it remains legible. Erasing entries is prohibited. Subsequent insertions and additions shall be expressly identified as such by adding the date.

### Safekeeping

**Article 187(1)** The ship's articles must be kept in good condition and, in particular, protected from dirt and dampness.

(2) Ship's articles shall be stored for five years, calculated from the date of the last entry. They may be stored on board or on shore. If they are stored on shore, the shipowner rather than the master shall be responsible for them.

### Updating

**Article 188(1)** The master shall be responsible for updating the ship's articles; he must ensure that the prescribed entries are made by the officer to whom he has assigned this task.

(2) In the event of accidents at sea, the master or the officer to whom the master has assigned this task shall ensure that the ship's articles are saved, insofar as this is possible in the circumstances.

## PART L

### Medical examination

#### Scope

**Article 189 (1)** The provisions of this part apply to crew members on all ships, with the exception of yachts.

(2) No one may be hired for service on board a ship in accordance with paragraph 1 unless he has proved his suitability for the work at sea for which he is to be deployed.

### Object of the medical examination

**Article 190** In line with the template contained in Annex 27, the medical examination, taking into consideration the age of the person examined and the nature of the work to be performed, must determine whether

1. the person examined is suffering from an illness or affliction that could worsen as a result of the work at sea or render the person unsuitable for said work, or endanger the health of other persons on board;

2. the hearing and eyesight of the person examined is completely satisfactory and his ability to distinguish colours is sufficient for the services to be carried out.

### Follow-up examination

**Article 191(1)** A new medical examination shall take place if a crew member has suffered a serious illness or a serious accident or if his behaviour on board has given reason to suspect that his hearing, eyesight or ability to distinguish colours has deteriorated; however, the follow-up examination must be carried out at least every five years.

(2) In the event that the crew member is a minor, a follow-up examination pursuant to paragraph 1 must take place within a period of no more than one year.

### Content of the medical certificate

**Article 192** A certificate in line with the template contained in Annex 27 shall be drawn up in relation to the medical examination pursuant to Article 190. The certificate must include the following information:

1. surname, first name, date of birth, place of birth, regular place of residence and intended deployment of the person examined;

2. information provided by the person examined concerning accidents, serious illnesses, epileptic seizures and vaccinations received; the person examined shall confirm this information with a signature;

3. the results of the medical examination in accordance with Article 190;

4. location and date of the medical examination;

5. name, address and signature of the doctor carrying out the examination;

6. the validity period of the medical certificate.

### Validity period

**Article 193** The maximum validity period of the medical certificate shall be five years, and no more than one year for minors, calculated from the date of issue. If the validity period of a certificate expires during a voyage, it shall remain in force until the end of the voyage.

**PART M****Records of service at sea****Scope**

**Article 194(1)** The provisions in this part shall apply to Austrian nationals engaged as crew on ships, with the exception of yachts.

(2) Under the prerequisite specified in paragraph 1, Austrian nationals must be equipped with a record of service at sea.

(3) Austrian nationals engaged as crew on foreign seagoing ships, excluding yachts, may obtain a record of service at sea upon request.

**Issue**

**Article 195(1)** The record of service at sea shall be issued by the Federal Minister for Transport in line with the template in Annex 28.

(2) The application for issue of the record must be made in writing to the Federal Minister for Transport, submitting an employment contract, an official identity document, birth certificate, proof of citizenship, a confirmation of residency and any qualification certificates available.

(3) The record of service at sea shall include the following information: issue reference number, number of the record of service at sea, surname, first name, date of birth, place of birth, nationality, regular place of residence, description of the person, photograph, signature of the holder, any qualification certificates and the place and date of issue.

**Entries**

**Article 196(1)** The master of a ship must make the following entries in the record of service at sea, and confirm them with his signature and the ship's stamp:

1. at the end of the employment relationship, the nature of deployment on board, the ship's name, size and port of registry, the name of the master and the shipping company, the place and date of the start and end of service and the ship's navigation area or the most significant ports;
2. any newly acquired qualification certificates;
3. changes to the regular place of residence.

(2) If an Austrian has been engaged as crew on a foreign seagoing ship, he shall ask the master of this ship to make the entries pursuant to paragraph 1.

(3) If the captain of a foreign seagoing ship refuses to make the entries pursuant to paragraph 1 numbers 2 and 3 for the holder of a record of service at sea, these may also be made by the Federal Minister for Transport, upon request.

(4) If the holder of a record of service at sea is the master of a ship, he shall arrange for the shipowner to confirm the entries pursuant to paragraph 1 numbers 1 and 2.

**Register of records of service at sea**

**Article 197(1)** The Federal Ministry for Transport shall keep a register of the records of service at sea that have been issued.

(2) The register detailed in paragraph 1 shall be arranged by the numbers of the records of service at sea and shall contain the issue reference number, the regular place of residence of the seafarer, the nature of the seafarer's service at sea and information on qualification certificates, as well as any other information and comments. Moreover, the register shall contain a list of the names of the holders, in alphabetical order, with the corresponding numbers of the records of service at sea.

**Renewal of records of service at sea**

**Article 198(1)** If all the pages of the record of service at sea are completed, or if the record cannot be used for another reason or the photograph contained in the record is no longer recognisable as the holder, the holder may submit the record of service at sea to the Federal Minister for Transport in order that the Minister may issue a new record of service at sea or certify the new photograph. If a record of service at sea has been lost, the seafarer must apply for a new record of service at sea to be issued. In this application, the loss of the previous record of service at sea must be substantiated.

(2) A new record of service at sea issued in accordance with paragraph 1 shall be assigned the same number as the first copy of the record of service at sea; the issue number must be noted beside this. Reference numbers for records of service at sea that have previously been issued, and information on the reason for the re-issue shall be stated by the Federal Minister for Transport in the "Entries and comments" section.



NAVY HYDROGRAPHICS OFFICE

**SAILING DIRECTIONS**

**P8**

**From Marotta to the border between Italy and Slovenia**

1<sup>st</sup> EDITION  
2008

GENOA

**NOTICE**

**Any notice or information about this text should be sent to:**

**ISTITUTO IDROGRAFICO DELLA MARINA  
[NAVY HYDROGRAPHIC INSTITUTE]**

**PASSO OSSERVATORIO, 4 – GENOA**

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## INTRODUCTION

The volume describes the Italian coastline on the Adriatic Sea from Marotta to the border between Italy and Slovenia.

This publication continues the implementation of the new collection of Sailing Directions of the Italian coastline printed in paperback. This volume represents, together with P8, the natural evolution of the Mediterranean Sailing Directions Volume 1/C (1991 edition).

The Sailing Directions should meet the needs of the professional mariner on board military, merchant and fishing vessels, and should provide the essential information needed for leisure craft.

The text has been drawn up bearing in mind that the sailing directions are, and must, complement the navigational charts, and must therefore contain notices that cannot be represented on the charts and therefore assist the interpretation of the information derived from them.

An attempt has also been made to provide more information on the services of the tourist marinas, taking into account the increasing development of leisure craft usage.

In the marina plans there is a graphical representation of the leisure craft symbols, updated in 2007. In the case of photographic representations, the year indicated refers to the year the photograph was taken.

Information received from the Maritime and Port Authorities, from the Masters of Italian vessels and from leisure craft was taken into account in drawing up this volume.

GRAPHICAL INDEX OF THE SAILING DIRECTIONS



## UPDATE SITUATION OF THE VOLUME

This volume of Sailing Directions is up to date as at 28/11/2007; changes made after this date will be the subject of suitable update "Notices" made available after the publication of this volume.

In order to remain continuously aware of the update status of the publication the user must enter in the appropriate space the changes contained in the Notices to Mariners Collection indicated (see I.I.3024).

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*SMALL CRAFT FACILITIES*

## INFORMATION OF A GENERAL NATURE

### THE SAILING DIRECTIONS

#### What they contain

The sailing directions are an essential complement to the navigational charts; they contain all the notices useful to the mariner that cannot be reported on the charts: a detailed description of the vertical appearance of the coast and the conspicuous points; suggestions for the conduct of navigation, landfall, anchoring, and entering into port; information on port facilities.

They contain photographs and views of the coast (drawings), and numerous plans of marinas.

The volume is completed by:

- a graphic index of the Sailing Directions
- a graphical index of the charts for leisure craft;
- a graphic index of navigational charts for the coasts described;
- a graphic index of plans;
- a graphic index of the subdivision into chapters of the coasts described.

Information of a general nature pertaining to technical, regulatory, geographical-political, oceanographic and climatological aspects is contained in the two “General” volumes of the Mediterranean Sailing Directions (Part I and Part II). The first volume deals with the following subjects: telecommunications, marks, rules and regulations, geographical-political and general oceanographic information; the second volume deals with climatology (atmospheric pressure, winds, sea state, temperature, humidity, cloud cover, precipitation, fog and visibility, disturbances, etc.). The two “General” volumes therefore constitute the introduction to and complement all the other Mediterranean Sailing Directions.

#### How they are organised

The publication is composed of an introductory part (including information of a general nature), graphical indices, the text (including photographs, coastal views and plans) and the alphabetical index of names.

#### Notices relating to use

The bearings are true and taken from the open sea, unless indicated otherwise. The courses are true.

Sea distances are expressed in nautical miles.

The depths are expressed in metres and are referred to mean low water springs.

The draughts are expressed in metres and, occasionally, in feet.

The heights are expressed in metres and are referred to the mean sea level.

Numbers in brackets with the abbreviation m for “metres”, if alongside the name of a shoal indicate the least depth, if alongside the name of a building indicate the height at its base.

The geographical coordinates reported in the text are sometimes approximate and usually refer to the datum of the highest scale chart on which the position appears; in some cases their sole purpose is to facilitate consultation of the charts.

The text describes the buildings and the supports of the lighthouses and lights considered to be useful references for daytime navigation. For a description of the light characteristics of lighthouses, lights and buoys, represented on the plans with a magenta plume regardless of the actual colour, refer to the List of Lights and Fog Signals.

The numbers of the navigational charts for the area described are referred to according to the titles of the chapters and of certain paragraphs, and are alongside the names of the locations; however, the mariner should always check the catalogue and the graphic index of charts that precedes the text.

For some places the characteristics of the main winds are indicated: those that blow with the greatest strength are defined as dominant, those that blow for the greatest time are defined as prevailing.

If notices are found in the Sailing Directions that are common to other nautical publications (List of Lights, Radio Services, General Information, Tide Tables), these must always also be checked.

It may be that one of the publications has not been promptly updated; in the event of doubt or of contradiction, the more recent notice must be used and great care taken. The same applies in the event of disagreement between the charts and the Sailing Directions.

The indications given on the courses to be followed and on the depths never represent absolute rules for manoeuvres. Although they should take these suggestions into account, mariners must always ensure, through careful examination of the chart, that they are applicable in relation to the size and manoeuvring capacity of the vessel and the prevailing conditions of the sea, wind and current.

The order in which the dangers, the coasts and the passes are described is not always that in which they are approached, seen and passed by the vessel; in particular, in the case of a passage between two islands, it may be that one side is described in the section that refers to one of the islands and the other in the section that refers to the other island, or even in different chapters. It is therefore necessary to look through a good number of pages to ensure that everything pertinent has been read.

This precaution is also necessary to ensure that no Notices to Mariners escape examination which, glued on a particular page, could involve a significant stretch of coast or sea.

The hyperbaric chambers mentioned in the text in connection with some towns/ports may not operate continually (or may be temporarily unavailable due to maintenance or other reasons). It is recommended that mariners always check the current availability of the hyperbaric chamber most easily reached from the diving area.

Notices relating to mooring and warping buoys are included in the description of the places where they are moored; in some cases, if there are more than three, their position may also be represented graphically.

Finally, it should be noted that the mooring buoys and floats are subject to frequent movements and for this reason they are not reported on the charts; even marker buoys may be moved or removed from the sea; therefore all the data on the position of beacons must be used with reservations.

### **How they are updated**

**Summary Collection** – At the time of sale the volume may be accompanied by a Summary Collection, containing the collected notices in force up to that date, in page number order; this document, updated by the publication of each fortnightly collection, is available on the internet at “<http://www.marina.difesa.it/idro/aggiornamenti.htm>”.

**Notices** – Notices that change or add to the contents of the text are distributed with the fortnightly “Notices to Mariners” collection which is published by the Hydrographic Institute and can be consulted on the Navy Hydrographic Office website.

The notices must be glued to a corner along the margin of the page indicated. Before attaching a notice always check that the subject matter corresponds to the page indicated; if an error is found, please notify the Hydrographic Institute immediately.

**A check of the update status** must be carried out using the “Checklist of Nautical Documents” published every six months and containing details of the Notices to Mariners in force.

**LIST OF DOCUMENTS  
OF INTEREST FOR NAVIGATION**

**1) FOR THE CONDUCT OF NAVIGATION:**

**Regulations for preventing collisions at sea** – Published by the Hydrographic Institute [I.I.], 1990 edition (I.I. 3019)

**Navigational charts:** the complete list is provided in the General Catalogue (I.I. 3001).

**Sailing Directions:** The Navy Hydrographic Institute publishes 12 volumes:

Mediterranean Sailing Directions: General Parts I and II (I.I. 3145);

Mediterranean Sailing Directions: P1 (I.I. 3201); P2 (I.I. 3202); P3 (I.I. 3203); P4 (I.I. 3204); P5 (I.I. 3205); P6 (I.I. 3206); P7 (I.I. 3207); P8 (I.I. 3208); Volume 4 (I.I. 3154); Volume 6 (I.I. 3161).

**List of Lights and Fog Signals:** The Hydrographic Institute publishes two volumes on the Mediterranean: List of Lights and Fog Signals: Part I – Mediterranean Sea from Gibraltar to Trieste (I.I. 3134); List of Lights and Fog Signals: Part II – Mediterranean Sea, Black Sea, and Sea of Azov – From Capodistria to Tangiers (I.I. 3135).

**Radio Services for Navigation:** The Hydrographic Institute publishes 2 volumes on the Mediterranean; the first for the radio services in general (I.I. 3128) and the second for radio meteorology (I.I. 3130).

**Tide and Tidal Current Tables:** Published annually by the Institute (I.I. 3133).

**Nautical Journals:** Published annually by the Institute (I.I. 3122).

**Nautical Tables:** Published by the Institute (I.I. 3070).

**Tables for direct calculation of height lines:** Volumes 2 and 3 covering the latitudes from 15° to 45°. Published by the Institute (I.I. 3137).

**Measured Bases along the coasts of Italy:** Published by the Institute (I.I. 3045).

**Introduction to Notices to Mariners and Notices to Mariners of a general nature** – Published annually by the Institute and distributed as an appendix to the Collection of Notices to Mariners No. 1.

**2) REGULATIONS FOR USE AND UPDATING OF NAUTICAL DOCUMENTS**

**Checklist of Nautical Documents** – Published by the Institute every six months.

**Navigational Information and NTM III NOTICES** – Published by the Institute every six months and distributed as an appendix to the Collections of Notices to Mariners No. 1 and No. 12.

**Regulations for the use and upkeep of nautical equipment** – Published by the Institute (I.I. 3024).

### 3) CONVENTIONS, CODES AND REGULATIONS

Compliance with the **Convention on the Territorial Sea and the Contiguous Zone** and the **Convention on the High Seas**, adopted in Geneva on 29 April 1958, and their implementation. Law no. 1658 of 8 December 1961, published in Official Journal no. 75 of 22 March 1962.

Deposit of the instruments of compliance with the **Convention on the High Seas**, adopted in Geneva on 29 April 1958. Foreign Office Communication, Official Journal no. 93 of 13 April 1965.

Regulations regarding the application of law no. 1658 of 8 December 1961, which authorised compliance with the **Convention on the Territorial Sea and the Contiguous Zone**, adopted in Geneva on 29 April 1958. Presidential Decree no. 816 of 26 April 1977, Official Journal no. 305 of 9 November 1977 (Establishment of the Italian base line).

Ratification and execution of the **United Nations Convention on the Law of the Sea** with appendices and final document, concluded at Montego Bay on 10 December 1982, as well as the agreement on the application of part XI of the **Convention** itself, with appendices, drawn up in New York on 29 July 1994. Law no. 689 of 2 December 1994.

**International Signals Code** – 2005 edition.

**Navigation Code** – Royal Decree no. 327 of 30 March 1942, Official Journal no. 93 of 18 April 1942, and subsequent modifications.

**Regulation for the implementation of the Maritime Navigation Code** – Presidential Decree no. 328 of 15 February 1952 and subsequent modifications.

**International Convention on the Safety of Life at Sea** – Law no. 313 of 23 May 1980, published in general supplement no. 2 of Official Journal no. 190 of 12 July 1980.

**Regulation for the safety of navigation and of life at sea** - Presidential Decree no. 1154 of 14 November 1972.

**Radiocommunications Regulation** – Geneva 17 November 1995 (CMR 95), 2004 edition.

**Laws and Decrees concerning leisure navigation** – Law no. 50 of 11 February 1971 and subsequent modifications; Law no. 171 of 5 May 1989; Ministerial Decree no. 232 of 21 January 1994; Legislative Decree no. 378 of 16 June 1994; Law no. 498 of 8 August 1994; Ministerial Decree of 10 May 1996; Legislative Decree no. 430 of 8 August 1996; Legislative Decree no. 436 of 14 August 1996; Legislative Decree no. 205 of 11 June 1997; Presidential Decree no. 431 of 9 October 1997; Ministerial Decree no. 274 of 2 July 1999; Ministerial Decrees nos. 385, 386, 387, 388 and 412 of 29 September 1999; Ministerial Decree no. 487 of 5 October 1999; Ministerial Decree no. 219 of 12 August 2002; Law no. 172 of 8 July 2003; Ministerial Decree no. 121 of 10 May 2005; Legislative Decree no. 171 of 18 July 2005.



**SEA AREA NORMALLY USED FOR  
EXERCISES**

There are areas in the Adriatic Sea for naval exercises and firing, as well as areas with restricted air space. These concern the following localities:

- D 10 – Mouth of the Fiume Reno
- E 343 – Fano
- E 344 – Pesaro
- E 345 – Riccione
- E 346 – Mouth of the Fiume Reno

These areas are referred to from time to time in the text. For the details consult the “Introduction to Notices for Mariners” for the current year and chart no. 1050.

## CAREENING DOCKS

## STONE DOCKS

Locality	Dock name	Length (m)	Width (m)	Height of water at jetties (m)
Aprilia Marittima	Cantieri di Aprilia	20.00	20.00	3.50
Aprilia Marittima	Marina Punta Gabbiani	15.00	5.00	variable
Aprilia Marittima	Marina Punta Gabbiani	22.00	6.50	variable
Monfalcone <sup>(1)</sup>	Italcantieri	350.00	56.00	11.3
Ravenna	Navi Ravenna	170	26	6.8
Trieste <sup>(2)</sup>	Bacino No. 1	139.60	17.45	4.60
Trieste <sup>(2)</sup>	Bacino No. 2	139.60	17.45	4.60
Trieste <sup>(2)</sup>	Bacino No. 3	206.80	28.00	8.20
Trieste <sup>(2)</sup>	Bacino Grandi Navi	295.00	56.00	9.20
Venice <sup>(3)</sup>	Bacino No. 1 <sup>(4)</sup>	80.00	10.00	4.50
Venice <sup>(3)</sup>	Bacino No. 2 <sup>(4)</sup>	145.00	20.00	7.00
Venice <sup>(3)</sup>	Bacino No. 3 <sup>(4)</sup>	240.00	32.60	10.00

- (1) intended for construction  
(2) owned by the Arsenale Triestino S. Marco (Fincantieri)  
(3) Castello Arsenale  
(4) owned by the Italian Navy

## FLOATING DOCKS

Locality	Name	Length (m)	Width (m)	Height of the water above the docking blocks (m)	Capacity (t)
Ravenna	Bacino Rossetti	70	20.46	9.45	1,200
Ravenna	Orioli Enrico	35.72	16.10	8.50	500

For the procedures for use of the docks refer to the appropriate Maritime Authority.

**REGIONAL MARITIME DIVISIONS OF THE MINISTRY FOR INFRASTRUCTURE AND  
TRANSPORT**

HARBOUR- MASTER	COASTLINE JURISDICTION			
	MARITIME DISTRICT OFFICES	TERRITORIAL LIMITS OF THE AREAS	LOCAL MARITIME OFFICES	BEACH DELEGATIONS
<i>COMPAMARE</i>	<i>CIRCOMARE</i>		<i>LOCAMARE</i>	<i>DELEMARE</i>
MARITIME DIRECTION OF RAVENNA				
Pesaro	Fano	From the mouth of the Fiume Cesano to the mouth of the Fosso Sejore	- Marotta	
		From the mouth of the Fosso Sejore to the Torrente Tavollo	- Gabicce a mare	
Rimini	Cesenatico	From the Municipality of Bellaria Igea Marina exclusive to the Municipality of Cesenatico inclusive		
		From the Torrente Tavollo inclusive to the Municipality of Bellaria Igea Marina inclusive	- Cattolica - Riccione - Bellaria/Igea	- Misano Adriatico
Ravenna		From the municipality of Cesenatico exclusive to the Municipality of Comacchio exclusive	- Cervia	- Casalborgsetti
	Porto Garibaldi	From the Municipality of Comacchio inclusive to the mouth of the Po di Goro	- Goro	- Volano
Chioggia		From the mouth of the Po di Goro exclusive to Pellestrina exclusive, but including the N dyke of the Port of Chioggia	- Porto Levante	- Pila di Porto Tolle - Scardovari

Venice		From Pellestrina inclusive, excluding the N dyke of the Port of Chioggia, to the N dyke of the mouth of the port of Venice Lido exclusive		<ul style="list-style-type: none"> <li>- Alberoni</li> <li>- Burano</li> <li>- Pellestrina</li> </ul>
	Jesolo	From the N dyke of the mouth of the port of Venice Lido exclusive to the mouth of the lagoon of Mort inclusive		
	Caorle <sup>2</sup>	From the mouth of the lagoon of Mort exclusive to the mouth of the Fiume Tagliamento		

<sup>1</sup> With separate section at Porto Corsini

<sup>2</sup> With separate section at Bibione

HARBOUR-MASTER	COASTLINE JURISDICTION			
	MARITIME DISTRICT OFFICES	TERRITORIAL LIMITS OF THE AREAS	LOCAL MARITIME OFFICES	BEACH DELEGATIONS
<i>COMPAMARE</i>	<i>CIRCOMARE</i>		<i>LOCAMARE</i>	<i>DELEMARE</i>
MARITIME DIRECTION OF TRIESTE				
Monfalcone	Grado	From the mouth of the Tagliamento to the mouth of the Isonzo (Sdobba) exclusive, excluding the access channel to Porto Buso up to the breakwaters	- Lignano Sabbiadoro	
	Porto Nogaro	From the E dyke of Porto Buso for the entire maritime channel up to the port environment of Porto Nogaro on the Fiume Corno and to the quay of the Banduzzi-Torviscosa industrial area on the Fiume Aussa heading W from the Punta della Niova along the lagoon boundary (Law no. 366/1963) up to the mouth of the Canale Cormor starboard side	- Marano Lagunare	
		From the mouth of the Isonzo (Sdobba) inclusive to the mouth of the Timavo (central axis)		
Trieste		From the mouth of the Timavo (central axis) to the blocking post of San Bartolomeo	- Muggia	- Sistiana

## TRAFFIC SEPARATION SCHEMES

Several traffic separation schemes have been set up in the Adriatic Sea and these involve all the coastal states.

Several have been adopted by the IMO (International Maritime Organization) while others have been adopted by the Government of the relevant country (see N. M. (G) no. 10 of the "Introduction to the Notices to Mariners").

All the above-mentioned schemes are marked on the navigational charts.

### - Central and Northern Adriatic (chart nos. 923 – 924 – 435):

A traffic separation scheme adopted by the IMO is in place in the Northern Adriatic. The scheme is effective to the N of the parallel 43°47' N with a **precautionary area** from which two traffic channels set out, one to the E and one to the W of a central prohibited area for vessels of more than 200 g.r.t because of the presence of platforms for extracting hydrocarbons and the relative pipelines.

In the **E channel** the direction of the traffic flow is 327° - 147°. To **approach the Gulf of Trieste** follow another channel in the direction 347° - 167°.

In the Gulf of Trieste it is necessary to follow a heading of 058° - 248° and, for the precautionary area, proceed in the direction 094° - 315° if heading for or coming from **Koper (Capodistria)** and in the direction 000° - 180° if heading for or coming from **Monfalcone**.

In the **W channel** the flow of traffic develops first in the direction 307° - 124°. To approach/leave the **Gulf of Venice** it is necessary to follow a heading of 337° - 154° at first and then 309° - 120°.

## "COMPULSORY NAVAL REPORTING SYSTEM "ADRIATIC TRAFFIC"

The system extends throughout the Adriatic Sea to the N of latitude 40°25'N and applies to tankers above 150 t and vessels above 300 t carrying dangerous or polluting goods.

This system was adopted by the IMO by means of resolution MSC139(76).

The main objective of the system is to provide coastal states with a complete picture of the maritime traffic of dangerous or polluting goods throughout the Adriatic Sea.

The countries involved are Albania, Croatia, Italy, Montenegro and Slovenia.

The area has been subdivided into five sectors, each one of which has been assigned to a "competent authority" operating on a specific VHF channel.

For further information consult the "Radio Services for Navigation Part 1".

**MOBILE DRILLING PLATFORMS  
IN THE ADRIATIC SEA**

**MOBILE DRILLING PLATFORMS IN THE ADRIATIC SEA**

Oil surveys are carried out continually in the Adriatic Sea using mobile drilling platforms and specialised vessels bearing the prescribed markings.

The list of the most important of these, with their positions, is published in the N. M. of a general nature in Notices to Mariners Collection number 1 of the current year, and is updated using the same means whenever changes are made.

The changes are broadcast by radio from the Navarea III service and, for the Italian coasts, also by the Italian Coastal Radio Stations (see radio services for navigation – Part 1 – chap. VIII).

**FIXED DRILLING PLATFORMS IN THE ADRIATIC SEA**

There are numerous fixed oil extraction platforms in the Adriatic Sea. All of these are marked by lights and many are also marked by fog signals.

The individual platforms are mentioned in the texts (see list of lights and navigational charts).

**SAILING DIRECTIONS P8**  
**Graphical index of the charts for leisure craft**

**ADRIATIC SEA**



**SAILING DIRECTIONS P8**  
**Graphical index of the charts**

**ADRIATIC SEA**

**SAILING DIRECTIONS P8**  
**Graphical index of the plans**

**ADRIATIC SEA**

**SAILING DIRECTIONS P8**  
**Graphical index of the chapters**

**ADRIATIC SEA**

Distance in miles between the main locations included in Sailing Directions P8

	Cattolica																						
Cattolica	•	24	21	81	16	107	106	119	8	38	49	44	11	98	113	91							
Cervia	24	•	5	65	39	96	93	108	32	14	26	20	15	82	105	72							
Cesenatico	21	5	•	69	35	99	96	112	28	20	30	26	12	87	106	76							
Chioggia	81	65	69	•	91	54	47	67	83	51	44	59	73	35	66	13							
Fano	16	39	35	91	•	112	112	126	8	51	61	56	25	106	117	102							
Grado	107	96	99	54	112	•	11	16	108	86	78	92	103	25	18	47							
Lignano	106	93	96	47	112	11	•	27	108	82	74	88	102	16	27	40							
Monfalcone	119	108	112	67	126	16	27	•	115	96	90	107	111	40	12	58							
Pesaro	8	32	28	83	8	108	108	115	•	43	54	50	17	102	113	92							
Porto Corsini	38	14	20	51	51	86	82	96	43	•	12	6	28	72	94	60							
Porto Garibaldi	49	26	30	44	61	78	74	90	54	12	•	18	40	63	89	52							
Ravenna	44	20	26	59	56	92	88	107	50	6	18	•	36	78	101	68							
Rimini	11	15	12	73	25	103	102	111	17	28	40	36	•	93	109	82							
S. Margherita, Caorle	98	82	87	35	106	25	16	40	102	72	63	78	93	•	39	26							
Trieste	113	105	106	66	117	18	27	12	113	94	89	101	109	39	•	58							
Venezia, Lido	91	72	76	13	102	47	40	58	92	60	52	68	82	26	58	•							



## CHAPTER 1

## FROM MAROTTA TO GORO

(CHART Nos. 923 – 36 – 37)

**INFORMATION OF A GENERAL NATURE** – From Marotta to Fano lies an uninterrupted succession of verdant hills strewn with numerous houses and villas. An uninterrupted line of new houses lies along the shore. In the centre of the village of **Mondolfo** (144 m) there is a square tower with a flagpole, with a more conspicuous cylindrical tower to its right and a small church with bell tower to its left; the village of **S. Costanzo** (1550 m) follows.

**“Adriatic Traffic” obligatory naval reporting scheme** – See page 17.

**Traffic separation schemes** – See page 17.

**Breakwaters** – Some unmarked submerged breakwaters are positioned along the stretch of coast between the mouth of the Fiume Cesano and Fano to defend the coastline.

**MAROTTA** – About halfway between Senigallia and Fano, a large tall water tank of reinforced concrete on a frame-work, the bell tower of the church and the larger grey-green building of the “Europa” hotel that stands over the houses of the town are all clearly visible. There are also two notable buildings of nine floors each, white in colour, and two blue silos. Just inland behind Marotta stands a square white tower that is clearly visible from the sea. About 2.5 M to the NW of Marotta a collection of very modern buildings stand out at **Torrette di Fano**, which continues to expand. Just to the NW of Torrette, near the beach, a conspicuous cylindrical tank, on a tall white concrete frame-work, stands out from the green of the hills behind along with a 10 storey hotel, cylindrical in shape and a reddish colour.

**Metaurilia** is located about 1.5 M to the NW of Torrette and is a modest group of low buildings, where a small church topped by 3 bells in a row can be seen.

The **Fiume Metauro** is crossed at its mouth by a sizeable 18 arch bridge.

**Area for military exercises** – Attention is brought to a vast area for military exercises, with air space restrictions and areas for firing exercises out to sea (from the land boundary near the coast) and along the stretch of coastal sea between the mouth of the Fiume Metauro and Rimini. For details see the “Introduction to the Notices to Mariners” for the current year and Chart no. 1050.

**Wrecks** – The following submerged hulls lie in the waters of Fano:

- 1) the hull of a trawler lies at 43°51'N - 013°04'E and is dangerous to shipping;
- 2) the remains of a minelayer lie about 8 M to the NNE of Fano, in depths of 26 m;
- 3) a sunken hull loaded with iron bars lies at 44°04'33"N - 013°19'10"E, abeam the hill called “Prelato” located immediately W of Monte Giove, at a distance of 19 M in depths of 59 m;
- 4) the remains of a submersible lie abeam of the mouth of the Fiume Metauro, at a distance of 9 M in depths of 35 m (43°56'24"N - 013°12'45"E).

**Submarine pipelines** – A gas pipeline reaches the shore at the mouth of the Fiume Metauro (43°49'42"N - 013°03'30"E) which connects the BASIL, BRENDA A and BRENDA T platforms, located about 16 M to the N of Fano, to land (see below).

**Dangers** – there is a wide area of foul bottom marked on the charts along the stretch of coast between the mouth of the Fiume Metauro and Pesaro, about 1.5 M from the shore.

**FANO** (Chart no. 214) – From sea it looks like a large town. Some bell towers can be seen. Monte Giove (223 m) rises to the SW of the town and is topped by a convent (hermitage) with bell tower; it is an excellent reference point for landing.

A tall **tank** with a grey frame-work is clearly visible even from a considerable distance at the SE end of the town.

The **bell tower** of S. Paterniano and a square red **bell tower structure** with arched windows can be seen in the town.

**Anchorage** – Vessels may anchor just over 1 M from land in 12 m on a sandy bottom; vessels drawing less than 4 m can approach up to 500 – 600 m. The anchorage is exposed to all the winds.

**Winds** – The N and NE winds are very violent cross winds. Winds from quadrants I (Bora) and II dominate in spring and summer; those from quadrants III and IV in the autumn and winter.

The ENE wind raises very high waves and makes entry into port dangerous.

The prevailing winds are from the SE in the summer and from the SW in winter, while the dominant winds are from the NE and the SW.

**Tides** – The maximum excursion reaches 0.6 m.

**Currents** – Generally head SE and are influenced by the winds. In the winter the N and W winds add to their intensity considerably.

**Weather warning signs** – Formations of clouds on Monte S. Bartolo herald winds mainly from the NW that then generally veer to the NE.

In the summer a clear horizon means winds from the East can be expected.

**Dangers** – The entry manoeuvre is dangerous in adverse weather conditions. The depths are very variable near the entrance.

**Regulations** – Access to the port is permitted subject to authorisation by the Fano Harbourmaster, to be contacted at least 30 min before expected arrival on VHF channel 16.

**Prohibitions** – It is prohibited to anchor within a 0.4 M radius of the port entrance. Entry, exit and navigation inside the Port of Fano are prohibited for vessels drawing more than 2.8 m. Navigation in the Canale Albani is prohibited for all vessels drawing more than 0.9 m. Vessels drawing more than 2.3 m are prohibited to enter the Nuova Darsena.

**Port of Fano** – Is built at the mouth of the Canale Albali and is protected to the E and to the N by a large dyke with 4 arms and to the W by a dyke, heading approximately N, that extends the route of the channel.

Nine **radar-reflecting posts** are positioned at the port entrance, near the inner end of the E mole. Two more are positioned to mark the W mole.

The port complex includes various basins: one contains the tourist port of Marina dei Cesari, the other is the Channel Port.

**Marina dei Cesari tourist port** (see plan) – Lies to the E of the entrance, in a wide fully quayed dock accessed by the channel. It has 14 floating piers, 8 of which extend from the N quay, while the other 6 are anchored to a mole which divides the basin from the dockyard. Some dolphins are arranged near the W quay of the port.

The depths at the entrance are about 3.8 m. The bottom is mud and sand. The draught permitted inside the tourist port is 3.5 m.

**Lights** – The entrance is marked by 2 steady lights.

**Quay services** – 435 berths 60 of which are for visitors, maximum length of vessels that can moor 35 m, fuel station from fixed plant (7.00 am – 6.00 pm), drinking ware, water supply, electricity supply, quay lighting, fire extinguisher.

**Port services** – Mooring, security, FAX, VHF, weather service, public toilets/showers.

**Channel Port of Fano** – Is made up of three docks: the **Nuova Darsena**, positioned to the S of the tourist port, the W dock (**Darsena Pipeta**) and the E dock (**Darsena Giurgin**) are fully quayed. The depths at the entrance are 4 m, with minima of 2.3 m; the bottom is sandy.

**Use of the quays, depths and draughts** – Are as follows:

Name of the quays	Main use	Length of the quays (m)	Draught (m)
Quay no. 1	mooring trawlers	30	1.5
Quay no. 2	mooring trawlers	42	1.5
Quay no. 3	mooring trawlers	33	1.5
Quay no. 4	mooring trawlers	126	1.5
Quay no. 5 (Banchina del Faro)	mooring trawlers	32	1.5
Quay no. 6 (Molo di Tramontana)	mooring trawlers	50	1.5
Quay no. 7 (Molo di Tramontana)	mooring trawlers	20	1.5
Quay no. 8 (Banchina Fiorello Federici)	mooring trawlers	230	2.5
Quay no. 9 (Molo dei Calafati)	quay works	200	2.5
Quay no. 10 (Banchina 8 June 1964)	bunkerage	65	2.5
Quay no. 11	disembarking catch – launch/haulage	57	2.5
Quay no. 12	leased	35	2.5
Quay no. 13	leased	300	2.5
Quay no. 14	leased	165	2.5

The Molo della Liscia is used exclusively for the leased mooring of leisure craft. The Darsena Pipeta is used for mooring trawlers dedicated to fishing for clams. Vessels must moor bow-fast at Quay no. 4. The Darsena Giurgin is reserved for dragnet trawlers to moor bow-fast.

The Canale Albani is crossed by a swing bridge located near the lighthouse; it is marked at night on its sides by 2 red lights, one facing the sea and the other inland, only visible from the channel itself. Maritime traffic in any case has priority over pedestrians. Between midnight and 7.00 am the swing bridge does not operate and traffic along the channel is free.

Along the channel boats and vessels in general are **prohibited** from mooring at the sections of quay adjacent to the swing bridge.



**FANO  
MARINA DEI CESARI**

**TOURIST PORT  
2007**

43°51'.3 N - 013°01'.0 E

Because of an old **submerged pile**, mooring is **prohibited** to all vessels with a draught greater than 2 m in the 9 m long Banchina Nord section of the Darsena Giurgin between the sailors quarters and the ex Maritime Hospital building.

A **submarine electrical cable** marked on the chart extends between the two quays off the entrance to the expansion basin.

**Lighthouses and lights** – The lighthouse (figure 1) stands about 525 m to the S of the entrance to the Channel Port and consists of a tall square white tower on a brown two-storey building. The entrance lights (figure 1) consist of metal columns on pedestals; the one on the Molo Est is red, the one on the Molo Ovest is green (see the List of Lights).

**Fog signals** – a foghorn is located on the Molo Est.

Red light

Lighthouse

Green light

**Figure 1** – Fano, port entrance, lighthouse and lights (2007).

**Quay services** – 140 berths 10 of which are for visitors, maximum length of vessels that can moor 30 m, water supply, electricity supply, quay lighting, fire extinguisher, 2 slipways, 1 mobile crane, fuel station, boat storage.

**Port services** – 3 dockyards, repair workshop, VHF, refuse disposal, collection of used oil/spent batteries, public toilets, sailing club, Ships' Husband/Maritime Agent.

**Accessory services** – Ice sales, gas/LPG cylinders, boat and dinghy hire, car and cycle hire, car parking, chandlery, shops of every kind, food stores, laundry, caravan storage, camping, sports equipment, bar, restaurant, hotel, internet point, information office, letter box, post office, bank/exchange, cash point pharmacy, doctors' surgery/emergency medical service, hospital, first aid, decompression chambers at Fano, Ravenna and Ancona.

**Communications** – Buses, railway, taxis, motorway, airports at Ancona and Rimini.

**Authorities** – Circomare, Tourist Port management, Customs, Carabinieri, State Police, Tax Police, Fire Brigade.

From Fano to Pesaro the coast is dominated by the high ground of **Monte Giove** and **Novilara** (215 m); the latter is crowned by the village of the same name, recognisable by the church, the square tower in the midst of the houses and a tank on a frame-work.

To the E of Novilara, again on the crest of the hills can be seen the church and the bell tower of **Roncosambaccio** (148 m) among the trees and the **Castello Castracani**, complete with a donjon with a red roof. On the sea shore at the level of the castle can be seen a typical row of identical buildings, like chalets with steeply pitched roofs arranged along the beach.

A collection of houses can be seen near Novilara halfway between Pesaro and Fano, near the mouth of a stream.

**Monte Ardizio** (141 m) is elongated and brown with steep sides and looks like

Monte Conero from a distance and can therefore, although not so high, lead to errors, especially in mist. The mountain has a steep rocky side from the sea; radio masts rise from the slopes.

**Reefs** – Numerous emerging and submerged reefs extend in the stretch of sea between the Port of Fano and the mouth of the Fosso Sejore.

**Fish restocking areas** – A number of structures in reinforced concrete are found between the mouth of the Fiume Metauro and Pesaro about 1 M from the coast to encourage fish restocking. The areas are shown on the charts and are covered in 8 m of water. Some mussel farms are positioned within this area:

- 1) two adjacent farms are located about 2.9 M to the N of Fano and are marked overall by 2 special marker **light buoys** positioned at the N and S corners, by 2 special marker **day buoys** at the E and W corners and by 2 special marker **day buoys** located at the borders of the two plants;
- 2) a farm is positioned about 1.7 M to the NE of the mouth of the Fosso Sejore and is marked by 2 special marker **light buoys** positioned at the N and S corners and by 2 special marker **day buoys** at the E and W corners. The following are **prohibited** in the stretch of water where the farm is positioned: transit, anchoring, fishing by whatever means, swimming, underwater diving and any other activities connected with the use of the farm, with the exclusion of authorised vessels. All vessels navigating in the vicinity must keep at least 500 m from the perimeter of the farm and proceed at the minimum speed required to maintain control.

**Fixed platforms** – The following are located in the sea off Fano:

- 1) BRENDA PERF AND BRENDA PROD at 44°06'58"N - 013°02'40"E, make up a single complex and are connected by two submarine pipelines to the ANNABELLA platform (44°31'41"N - 013°04'44"E; see below).
- 2) BASIL at 44°49'42"N - 013°03'30"E, connected to the BRENDA PROD by two submarine pipelines;
- 3) DARIA A and B at 44°04'00"N - 013°15'00"E;
- 4) ANNALISA at 44°11'.0 N - 013°07'.5 E, connected by a submarine pipeline to the BRENDA PROD.

**Submarine pipelines** connect the platforms mentioned in points 2) and 3) to the plants located near the mouth of the Fiume Metauro (44°49'.65 N - 013°03'.60 E).

Anchoring and fishing are **prohibited** within 0.5 M of the installations and the pipelines up to the limit of the territorial waters.

**Reef** – A reef that is awash is located to the S of the small Zara mole, at Bagnarola.

The coastal hills are higher between Pesaro and Cattolica. The coast then becomes low again up to Rimini, with the high ground of the Republic of San Marino behind (Monte Titano, 738 m). The Umbria-Marche Appenine range forms the mountain system behind it; the highest peaks are: Monte S. Vicino (1,4985 m) and the Monti di Carpegna (1,415 m). Between Rimini and the Po delta the coast runs alongside a very low plain and, in the N part, is fragmented by water courses and numerous marshy sections that form the lagoons on the Po-Veneto area; the Po delta is made up of alluvial terrain. Fog is frequent in this area, so it is advisable to navigate with great care. A large number of bathing stations are present along the coast, from Fano all along the Ravenna coastline.

**PESARO** (Chart no. 214) – Is located at the mouth of the Fiume Foglia, in the basin that opens up between Monte Ardizio and Monte S. Bartolo.

**Conspicuous points** – Pesaro looks like a long line of modern buildings among which the following can be recognised: at the start of the built-up area, by the foothills of Monte Ardizio, the **Colonia Marina**, a typical large grey building on two floors with two symmetrical turrets and a red roof; at the centre of the town the large **dome**, of a light grey colour, with the small green dome of a church; on the shore to the W of the port a complex of 10 **buildings**, 9 of which are 55 m high, like tower blocks, which seen from the sea have brown and ivory facades.

**Anchorage** – The Pesaro Compamare with its ordinance has established the following anchorages for merchant ships, the positions of which are shown on the charts: **A** for lighterage; **B** for vessels with dangerous cargoes; **C**, **D** and **E** for vessels with various cargoes.

**Lighthouses** – The lighthouse is situated on the Monte S. Bartolo (45°55' N - 012°53' E), to the NW of the town and consists of a cylindrical white tower, 25 m high, next to a two-storey building (figure 2).

**Figure 2** – Monte S. Bartolo, lighthouse.

**Winds** – Are very variable. The most frequent in the year are those from quadrant III and, of these, the one that blows most frequently is the SW wind, called “Garbino” by the locals, that is hot and dry in the summer. Except for those from the N and the NE that can exceed 50 knots, the winds are of modest intensity. The greatest intensities are recorded in the winter, especially in December and January. During the winter the W and NW winds prevail while the winds from quadrant I are very strong and blow for a few days; they herald good weather, cold and dry, but rough seas. In the spring the NE prevails, in the summer the SW and in the autumn the NE, the SW and the SE. The latter brings bad weather, clouds and rain. Winds from quadrant I are cross winds.

**Tides** – The average range of the tides reaches 50 cm, with some variation due to weather and sea conditions. Winds from quadrants II and III tend to raise the high tides and reduce the low tides. Low atmospheric pressure gives a similar effect, while high pressure produces the opposite effect. The establishment of the port is 10 h 45 m.

**Currents** – With NE and N winds the coastal current that flows SSE up to 5-6 M from the coast reaches a considerable intensity. The current is significantly influenced by the winds. The tidal currents do not reach a speed of half a knot.

**Weather warning signs** – In the winter a build-up of clouds on the hills inland, on the high Foglia valley and a rapid fall followed by an unexpected increase in pressure herald the arrival of the strong NE wind followed by showers and high seas. If the wind tends to veer to the N bright spells are to be expected; however if it veers to the E or the SE it will start to rain and become unstable for several days.

The SW wind is heralded by brief sunny intervals on the hills and by a considerable lowering of pressure: it leads to bad weather.

In summer with high temperatures a fresh wind from the SE from the early hours of the morning and the presence to the N of a characteristic mass of dark clouds low on the horizon warn of storms possibly of appreciable intensity. If the SE wind tends to decline after a short time, a storm of relative short duration can usually be expected.

**Fog** mainly appears in December to March and is sometimes thick. Mist is frequent especially in the morning in the autumn.

**Dangers** – Near the Channel Port, within a 400 m radius of the entrance there are shoals the minimum depths of which vary and move due to sea storms. It is advisable to navigate keeping within the sector between the true bearings of 315° - 000° from the light on the Molo di Levante.

**Entry instructions** – It is very difficult to enter the port during N and E winds; in particular for landing it is advisable to approach to 1 M from the coast in the direction of the channel, keeping as close as possible to the axis of the channel to avoid the banks of sand that occasionally form to the E and to the W following winter storms. In the event of adverse weather conditions and in particular during winds from quadrants I and IV, greatest care must be taken with the entry manoeuvre due to the heavy swell that forms at the mouth of the port.

Vessels without permanent berths in the port of Pesaro must request permission to enter the port from the Operations Room of the Harbourmaster on VHF channel 16 or by telephoning on no. 0721400016.

**Pilotage** – Up to 1 km from the entrance from the port of Pesaro pilotage is temporarily obligatory for all vessels (of any nationality) with a gross weight of more than 400 t, both for entry and exit manoeuvres and for movements within the port, except for manoeuvres onto the quay that do not involve the use of machines and/or tugs.

Exempt from the pilotage obligation are naval vessels, vessels with a gross weight of less than 400 t, fishing boats that are not equipped for ocean fishing, tugs involved in the port services, vessels equipped for local traffic and for works in the port and those with an operational base in the port of Pesaro.

**Prohibitions** – Until a new order is issued, vessels with a draught greater than 3.4 m are prohibited from entering the port. Exceptions can be requested from time to time from the Harbourmaster of Pesaro, with regard to the depth surveys that will be conducted periodically in the area.

- The following are prohibited within the port and in the associated roadstead: fishing with nets and fixed equipment of any type, underwater diving, swimming, water skiing and/or any similar activities that could constitute a potential danger for the safety of shipping.
- Temporary mooring of leisure craft at the bollards, rings and other fixed arrangements without the master alighting from the vessel is permitted if it does not exceed 30 g.r.t.
- Leisure craft are prohibited from mooring or stopping as follows: at the head of the fuel-pier in line with the automatic fuel station, unless they need to carry out refuelling operations and only for the time strictly necessary; on the outside of the quayed spur that separates the berthing basin from the terminal part of the channel, unless they need to carry out refuelling operations at the fuel station and only for the time strictly necessary; in the stretches of water off the haulage slips; in front of the embarkation stairways at the quays; at the quays equipped for commercial operations.

- In the sector within a radius of 1,000 m from the red light of the port entrance, between bearings 270° - 030° (120°) of the red light, navigation must be conducted with particular care at a modest pace; anchoring and stopping are **prohibited** in this sector.

**Port of Pesaro** – Is located on the starboard bank of the mouth of the Fiume Foglia, at the NW end of the town. It is formed by an **access channel** defended by two **moles (Molo di Levante and Molo di Ponente)** with a depth of about 4 m, by an **expansion basin**, by a **stopping basin** and by a **terminal channel**. A floating pier is positioned in the centre of the stopping basin.

To the W of the entrance, between the Molo di Ponente and the Molo Foglia, extends the Nuova Darsena, intended for leisure craft and protected to the N by a long breakwater mole, with its origin at the head of the Molo Foglia.

The head of the Molo Foglia of the dock is not marked. Access is only permitted in daylight hours and with guaranteed weather conditions.

The port is fully quayed.

The depths are 3.5 – 4.5 m at the mouth and 5 – 5.5 m in the basin centre. The bottom is sandy/muddy. The port is subject to silting up, for which dredging is carried out periodically; for information contact the Maritime Authority.

**Lights** – See the List of Lights.

**Use of the quays and depths** – Is as follows:

Name	Main use	Quay size (m)	Max. vessel length (m)	Max. vessel width (m)	Depths (m)
<b>Molo di Levante</b>		320			3.8 – 4.5
<b>Molo di Ponente</b>		240			3.2 – 4.4
<b>Banchina Commerciale</b>	Merchant ships	217	100	15	4.5 – 5
<b>Banchina di Levante</b>	Leisure, Motor Vessels, trawlers	508	13	4	2.5 – 3.4
<b>West side of quays</b>	Leisure, trawlers	644	10	3.7	2.6 – 3.3
<b>Banchina di Ponente</b>	Vessels being completed	102	90	10	4.2 – 5
<b>Banchina Petroli</b>	Mooring tankers	608	60	8.8	3.8 – 4
<b>Darsena Nuova</b>	Leisure	217	7.5	3	1.8 - 3

**Quay services** – About 340 berths 3 of which for visitors, 3 slipways, 1 fixed crane of 10 t, fuel station (subject to telephone contact with manager) drinking fountain, boat storage.

**Port services** – Pilotage service, local guide, dockyard, repair workshop, refuse disposal, collection of used oil/spent batteries, public telephone, sailing club, Ships' Husband/Maritime Agency.

**Accessory services** – Boat and dinghy hire, car parking, chandlery, food stores, laundry, sports equipment, bar, restaurant, hotel, letter box, bank/exchange, cash point, pharmacy, doctor's surgery/emergency medical service, hospital/first aid.

**Communications** – Seasonal ferry for Croatia, buses, railway, taxis, motorway, airport at Falconara, heliport at Falconara.

**Authorities** – Compamare, Customs, Carabinieri, Police, Tax Police, Fire Brigade.

Between Pesaro and Cattolica the coast is steep and falls rapidly to the sea with loose cliffs devoid of vegetation. The following are visible from sea: the **lighthouse** on Monte S. Bartolo, described above; the village of **Fiorenzuola di Focara** (177 m), in a high and isolated position; **Monte Gradara** (142 m) topped by a castle with a reddish perimeter wall with castellated towers (figure 3); **Monte Luro** (289 m) with symmetrical gently sloping sides topped by a tower-shaped church with bell tower.

**Figure 3** – Gradara castle.

**Submerged reefs** – There are two submerged reefs in the area of sea between Pesaro and Fiorenzuola di Focara about 150 m from the coast in depths of 3 m, each 1,200 m long; islets emerge from these reefs, about 180 m apart.

Other reefs lie to the SE and NW of these barriers, between Pesaro and Casteldimezzo, some emerging and some submerged. 3 groynes are positioned at Casteldimezzo to the SE of the marina of Vallugola.

A submerged artificial barrier intended for fish restocking is positioned to the NNW of Pesaro about 2.7 M from the coast, between Fiorenzuola di Focara and Monte Castellaro.

**Fish repopulation** – Anchorage and fishing (professional or sporting) is **prohibited**, whether surface or underwater, in the above mentioned zone. Transit is prohibited in the area of sea 450 m long and 100 m wide which extends parallel to the coast in a SE-NW direction, beginning from the Northernmost emerging barriers positioned to the NW of “Baia Flaminia”, in the village of Soria.

**Marine farms** – 1) A marine farm is positioned about 3 M to the NNW of the entrance to the port of Pesaro and is marked by **2 special signal light buoys**, located on the N and S corners, and by **2 special signal day buoys** positioned on the other two corners. The following are **prohibited** in the stretch of water occupied by the farm: transit, anchoring, fishing, swimming, diving and any other activities not connected with the use of the farm. Passing vessels must keep a distance of more than 500 m from the farm.

2) A farm is positioned about 1.5 M to the NNE of Fiorenzuola di Focara and is marked by **2 special marker yellow light buoys** on the N and S corners, by **2 special signal day buoys** positioned on the E and W corners and by **2 special marker day buoys** positioned half way along the E and W sides. The following are **prohibited** in the stretch of water affected by the farm, unless authorised by the Harbourmaster of Pesaro: transit, anchoring, fishing by whatever means, swimming, diving and any other activities not connected with the operation of the farm. Vessels passing in the vicinity must keep a distance of at least 500 m from the perimeter of the farm and proceed at minimum speed.

**Casteldimezzo** – Can be recognised by a small low grey bell tower (197 m), just to the NNW of Fiorenzuola di Focara, and by a white building standing out on the edge of the coast; to the S of this

a three-storey building can be seen with red shutters surrounded by small villas, that constitute the tourist village of “Vigna del Mar”.

**Conspicuous points** – The following points further inland can be seen from the sea: the **Monti di Carpegna** and the accentuated peak of **Monte Copiolo** (1,033 m); **Monte S. Marino** (738 m), recognisable by its four peaks, three of which are topped by towers; the villages of **Montefiore Conca** and **Saludecio** (343 m); the **Monti Scorticata** with their notable sinuous rocky crest, to the E of which lies the extensive village of **Verucchio** (332 m).

**GABICCE MARE** – Is a town that extends along the coast. Its suburb **Gabicce Monte** stands on the hill (144 m) that is sheer to the sea.

**Winds** – The ENE is the cross wind. The E and SE winds are dominant, while the NE is the prevailing wind.

**Tides** – The tidal excursion is 0.55 m.

**Port of Marina di Baia Vallugola** (see plan) – Lies in the municipality of Gabicce Mare; it is a tourist port the entrance to which is 20 m wide and lies between a breakwater mole, bearing NNW and an inner mole, bearing roughly E. The marina is provided with piers.

The marina is accessible to leisure craft with regular moorings in the Marina di Baia Vallugola.

The depths at the entrance to the port are 2.5 m, and the same in the basin centre; the minimum is 1.7 m. The bottom is sandy.

**Warning** – The marina is subject to silting up; dredging activities are carried out every year in May.

In winter is not advisable to moor in Vallugola because of silting up. The access is free in the period of 1 May – 30 September.

On arrival make contact with the Locamare (VHF channel 9) from 8.00 am – 8.00 pm.

**Lights** – A light is positioned on the head of each of the two moles (on a green post to starboard on entry; on a red post to port).

**Use of the quays, depths and draughts** – Is as follows:

MOLES AND QUAYS					Maximum size of vessels that can moor	
Name	Main use	Length (m)	Depth (m)	Draught (m)	Length (m)	Width (m)
<b>Darsena Est</b>	Leisure		2	1.8	12	4.5
<b>Pier F</b>	Leisure	25	2	1.8	8	3
<b>Pier E</b>	Leisure	28	2	1.8	8	3
<b>Pier D</b>	Leisure	32	2.3	2	8	3
<b>Pier C</b>	Leisure	24	2.3	2	8	3
<b>Pier B fixed</b>	Leisure	20	2.3	2	5	2
<b>Pier B floating</b>	Leisure	12	2.3	2	5	2
<b>Pier A</b>	Leisure	36	2.3	2	5	2
<b>Darsena Ovest</b>	Leisure		2.4	2.1	18	5.7
<b>Diga Nord</b>	Leisure	25	2.5	2.1	12	4.5
<b>Pier G</b>	Free transit	30				
<b>Pier H</b>	Free transit					



**MARINA DI BAIA VALLUGOLA  
TOURIST PORT  
2007**

43°57'.8 N - 012°47'.5 E

**Quay services** – 150 berths 15 of which are for visitors, fuel station (by means of tanker), drinking water, water supply, electricity supply, TV aerial point, TV cable socket, 1 slipway, 1 mobile crane of 120 t, 1 fixed crane of 500 t, fire extinguisher, quay lighting, boat storage.

**Port services** – Weather service, public toilets/showers, refuse disposal, repair workshop for wooden hulls with motors and electro-mechanical installations, mooring service, FAX, VHF, collection of used oil/spent batteries.

**Accessory services** – Ice sales, car parking, shops of every kind, camping, sports equipment, bar, restaurant, hotel, internet point, information office.

**Communications** – Buses, railway (Cattolica), motorway (Cattolica), airport (Rimini).

**Authorities** – Locamare, Tourist Port Management.

**CATTOLICA** (Chart no. 215) – Extends along the coast with modern buildings.

**Conspicuous points** – The **bell tower** of the dark red church, 52 m high, with pointed spire, and the square grey Municipal **tower** can be seen in the centre of the town.

Two tall **chimneys** stand out near the port. A **church** with bell tower is clearly visible on the ridge of the hills inland. A complex of **holiday buildings** of a light ash colour stands to the W of the town; a tower beacon stands on the central building.

**Anchorage** – There is shelter from W winds between Gabicce Mare and the mouth of the Torrente Conca, but exposure to those from the NW to the SE; the SW often wind blows with very violent gusts.

**Dangers** – Some large rocks covered by 2 m of water lie on the bottom to the E of the channel's axis, up to 400-500 m from the beach.

The entrance to the Channel Port can be obstructed by sandbanks that form after sea storms; in any case the maximum depths are about 2.5 m.

**Winds** – In winter the NW and N winds predominate; the former is stormy, the latter rainy. Both blow with considerable force and last for 3 – 5 days. In summer the moderate SE wind dominates, lasting about 12 hours. Sometimes this prevalence is interrupted by the SW wind which blows with particular violence, but for a short duration. In spring and in autumn the winds are moderate; the most frequent are the ENE and the W winds. The W wind brings fog; the NW wind mist; the ENE wind generates large waves and the NW and N winds strong currents.

**Currents** – The current has a constant SE direction, with a speed of 1-2 knots in summer, 3-4 knots in winter. With NE and NW winds the same current can reach an intensity of up to 5-6 knots.

**Tides** – The tide generates a constant current that reaches a speed of 1-2 knots in the summer period, of 3-4 knots in the winter period. The high and low tides lead, in the Channel Port, to a change in level of about 1 m.

**Weather warning signs** – When the W or SW winds blow through a cloudy sky, there can be an unexpected NE wind; during the same winds but with clouds that tend to open up, the SW wind can be expected to strengthen.

**Entry instructions** – Entry to the port is authorised by the local Maritime Authority that also authorises berthing at the quays.

**Channel Port of Cattolica** – Is formed by the mouth of the Torrente Tavollo, extended by 2 quayed moles bearing roughly N, about 23 m apart, by a small quayed dock that opens up at the root of the W mole, by an internal dock leased to the Marina di Cattolica Company and by a floating pier located inside the quayed Dock, on the W side.

The port is intended for fishing boats and leisure craft; it is sheltered from winds in quadrant III but is fairly inaccessible during a NE wind. It is subject to progressive silting up. Winds from quadrants I and II generate a strong swell making mooring at the quays of the moles unsustainable; in these cases it is only possible to moor in the dock.

The depth is 4.6 m at the entrance, 3.8 m in the basin centre; the minimum is 2.5 m. The bottom is sand/mud.

**Use of the quays, depths and draughts** – Are as follows:

MOLES AND QUAYS					Maximum size of vessels that can moor		
Name	Main use	Size (m)	Depth (m)	Draught (m)	Length (m)	Height (m)	Width (m)
<b>Channel Port E mole</b>	Fishing boats	762	3.8	2	24		5
<b>Channel Port E mole</b>	Fishing boats	767	3.8	2	24		5
<b>Quayed dock</b>	Fishing boats Leisure craft		3.2	2.8	18	2.8	6.5
<b>Internal dock</b>	Leisure craft		3.2	3	7 - 15	3	5
<b>Floating pier</b>	Fishing boats	70	2.2	2	7 - 10	1.2	2.5 - 3

**Works in progress** – Works are in progress to build a new dock outside the Channel Port of Cattolica. The area affected by the works is marked by two special marker light buoys located at 43°58'18".4 N - 012°44'50".2 E and at 43°58'18".0 N - 012°45'02".8 E. Swimming, navigation, anchoring and fishing are prohibited within the area. Vessels passing near the area affected by the works must proceed at the minimum speed.

**Lighthouses** – A lighthouse standing on four posts with black and white sides (figure 4) is positioned near the root of the E mole.

**Figure 4** – Cattolica, lighthouse.

**Lights** – The light on the head of the E mole consists of a metal column on a pedestal, painted entirely red; the one on the head of the W mole is a metal column on a pedestal, painted entirely green.

A **fog signal** (foghorn) is also positioned on the head of the E mole.

**Collection of used oil** – A service is available in the Channel Port according to the procedures established with Ordinance no. 16/94 of the Rimini Compamare.

**Quay services** – 120 berths plus 68 in the channel port, 20 of which are for visitors, water supply, electrical supply, quay lighting, fire extinguisher, slipway, 1 travel lift of 160 t, fuel station (8.00 am – 6.00 pm), boat storage.

**Port services** – Shipping Agent/Maritime Agency, dockyard, refuse disposal, collection of used oil/spent batteries, repair workshop, public toilets, public telephone, sailing club.

**Accessory services** – Ice sales, diving centre, boat/dinghy hire, car/cycle hire, car parking, chandlery, shops of every kind, food stores, sports equipment, bar, restaurant, hotel, internet point, information office, letter box, post office, cash point, pharmacy, emergency medical service, hospital, first aid.

**Communications** – Buses, railway, taxis, motorway, airport (Rimini), heliport (Rimini).

**Authorities** - Locamare, Tourist Port Management, Carabinieri, Tax Police, Fire Brigade.

**Breakwaters** – 17 breakwaters are positioned parallel to the shore at a distance of about 100 m from it to the E and W of the Port of Cattolica, more precisely from the mouth of the Conca up to the slope of Gabicce Monte to protect the beach.

**PORTOVERDE** – Is found at the mouth of the Torrente Conca.

**Conspicuous points** – It is recognisable by the tall circular building of the sailing club and nine ten-storey tower blocks, which lie further W near the beach.

**Entry instructions** – Access to the port is dangerous during NE winds that create a considerable swell; it is advisable to use an echo sounder and to proceed at a slow pace.

**Regulations** – Access is permitted exclusively to leisure craft and fishing boats that have regular moorings; vessels transporting passengers may moor for the time needed for the embarkation/disembarkation operations and subject to agreement with the Management of the tourist port. Vessels of more than 25 m overall length or that draw more than 1.8 m are **denied** access.

**Portoverde** – (see plan) (figure 5) – Is a private tourist marina located about 100 m to the W of the mouth of the Torrente Conca, between Cattolica and Misano Adriatico.

The **marina** is protected by two small moles at right angles to the coast marked by **lights** at their heads.

Inside it is divided into two fully quayed docks: the **Darsena Vecchia** is to the N and is provided with two moles and various piers; the **Darsena Nuova** is to the S.

The depths are 1.8 m at the entrance and 3 m in the basin centre. The bottom is sandy.

The marina is subject to silting up, above all at the entrance, but is regularly dredged.

Figure 5 – Portoverde, marina (2005).

Use of the quays, depths and draughts – Are as follows:

Name	Main use	Max. vessel length (m)	Max. vessel width (m)	Depth (m)	Draught (m)
Darsena Nuova	Leisure	25	6.5	3	1.8
Darsena Vecchia (shore quay)	Leisure	25	6.5	3	1.8
Darsena Vecchia (piers)	Leisure	12	4.5	3	1.8

**Quay services** – 350 berths, fuel station, boat storage, drinking water, water supply, electrical supply, TV point, quay lighting, fire extinguisher, slipway.

**Port services** – Mooring, security, repair workshop, skin diver, FAX, weather service, refuse disposal, collection of used oil/spent batteries, public toilets/showers, public telephone, sailing club.

**Accessory services** – Car/cycle hire, car parking, chandlery, shops of every kind, food stores, laundry, sports equipment, bar, restaurant, information office, bank, cash point, pharmacy, doctor's surgery/emergency medical service at Misano Adriatico, hospital/first aid at Cattolica.

**Communications** – Buses, railway at Misano Adriatico, taxis, motorway at Cattolica-San Giovanni, airport and heliport at Rimini.

**Authorities** – Tourist Port Management, Carabinieri.

**Prohibitions** – Navigation, stopping and fishing are prohibited in the area off the Misano Adriatico coastline, up to a distance of 350 m from the coast.

After Cattolica the coastline becomes lower. Near the shore a building with three sections can be seen, the side ones being light green and the central one grey.

**PORTOVERDE  
MARINA  
2007**

43°58'.3 N - 012°43'.0 E

**Wrecks** – The wreck of an aircraft that is dangerous for shipping lies in depths of about 9 m at approximately 44°01'00" N - 012°41'20" E.

**Breakwaters** – Barriers that are awash are positioned to the S of Riccione, about 200 m from the coast, that extend from abeam the settlement of Mater Dei to abeam the Grand Hotel of Riccione. They are marked by small yellow **buoys** positioned 100 m from one another.

**RICCIONE** – Consists of an uninterrupted line of modern blocks of flats. Behind them, on the ridge of the first level hills two reddish churches with red bell towers on square bases are recognisable.

**Winds** – Both the dominant and prevailing winds come from the E and the SE. N and NW winds create swell.

**Tides** – Tidal excursions of about 1 m are recorded.

**Entry instructions** – Before entering port contact the Maritime authority by VHF channel 16 to check the availability of berths and the state of the depths at the entrance.

The entrance is subject to a strong swell that tends to impede the boats, even those with a considerable weight and powerful engine, above all with N and NW winds.

**Channel Port of Riccione** (see plan) – Is a tourist-fishing marina that opens up at the mouth of the Rio Melo; it is protected by two moles and consists of the quayed banks of the channel and by two docks called Darsena di Ponente and Darsena di Levante, from which a pier extends. The port is sheltered from winds in quadrant III.

The depths at the entrance are very variable; on average they are 1.3 m at the entrance, 1.8 m in the basin centre with a minimum of 1.4 m. The bottom is of sand and mud with a good hold.

**Dangers** – The port is subject to silting up, especially during the winter period, when the depths reduce to less than 1m, restricting access to small boats with shallow draughts. They are dredged regularly.

**Lights** – The entry to the port is marked by lights, positioned on the heads of the outer moles, and by a foghorn with a red light on the E mole.

**Use of the quays, depths and draughts** – Are as follows:

Quay name	Main use	Max. vessel length (m)	Max. vessel width (m)	Max. vessel height (m)	Depth
Darsena di Ponente	leisure	18	4 – 5		2
Darsena di Levante	leisure/fishing	18	4 – 5		1.6
Quay channel between the V.le D'Annunzio-V.le Dante bridges	leisure	7 (5.5 if moored stern fast)	2	1.7 (0.8 in full channel conditions)	1.3
Quay channel between the V.le Dante-V.le Tasso bridges	leisure	7 (5.5 if moored stern fast)	2	1.7 (0.8 in full channel conditions)	1.3
Quay channel between the V.le Tasso-railway bridges	leisure	7 (5.5 if moored stern fast)	2	1.7 (0.8 in full channel conditions)	1.3

**RICCIONE  
CHANNEL-PORT  
2007**

44°00'.5 N - 012°39'.5 E



**Quay services** – 500 berths 6 of which are for visitors, fuel station, drinking water, boat storage, water supply, electrical supply, quay lighting, fire extinguisher, slipway, fixed crane of 12 t.

**Port services** – Mooring, security, VHF, dockyard, repair workshop, refuse disposal, collection of used oil/spent batteries, public toilets/showers, public telephone, sailing club.

**Accessory services** – Shipping Agent/Maritime Agency, boat and dinghy hire, cycle hire, chandlery, car parking, shops of every kind, food stores, laundry, caravan parking, camping, sports equipment, bar, restaurant, hotel, internet point, information office, letter box, post office, bank/exchange, cash point, pharmacy, doctor's surgery/ emergency medical service, hospital/first aid.

**Communications** – Buses, railway, taxis, motorway, airport and heliport in Rimini.

**Authorities** – Locamare, Carabinieri, Fire Brigade (Rimini), State Police (only in the summer period).

Beyond the bridge on the **Torrente Marano** two buildings (holiday apartments) can be seen: one is red and the other white with a tall white tower beacon in the centre (**Colonia Novarese**). Behind the row of houses a large cylindrical tank with red and white chequers on a cylindrical red donjon can be recognised. Just inland, on the ridge of first level hills, there are some bell towers including that of **S. Lorenzo in Correggiano** with its white dome.

**Mussel farm areas** – These are found about 2.5 M to the ENE, 3 M to the NNE, 3 M to the N and about 4 M to the NNE of Riccione respectively. The corners of each one are marked by small radar-reflecting **buoys** and the centres by yellow **light buoys** with "X" shaped radar-reflecting topmarks (see List of Lights).

The limits of the areas and the buoys are shown on the charts.

Navigation, stopping, anchoring, diving, swimming and fishing are **prohibited** within the above areas.

**Wrecks** – A wreck is found near the coast, about 2.5 M to the SE of Rimini, at a depth of 3.8 m. The wreck of the fishing boat "Vittoria" lies at approximately 44°05' N - 012°38' E in depths of 13 m marked by a small black buoy.

A sunken hull which is **dangerous** to shipping is found at 44°06'41" N - 012°43'10" E; it is marked by 2 small white buoys.

To the NW of the above another wreck lies about 5.5 M to the NE of Rimini in a depth of 13 m.

**Military exercise area** – Attention is brought to the existence of a vast area for military exercises along the coastline of Rimini. For details see the "Introduction to the Notices to Mariners" for the current year and Chart no. 1050.

**RIMINI** (Chart no. 215) – Locality of considerable tourist and nautical interest, viewed from the sea it does not have many notable characteristics, except for a **tower block**. The coast road is very well lit during the summer until late at night.

**Conspicuous points** – With clear weather the following can be recognised: **Monte S. Marino** (or **M. Titano** 738 m), easily recognised by the 3 towers on top; the **Monti di Carpegna** (1,415 m), further inland, almost in line with the mouth of the Channel Port of Rimini, that has a gently curving ridge and wooded slopes; the **Monti Scorticata**, with 3 peaks, the central one having a noteworthy tower on top.

An excellent reference point in Rimini is the conspicuous tower block, mentioned above,

with 27 floors and a whitish colour, 100 m high, located about 900 m to the S of the lighthouse and clearly visible during clear weather even at a distance of 10 M. By night the building can be recognised by the red aircraft warning lights on the four corners, halfway up and at the top.

To the SE of the tower block the pointed bell tower of Piazza Tripoli, that stands near the beach and the large cylindrical tank of the airport, about 50 m high, painted with red and white stripes, can be recognised.

**Dangers** – About 1,200 m to the W of the entrance to the Channel Port and about 300 m from the coast, a **bank of sand and pebbles** is formed that normally stretches out from the beach for about 100 m with a width of about 50 m and depths of 0.3 – 0.5 m. The bank is unmarked and constitutes a danger for boats coming from the N heading for Rimini.

A **block of concrete** that is dangerous to shipping lies on the bottom, about 3 m from the line of the quay, alongside the “IGEA PESCA” warehouse.

**Wrecks** – A wreck lies to the N of the light positioned on the head of the entrance mole of the Channel Port of Rimini, at a depth of about 4 m.

**Anchorage** – Except for those transporting dangerous cargoes, merchant ships can anchor at the point 44°07'06" N - 012°34'20" E, as laid down by the Rimini Comandante with a suitable ordinance.

Before anchoring the Masters of the vessels must contact the Maritime Authorities on VHF channel 16 for the necessary authorisation.

All maritime activities by vessels not at anchor are prohibited in the area of sea with a 0.3 M radius centred on the point defined above.

**Winds** – In January, February and March winds from the W, NW and N predominate bringing fog and mist. At variable intervals in the above months NE and E winds blow, which are always stormy and bring rain and can even last for a week. From April to September the winds are variable and the weather is generally good; from October to December winds from the S, SE and E and sometimes NW predominate: the first three bring rain, but the NW wind brings good weather. Winds from the N, NE and particularly E are dangerous in all seasons. The NW and N winds are cross winds.

**Currents** – Heading SE, speed about 1 knot. In the winter, during strong winds from quadrant IV, it can reach 5 knots.

**Tide** – The normal tidal excursions vary between 60 and 80 cm. During strong winds from the open sea the level of the water in the port rises considerably.

The establishment of the port is 11 hours.

**Weather warning signs** – If Monte Titano is covered and the high ground of Casteldimezzo is very clear bad weather can be expected.

**Landing** – To land at Rimini follow the “lighthouse – tower-block” **leading line** (190°30').

**Entry instructions** – Before entering the access channel of the port, steer to the extension of the axis of the channel itself, at least 200 m from the head of the Molo di Levante. The N and NW winds generate considerable swell at the entrance.

The internal part of the port is sheltered from all the winds; the entrance is sensitive to the effects of the NE wind; the N and SE winds pile up the waters. It is dangerous to enter the port during N or NE winds.

**Channel Port of Rimini** – Consists of the mouth of the Fiume Marecchia, quayed on two sides and extended by two moles: **Molo di Levante** and **Molo di Ponente**.

Again these are quayed; there is a berthing spur for ferries in line with the internal elbow of the Molo di Levante.

**Prohibitions** – From 1 May to 30 September of every year, fishing by any means and swimming are prohibited in the stretch of water 500 m wide off the beach of S. Giuliano, to the W of the Molo di Ponente, due to the presence of leisure craft.

**Regulations** – 1) On entering and leaving the port all ships, vessels and boats of any type and weight, including leisure craft, must proceed at low speed (no greater than 3 knots) and keep in the mid-starboard of the channel with respect to their course.

2) Ships, vessels and boats that are leaving have priority over those entering.

3) The turning manoeuvre, authorised beforehand, is only permitted at the level of the haulage slipway and is restricted to vessels drawing no more than 2.5 m with an overall length of no more than 50 m. Trawlers and small craft that frequent the port are exempt from this requirement.

4) When dredging works are in progress ships and vessels entering and leaving must stop and wait until the warping cables of the dredger have been let go.

5) It is **prohibited** to navigate under sail in the section of channel between the lighthouse and the Ponte della Resistenza.

6) In the context of the Channel Port of Rimini there is a **collection service for used oil** that can be regenerated discharged from merchant, naval, fishing and leisure vessels. The service is carried out by the Obligatory Consortium of Used Oils with the procedures set out in Ordinance no. 16/94 of the Rimini Compamare.

**Lights and lighthouses** – The lighthouse (figure 6) positioned inside the channel on the E bank consists of a square white tower, 25 m high, with an all-white building. It is not easy to recognise as it is surrounded by numerous constructions.

For the lights see the List of Lights.

**Figure 6** – Rimini, lighthouse.

**Depths** – Especially at the entrance the depths of the Channel Port are very variable and require dredging every year. At the entrance they are 4.5 m and in the basin centre 4 m,

with minima of 3.5 m. The depths are greater on the E side of the channel, between the entrance and the lighthouse, beyond which they diminish gradually. The bottom is muddy.

**Use of the quays, depths and draughts** – Are as follows:

Name	Main use	Quay size (m)	Max. vessel length (m)	Max. vessel width (m)	Depths (m)	Draught (m)
<b>Molo di Levante</b>	Commercial/ passenger transport	180	100	20	4.5	3.5
<b>Banchina Destra</b>	Fishing/leisure	1350	30	6	4	3
<b>Banchina Sinistra</b>	Fishing/leisure	760	30	6	4	3
<b>Banchina Ro-Ro</b>	Commercial/ passenger transport	110	90	10	6.5	5.5

Boats with a superstructure height of less than 1.25 m can access up to the Ponte Tiberio.

**Docks for leisure craft** – Upon entry to the Channel Port, to starboard, a wide dock opens up called Marina di Rimini, quayed for 3,000 m and equipped with various piers intended for leisure craft and fishing boats to berth. Vessels up to 40 m long and 12 m wide can access. The depths are 4 m, the draught permitted is 3 m.

Upon entry to the Channel Port, to port near the Sailing Club, a small dock opens up for leisure craft. Another dock, located within, is in the old river-bed of the Fiume Marecchia, upstream of the Resistenza bridge, up to the Ponte Tiberio (or Romano) quayed for 990 m. The depths are 2-3 m. It can accommodate about 300 vessels with a maximum length of 10 m, drawing 1.2 m.

Due to the low height of the Ponte della Resistenza, the entry to the latter dock is only permitted for vessels without masts or superstructures or with low superstructures and masts that can be lowered.

The height restriction for vessels to access is 1.25 m.

**Quay services** – 300 berths from the Ponte della Resistenza to the entrance to the channel port 200 of which are for leisure craft and 100 for fishing boats, another 300 between Ponte della Resistenza and Ponte Tiberio, boat storage, fuel station (9.00 am – 6.00 pm), drinking water, water supply, electrical supply, quay lighting, fire extinguisher, slipway, mobile crane up to 60 t.

**Port services** – Dockyards, repair workshop, skin divers, VHF, refuse disposal, collection of used oil/spent batteries, public toilets, public telephone, sailing club.

**Accessory services** – Shipping Agent/Maritime agency, gas/LPG cylinders, boat and dinghy hire, car/cycle hire, car parking, chandlery, food stores, laundry, bar, restaurant, hotel, information office, post office, bank/exchange, cash point, pharmacy, doctors' surgery/emergency medical service, hospital/first aid, decompression chamber.

**Communications** – Seasonal ferry for Croatia, motorway, railway, buses, taxis, airport of Rimini-Miramare, heliport.

**Authorities** – Compamare, Tourist Port Management, Carabinieri, Police, Tax Police, Fire Brigade, Customs.

To the N of Rimini the coast is low and sandy; the area behind it is higher and rich with vegetation. Along the beach an uninterrupted line of modern blocks of flats and

swimming establishments stretches out. The following are recognisable between the suburbs of Viserbella and Torre Pedrera, immediately to the NW of Viserba: two **aerials** painted with red and white stripes; a **tank** consisting of a red cylindrical construction, topped by a silver cylinder of a greater diameter and finally above the tank a grey **building in the shape of a chimney**.

**Monte S. Arcangelo di Romagna** (88 m) is recognisable by two humps, both topped by towers, and the village of the same name; the two summits are easy to make out from the N. Level with S. Arcangelo di Romagna a water tank (located about 1 M to the NW of Viserba) stands out on the coast, isolated and clearly visible, with a chimney a bit further N.

**Viserba** extends along the coast for over 1.5 M; it comprises a number of detached houses.

**Breakwaters** – To protect the settlements of Viserba, Viserbella and Torre Pedrera, threatened with erosion, there are a number of breakwaters each 100 m long located about 300 m from the coast, that extend uninterrupted up to the port of Bellaria.

**Dangers** – Due to the presence of a half-emerging post in the circular area centred at 44°07'.883 N – 012°29'.538 E with 100 m radius navigation, anchoring, stopping, mooring, fishing and swimming.

**Wrecks** – A wreck lies about 5.5 M to the N of the lighthouse of Rimini.

**Buoys** – An oceanographic buoy is positioned at 44°08'39" N - 012°34'24" E and is equipped with a yellow light with X topmark. Navigation, stopping, anchoring, diving, swimming and any type of fishing are **prohibited** in the adjacent area, marked on the chart.

**Marine farms** – A mussel farm is positioned about 3.5 M to the E of Bellaria with a mollusc farm alongside. Each is marked by 4 small buoys positioned at the corners and by a yellow light buoy at the centre. The buoys are at 44°09'00" N - 012°32'46" E and 44°09'50" N - 012°31'58" E respectively.

Navigation, stopping, anchoring, diving, swimming and any type of fishing are **prohibited** in the areas affected by the farms.

**BELLARIA and IGEA MARINA** – Are two settlements forming one single municipality, at the mouth of the Fiume Uso (the ancient Rubicon). The entire habitation consists of a number of hotels and villas that extend for over 2 M to the N and S of the river. At the start of the habitation, immediately to port of the entrance of the channel, a large yellow building stands out, located 150 m from the beach consisting of three floors, with the taller single storey central body (National Railways Holiday Camp). About 1 M to the W of the entrance of the channel stands the Hotel Gambrinus, a brown building with white balconies, and the tower of the aqueduct, 45 m high, of a grey colour.

**Breakwaters** – A number of breakwaters are positioned parallel to the coast all along the coastline off the settlements of Bellaria and Igea Marina.

**Winds** – In the summer and autumn winds from the E, SE and S dominate; in the winter they are from the N, NW and W. N, NE and E winds are always dangerous. The NW and N winds are cross winds.

**Entry instructions** – Vessels leaving have priority over those entering. The maximum speed permitted is 3 knots.

Entry to port is dangerous during built-up seas and big waves from the open sea.

**Channel Port of Bellaria** – Consists of the mouth of the river, extended out to sea by two small moles 30 m apart. The banks are quayed.

The depths at the entrance are 2-3 m, in the channel 2-2.5 m, with minima of 1 m. The bottom is muddy.

**Prohibitions** – It is prohibited to navigate under sail within the port and in the access channel.

**Dangers** – The Channel Port is subject to silting up and is continuously dredged (except from June – September) to keep the average level of the depths at about 2 m.

**Lights** – See the List of Lights.

**Use of the quays, depths and draughts** – At the quay and at the mole on the N side of the channel, with berths over a distance of about 520 m, fishing boats up to 20 m long, 5 m wide and drawing 2-2.5 m can moor.

The quay and the mole on the N side of the channel, with berths over a distance of about 615 m, are intended for leisure craft, traffic and fishing boats up to 40 m long, 6 m wide and drawing 2-2.5 m.

**Collection of used oil** – See Ordinance no. 16/94 from the Rimini Compamare for the procedures for collecting used oil that can be regenerated.

**Quay services** – 80 berths 12 of which are for visitors, fuel station, drinking fountain, boat storage, water supply, electrical supply, quay lighting, fire extinguisher, slipway, fixed crane up to 15 t.

**Port services** – Dockyard, repair workshop, deep sea diver, skin diver, FAX, VHF, weather service, collection of used oil/spent batteries, public toilets/showers, public telephone, sailing club.

**Accessory services** – Shipping Agent/Maritime Agency, ice sales, gas/LPG cylinders, diving centre, boat and dinghy hire, car/cycle hire, car parking, chandlery, shops of every kind, food stores, laundry, caravan park, camping, sports equipment, bar, restaurant, hotel, internet point, information office, letter box, bank/exchange, cash point, pharmacy, doctors' surgery/emergency medical service.

**Communications** – Buses, railway, taxis, motorway at Rimini Nord, airport of Rimini-Miramare.

**Authorities** – Locamare, Customs, Carabinieri, Police, Tax Police, Fire Brigade.

**Breakwaters** – To the E and W of the Channel Port of Bellaria there is a succession of 52 breakwaters to protect the beach, located about 150 m from the shore and almost parallel with the coastline.

**Fixed installations for the extraction of hydrocarbons** – There are platforms and wells in the waters of the Maritime Department of Rimini for the extraction of hydrocarbons.

The platforms are suitably marked (see the List of Lights) and are found in the following positions:

- 44°13'43".129 N - 012°42'18".062 E (ANEMONE B);
- 44°12'50".0 N - 012°42'19".4 E (ANEMONE CLUSTER);
- 44°12'50" N - 012°46'36" E (ANTONELLA);
- 44°18'20".3 N - 012°37'41".3 E (ARIANNA A);

- 44°18'18".572 N - 012°37'38".904 E (**ARIANNA CLUSTER**);
- 44°09'59".8 N - 012°43'12".2 E (**AZALEA B**);
- 44°17'38" N - 012°38'21" E (**CERVIA A**);
- 44°17'17".4 N - 012°38'44".3 E (**CERVIA B**);
- 44°18'03".487 N - 012°38'24".988 E (**CERVIA C**);
- 44°17'39".996 N - 012°38'23".436 E (**CERVIA Cluster**);
- 44°13'49".524 N - 012°28'59".179 E (**MORENA 1**);
- 44°06'15".395 N - 012°50'25".959 E (**REGINA**);
- 44°20'35".79 N - 012°44'43".48 E (**NAIDE**).

Arianna A and Arianna Cluster are connected by a walkway.

Cervia A and Cervia Cluster are connected by a walkway.

The **wells** are suitably marked (see the List of Lights) and are in the following positions:

- 44°10'16".2 N - 012°42'52".3 E (**AZALEA A**);
- 44°10'15".8 N - 012°42'51".8 E (**AZALEA B**);
- 44°07'49".4 N - 012°45'12".7 E (**GIULIA 1**).

Azalea A and Azalea B are connected by a bridge.

**Submarine pipelines** – The platforms and the wells are connected to each other and to the “Rubicon” gas Power Station by submarine pipelines.

**Prohibitions** – Anchoring and fishing by trawling and with equipment that drags and disturbs the sea-bed are prohibited in the areas marked on the charts surrounding the fixed installations and the pipelines.

Anchoring and trawling are however permitted between the lines joining the following points:

- a) 44°11'24" N - 012°29'36" E;
- b) 44°17'00" N - 012°38'15" E;
- c) 44°13'51" N - 012°40'51" E;
- d) 44°10'36" N - 012°42'00" E.

No vessels of any type are permitted to transit and stop within a 500 m radius of the above installations. It is also prohibited to conduct underwater fishing or to approach on or below the surface within 500 m of them (Ordinance 10/01 of the Rimini Compamare).

**Marine farm areas** – A marine farm is located in the area of sea bounded by the following points:

- 44°12'.99 N - 012°27'.42 E;
- 44°13'.40 N - 012°28'.10 E;
- 44°12'.41 N - 012°29'.14 E;
- 44°11'.97 N - 012°28'.46 E;

The outline of the area is marked by **4 day buoys** with X topmarks positioned at the corners and by a special marker **light beacon** located within.

There is another marine farm to the NE of the above area, in the area bounded by the following points:

- 44°14'.04 N - 012°29'.59 E;
- 44°14'.48 N - 012°30'.42 E;
- 44°13'.68 N - 012°31'.12 E;
- 44°13'.29 N - 012°30'.28 E.

This farm is marked by a central light signal located at 44°13'48" N - 012°30'21" E.

A marine farm is positioned about 2.8 M to the ENE of Gatteo a Mare and is marked at the corners by 4 small buoys and at the centre, at 44°11'37" N - 012°30'18" E, by a special marker **light buoy**.

Within the areas indicated above the following are **prohibited**: navigation, except for vessels intended to service the farms; stopping, anchoring, diving, swimming and any type of recreational and commercial fishing with any type of net, equipment and/or instrument.

**Submarine pipelines** – a submarine pipeline is positioned off the village of Gatteo a Mare. The terminal is marked by a special marker light buoy located at 44°10'.682 N - 012°26'.234 E (WGS 84).

**CESENATICO** (Chart no. 215) – Is easy to recognise from sea by a very tall, light-coloured square tower block (120 m) located about 1,000 m to the S of the Channel Port and visible from about 20 M during clear weather. The following are also conspicuous: a large cylindrical **tank** on a framework, 47 m high, in the centre of the village that is visible from about 12 M, the **bell tower** of the church, beyond the houses, and a much smaller tank to the N of the village.

**Dangers** – A votive statue on a cement pedestal is positioned along the W coastline in the stretch of water off the XII Stelle Holiday Camp at a distance of about 100 m from the shore. It emerges about 2 m above the average tide level.

**Anchorage** – Except for those transporting dangerous goods, ships that intend to stop in the Cesenatico roadstead must anchor at 44°13'.8 N – 012° 24'.7 E, having obtained authorisation from the Maritime Authorities on VHF channel 16.

The circular area with a 0.3 M radius centred on the anchorage is defined as the “Rada di Cesenatico”, and it is **prohibited** to position equipment or carry out activities that might impede the anchoring operations within it.

**Winds** – Sheltered from those in quadrants III and IV (except N). Those from the ENE (cross winds) are particularly violent in winter, as are those from the SW (called “Garbino” by the locals) in the summer. E and NE winds cause swell; the W wind brings fog, often before midday in autumn and winter months.

**Tides** – The excursion is about 0.7 m.

**Currents** – The coastal current generally flows to the SE and is affective up to 5-6 M from the coast with a speed of about 2 knots; it strengthens considerably during a N wind, and can reach up to 5 knots.

**Weather warning signs** – In the winter white clouds on the hills around the Savio valley, to the W, warn of the E wind; if the clouds are dark rain is also likely. The same clouds followed by further clouds appearing to the E, with excessively high water levels in the port herald the NE wind.

In summer an unexpected and particularly violent SW wind is preceded by the formation of white clouds over the hills to the W of Cervia. A particularly clear horizon to the E indicates a SE wind which in the summer is dominant especially in the afternoon.

A SE wind and low clouds to the N indicate the approach of a storm that is generally short in duration.

**Entry instructions** – Vessels of up to 3.2 m draught can enter the port. All vessels entering or leaving the port must always proceed at low speed and in any case at no more than 3 knots.

It is **dangerous** to enter port with NE winds that cause swell.

The access channel has an average width of 25 m, is dredged regularly and is subject to silting up especially at the entrance and up to 100 m from it.



“**Da Vinci**” gates [a system of locks] are positioned in the transit area of the channel port, about 500 m from the entrance, in order to protect the town from the risk of flooding. The gates can be opened and closed in the event of general/extraordinary maintenance or in adverse weather conditions. Movement of the gates is indicated by light markers as follows:

- visible from outside the port: by **rotating yellow lights** positioned at the heads of the moles on yellow 5 m high posts, and by **white and yellow lamps** positioned on the walkway over the Da Vinci gates;
- visible from inside the port: by a steady **red semaphore light** positioned on the E quay about 60 m from the Da Vinci gates, and by **white and yellow lamps** positioned on the walkway over the Da Vinci gates.

The above markers may be supported and/or replaced by acoustic signals, or by other visual signals, including manual ones.

In the event of adverse weather conditions, closing the gates is also marked by a suitable message via VHF channel 16, with the communication being repeated at regular intervals, until they are fully opened once more.

If the Da Vinci gates are being moved it is absolutely **prohibited** for any vessel to access the port of Cesenatico, to leave it or to navigate along the transit area of the port concerned.

**Regulations** – In adverse weather conditions, the proprietors/ship owners/masters of traffic motorboats and passenger transports moored in the port of Cesenatico must scrupulously observe the following general regulations laid down by the local Maritime Authority:

- assess the possibility of putting to sea and/or leaving the port of Cesenatico, arranging to remain in contact with their agents on land (the identification of which will be exclusive responsibility of the relative proprietors/ship owners/masters) in order to be informed by the Mayor of Cesenatico of any activation of the “state of attention and/or emergency” as a result of the risk of flooding leading to the closure of the Da Vinci gates;
- if there is a sudden deterioration in the weather conditions while the vessel is at sea, vessels must contact the operations room of the local Maritime Authority immediately via VHF channels 16-14, in order to be updated with the current situation, and communicating position, course and expected weather for the return to the port of Cesenatico;
- Under these circumstances, to also assess the possibility of heading for a neighbouring port considered suitable for the characteristics and size of their vessel as well as being suited to the existing sea conditions, in order to avoid finding the port closed for re-entry due to the activation of the Da Vinci gates;
- in the course of the return to the port of Cesenatico, unless directed otherwise, the vessel will have to keep in continuous contact with the operations room of the local Maritime Authority via VHF channels 16-14;
- it remains the intention that the master of the vessel takes full responsibility for the decision to return under the circumstances in question and within the time laid down, being aware of the risk that if this time is exceeded, it might not be possible to gain access to the port.

For more information see Ordinance no. 16/07 of the Cesenatico Compamare.

**Channel Port of Cesenatico** – The access is protected by two long quayed moles, by Da Vinci gates in front of the two docks and the branch of the channel called **Vena Mazzarini**. The docks are interconnecting by means of the access channel to the **Darsena Vecchia**, intended for leisure craft, fishing and commercial activities, which can accommodate up to 70 boats, and subsequently to the **Darsena Nuova**, called **Onda Marina**, intended for tourist berths that can accommodate up to 280 boats. Both are provided with floating piers. The quays of the Channel

Port are as follows: the Quay for “embarking/disembarking various cargoes”, the Quay for “disembarking catch”, Banchina “Frontiera” and Banchina “Transfrontaliera”, at the Molo di Levante, intended for embarking/disembarking passengers.

The channel continues up to another small dock called **Vecchio Squero** and along the **Canale Centro Storico**.

The depths at the entrance are 3.4 m. The bottom is mud and sand.

**Lighthouses** – The lighthouse is located on the SE bank of the Channel Port, on a cylindrical white tower next to a two-storey house. Due to the other building constructed nearby, the entire tower is only visible from a restricted sector on the axis of the channel.

**Lights** – Positioned on the heads of the moles: metal columns on cylindrical pedestals at Molo di Levante (red) and Molo di Ponente (green) (see the List of Lights).

**Fog signals** – A foghorn is installed near the red light on the Molo di Levante.

**Collection of used oil** – All vessels can make use of the service according to the procedures set out in Ordinance 16/94 of the Rimini Compamare.

**Quay services** – About 670 berths 25 of which are for visitors, fuel station (subject to reservation from 01/10 – 30/04, during the rest of the year Mon – Fri 8.00 am – Noon, Sat/Sun 8.00 am – Noon and 2.00 pm – 6.00 pm), boat storage, drinking fountain, water supply, electrical supply, telephone point, quay lighting, haulage slipway, fire extinguisher, 2 mobile cranes up to 160 t, 4 fixed cranes from 10 t.

**Port services** – Dockyard, repair workshop, FAX, VHF, refuse disposal, collection of used oil/spent batteries, public toilets.

**Authorities** – Circomare.

**Breakwaters** – A 770 m long breakwater that is awash is positioned to protect the coastline and sets out in a NW direction from the N mole of the Channel Port of Cesenatico.

**Wrecks** – A sunken hull that is dangerous to shipping lies about 7 M bearing 063° from the Cesenatico lighthouse. Another wreck with 11.1 m head of water lies 1 M to the N of the one above.

**Submarine pipelines** – A submarine pipeline is positioned off the town of Cesenatico and the terminal is marked by a special marker **yellow light buoy** positioned at 44°12'.392 N - 012°24'.393 E.

**CERVIA – MILANO MARITTIMA** (Chart no. 215) – Are two swimming centres that form a single collection of tall massive buildings laid out, for the main part, along the coast road, with a wide beach upon which a number of swimming stations stand.

The two localities are separated by the **Canale delle Saline** that, in the coastal section, forms the port of Cervia.

**Conspicuous points** – To the S of the port the cylindrical **tower of the aqueduct** (25 m) can be seen towards the inland, on a reinforced concrete structure, with a white upper part and a dark lower part.

Two **tower blocks** are conspicuous in Milano Marittima, both having blue and white stripes; one is further inland, the other is near the beach.

Further N, towards the Lido di Savio, the buildings of two **holiday camps** can be seen: one with two separate bodies, joined by a frame-work of reinforced concrete, the other on four floors, of an ivory colour, laid out parallel to the beach.

**Winds** – Those from quadrants I and IV are dominant. The NE, E and SE winds are normally moderate.

**Entry instructions** – Before entering the access channel, all vessels of draught greater than 1.5 m are required to request permission to enter port from the local Maritime Authority on VHF channel 16.

During strong winds and sea from quadrants I and II, it is very difficult to enter the port of Cervia due to the narrow entrance and the presence of bars that form near the heads of the moles. It is not advisable to enter port if there are large waves.

**Channel Port of Cervia** – Is formed by the terminal part of the Canale delle Saline that emerges into the sea protected by two guard moles: the one to the N is about 100 m long, the other about 160 m; they are parallel and 25 m apart.

The banks of the channel are quayed, each for a length of 800 m: the starboard bank can be used throughout its length for boats to moor; the port bank can all be used except for the last 60 m because of the presence of the old piles of the mole on the bottom.

The port is subject to silting up in the winter period, but is dredged annually. The depths at the quay are 1.5 – 2.5 m. The bottom is sandy.

**Regulations** – With Ordinance no. 30/96 the Harbourmaster of Ravenna has ratified the Regulations for navigation, stopping, berthing and for the priorities at the same for ships and boats in the Channel Port of Cervia. For details on the moorings and the uses of the quays contact the Maritime Authorities.

Leisure craft must proceed at a speed of no more than 3 knots within the Channel Port .

**Prohibitions** – Fishing, swimming, navigation under sail and the use of water jets in the internal waters of the Channel Port of Cervia are prohibited.

**Lighthouses and lights** – To the SW of the entrance stands the octagonal tower of the lighthouse that is however only partly visible from the sea, in that it is covered by the tall surrounding buildings.

The light on the head of the Molo Sud is on a metal column on a pedestal, all painted red; the light on the head of the Molo Nord is on a green post; the light on the SW corner of the private dock is on a red post.

**Fog signals** – A foghorn is mounted on the head of the Molo S.

**Use of the quays, depths and draughts** – Vessels 6 - 13 m long can moor at the quay reserved for free mooring, on the Milano Marittima side, in the section between nos. 69 – 74 Via Parini; - vessels less than 6 m long can moor in the section of the quay of the Vecchia Darsena between the entrance to the dock and the second bollard near the crane of the “Il Sestante” Co-operative, stacked double if necessary; the remaining sections of quay of the dock are managed by the Municipality of Cervia (0544/979111).

Leisure craft using the above free sections of quay must, before launching their vessels, inform the local Maritime Authority as to the size and characteristics of the vessels and the general information on the owners/masters of the vessels themselves.

During the summer season the draught permitted is 2 m, and 1.5 m in the winter period.

**Quay services** – 52 berths, fuel station (8.00 am – 5.00 pm), water supply, electrical supply, quay lighting, haulage slipway up to 50 t, 5 fixed cranes up to 25 t, 1 travel lift up to 45 t, boat storage, public telephone.

**Port services** – Repair workshop, security, refuse disposal, weather service.

**Accessory services** – Ice sales, car parking.

**Entry instructions** – Follow the Channel Port for about 300 m and then turn to port, entering the old dock from which a new large dock called Marina de Cervia is accessed.

**Port of Marina di Cervia** – Is located on the NE side of the Vecchia Darsena; it is a private tourist port reserved for leisure craft, equipped with 8 piers.

The depths are 2 – 2.5 m. The bottom is sandy.

**Quay services** – 280 berths, 20 of which are for visitors; fuel station (8.00 am – 5.00 pm), water supply, electrical supply, quay lighting, 1 haulage slipway up to 50 t, 1 fixed crane, 1 mobile crane, 1 travel lift, boat storage.

**Port services** – Repair workshop, security, public toilets/showers, refuse disposal, weather service, public telephone.

**Accessory services** – Ice sales, car parking, post office, first aid, bank (Milano Marittima), pharmacy (Milano Marittima), hotels (Milano Marittima), restaurants (Milano Marittima).

**Communications** – Taxis.

**Authorities** – Locamare, Carabinieri, Tax Police (Milano Marittima).

**Mussel farm** – Is positioned about 4.5 M to the NE of Cervia. The limits of the area are shown on the charts; a yellow **light buoy** with radar-reflecting “X” topmark marks its centre.

From Cervia-Milano Marittima to Ravenna the coast is low and sandy. Immediately after Milano Marittima, the swimming centres of **Lido di Savio** and **Lido di Classe** stretch out made up of modern buildings.

**Conspicuous points** – The Fiume Savio flows into the sea between the two villages. Its mouth can only be recognised by navigating a short distance from the coast: some fish **warehouses** can be seen on **piles** near a white three-floor **building** with large brown windows and roof terrace, on which there are three small **towers**, also coloured white.

At the N end of the Lido di Classe complex there is a large five-storey **building** with four **turrets**.

Towards the S end of Lido di Savio a very long five-storey **block of flats** can be made out. A pine forest starts just after Lido di Classe which, extending right down to the shore, stretches almost to the mouth of the **Torrente Bevano**, near which on the beach a number of warehouses of various colours can be seen. The **Casa Bevano** is made up of three bodies, the centre one of which is slightly lower, and further N a **square** two floor **house** with a red roof can be seen when navigating along the coast.

A few hundred metres to the N of the mouth of the **Fiumi Uniti** the equipment of a methane gas **pumping station** and a **parabolic aerial** on a frame-work, 20 m high, can be seen on the beach.

**Lido Adriano** – Is a small swimming centre made up of some large modern buildings, near the beach.

**Conspicuous points** – The reinforced concrete **tower** of the aqueduct is clearly visible at 35 m high; it is made up of a cylindrical rising column with a conical lower part. The pine forest starts again just after

Lido Adriano, extending quite densely to the shore, and reaches Marina di Ravenna.

**Dangers – Breakwaters that are awash** are positioned in defence of the coastline between Lido Adriano and Punta Marina, and are unmarked and dangerous to navigation. Small posts with red and white stripes are only mounted on a few of them.

**Biological protection zone** – Is instituted with Ministerial Decree of 21/07/95 published in the Official Journal of 31/08/95, in the stretch of sea between the following points:

- a) 44°23'26" N - 012°35'06" E;    b) 44°22'54" N - 012°35'18" E;  
c) 44°22'50" N - 012°34'49" E;    d) 44°23'21" N - 012°34'37" E.

Fishing, whether recreational or commercial, by whatever means is **prohibited** in this area; mussel farming can be licensed with suitable authority.

**Wrecks** – Some wrecks lie within this area: that of the Paguro platform is at 44°23'05" N - 012°34'55" E with a 14 m head of water; there are other metal hulls at 44°23'04" N - 012°34'57" E with an 8 m head of water. The wrecks are used for fish restocking.

- The circular 0.5 M radius centred on the point with co-ordinates 44°22'37" N - 012°26'57" E is **prohibited** to navigation, transit, stopping and anchoring due to the presence of **pyramid-shaped modules** in defence of a protected marine area on the bottom and which have a maximum height of 2.4 m from the seabed; this area is marked by a yellow light **buoy**.
- Another biological protection zone, called "**Area outside Ravenna**" has been instituted with Decree 16/03/04 published in Official Journal no. 77 of 01/04/04 and modified by Decree of 27/09/06 published in Official Journal no. 237 of 11/10/06. In the area bounded by the lines joining the points with the following co-ordinates fishing for the fry of any species and trawling are **prohibited**:
  - a) 44°33'.3307 N – 012°17'.0645 E;
  - b) 44°33'.3307 N – 012°28'.4632 E;
  - c) 44°23'.0076 N – 012°28'.5005 E;
  - d) 44°23'.0027 N – 012°19'.2952 E.

**Punta Marina** – Lies about 3 M to the NNW of the mouth of the Fiumi Uniti; the modern part of the village extends along the beach, towards Marina di Ravenna, with houses mainly surrounded by trees.

**Conspicuous points** – A brick red **skyscraper** stands in the S part of the village at 44°26'18".8 N - 012°17'35".3 E. Beside it a **building** on a tall square yellow base and a pink **house** are visible emerging from the pine forest overlooking the surrounding houses.

The **holiday camp** of the Italian Red Cross, halfway between Punta Marina and Marina di Ravenna, half hidden in the pine forest consists of a large white building with a tower beacon on top.

**Buoys** – A yellow current measurement buoy, equipped with lamp and two cylindrical radar reflectors, is positioned at 44°29'.66 N - 012°21'.59 E.

**Methane gas research and extraction plants** – Numerous plants for extracting methane gas are installed in the area off the Ravenna coast, between the mouth of the Torrente Bevano (44°21'.8 N - 012°19'.4 E) and Casal Borsetti (44°33'.2 N - 012°17'.1 E). These plants can be grouped together according to their different characteristics:

- a) **methane wells**: square iron frame-works planted in the seabed and emerging about 10 m above average sea level, are generally equipped with a square platform with sides 7 m in length;

- b) **fixed drilling platforms**: standing on tubular legs emerging at least 20 m above average sea level, they are equipped with drilling towers about 70 m above average sea level and with accommodation structures for personnel;
- c) **fixed production platforms**: similar to the above but without the drilling towers;
- d) **submarine gas pipelines**: consisting of pipes of various diameters that connect the various wells to the collection platforms and then to the coast;
- e) **mobile drilling platforms**: equipped with drilling towers, their positions are marked from time to time in the Notices to Mariners.

The **fixed methane wells**, all provided with **lights** and some with **fog signals** (see the List of Lights), are found in the following positions (WGS 84):

- 44°20'53" N - 012°35'21" E: **PORTO CORSINI MARE SUD 1 (PCMS 1)**;
- 44°23'41" N - 012°26'38" E: **ANTARES 1**.
- 44°28'31" N - 012°27'13" E: **ARMIDA 1**

The **fixed methane platforms**, all provided with **lights** and some with **fog signals** (see the List of Lights), are found in the following positions (WGS 84):

- 44°22'05" N - 012°34'38" E: **PORTO CORSINI MARE SUD 2 (PCMS 2)**;
- 44°23'03" N - 012°34'45" E: **PORTO CORSINI 73 (PC 73)**;
- 44°23'22" N - 012°27'13" E: **ANTARES**;
- 44°23'26" N - 012°33'37" E: **PORTO CORSINI C (PC C)**;
- 44°23'26" N - 012°20'36" E: **ANGELA ANGELINA**;
- 44°23'33" N - 012°20'42" E: **ANGELA**;
- 44°24'18" N - 012°39'39" E: **AMELIA A**;
- 44°24'24" N - 012°39'44" E: **AMELIA B**;
- 44°24'22" N - 012°39'46" E: **AMELIA C**;
- 44°24'25" N - 012°39'41" E: **AMELIA D**;
- 44°24'18" N - 012°32'47" E: **PORTO CORSINI 80 (PC 80)**;
- 44°25'22" N - 012°31'14" E: **PORTO CORSINI 80 BIS (PC 80 bis)**;
- 44°26'27" N - 012°25'24" E: **DIANA CLUSTER**;
- 44°28'39" N - 012°32'47" E: **GARIBALDI D**;
- 44°28'47" N - 012°27'12" E: **ARMIDA (equipped with Racon)**;
- 44°29'11" N - 012°31'53" E: **GARIBALDI B**;
- 44°30'31" N - 012°22'26" E: **PORTO CORSINI WEST B-C (PCW B-C) (double platform)**;
- 44°30'40" N - 012°21'35" E: **PORTO CORSINI WEST A-T (PCW A-T) (double platform)**;
- 44°31'21" N - 012°30'42" E: **GARIBALDI A-T-Cluster (triple platform)**;
- 44°31'51" N - 012°30'55" E: **GARIBALDI C (connected by gangway to the GARIBALDI K platform)**;
- 44°31'53" N - 012°31'00" E: **GARIBALDI K (connected by gangway to the GARIBALDI C platform)**;
- 44°32'22" N - 012°29'45" E: **AGOSTINO A**;
- 44°32'22" N - 012°29'45" E: **AGOSTINO CLUSTER (connected by gangway to the AGOSTINO A platform)**;
- 44°32'47" N - 012°29'41" E: **AGOSTINO C**;
- 44°33'13" N - 012°28'18" E: **AGOSTINO B**;
- 44°41'18" N - 012°50'51" E: **NAOMI PANDORA**.

The installations are variously connected to one another and to land by **submarine pipelines**.

**Outer terminals of submarine oil pipelines** – Some submarine pipeline terminals are installed in the sea off Marina di Ravenna to embark/disembark oil products. They are shown on the charts.

- **AGIP 1 terminal** – Is at 44°28'22" N - 012°21'20" E (3.5 M bearing 106° from the Ravenna lighthouse). It consists of a twelve-sided platform with a maximum diameter of 25 m, 10.5 m above average sea level, supported by steel posts driven into the bottom, is topped by a second platform of the same size 3 m higher, on which a small rotating level is mounted, 3.5 m high, which supports two arms for raising and coupling flexible pipes. Vessels moor bow fast to 4 **buoys** painted with red and white stripes, located to the W of the terminal, anchoring at the points indicated by the small buoys. The terminal is marked at night by a **light** (see List of Lights).

- 2 cylindrical yellow day **buoys** are found in the position of the ex AGIP 3 terminal, at approximately 44°29'00" N - 012°25'00" E.

- **AGIP 4 terminal** – Is at 44°27'30" N - 012°31'15" E, made up of a rotating platform with an external diameter of 25 m, about 6 m above average sea level, painted with red and white stripes. This platform, equipped for supertankers to berth, is marked by a **light**, by a **foghorn** (see List of Lights) and by a **racon** (see Radio Services for Navigation Part 1).

- **ENEL Marine Terminal** – Is located at 44°27'48" N - 012°23'54" E, made up of 1 central platform, 4 mooring dolphins and two berthing dolphins, all of which connect to the central structure by gangways. The central platform, square in plan with a pedestrian level 11.5 m above average sea level, is supported by a tubular structure on four steel posts driven into the seabed. It has two loading arms and other equipment.

The terminal is equipped with **luminous and acoustic signalling** (see List of Lights).

All the terminals are connected to land, at Punta Marina, by oil pipelines; those that lead to the AGIP 1 and 4 Terminals and the ex AGIP 3 Terminal start at 44°26'33" N - 012°17'45" E; the one that leads to the ENEL Marine Terminal sets out from 44°26'48" N - 012°17'42" E.

**Warnings** – To move on and off moorings at the terminals vessels must make use of the help of the pilots and the mooring services of the port of Ravenna. The hosepipes are connected and disconnected by the technicians of the AGIP and ENEL Companies. Vessels at the outer moorings must keep their equipment ready to leave the moorings both in the event of emergency and with adverse weather conditions. Boulders are arranged on the bottom between the terminals and along the route of the submarine oil pipeline of Punta Marina, starting at a distance of 1,000 m from the coast towards the open sea. These boulders stick out from the seabed by about 1 m and are in two rows at intervals of 40 m, in depths that vary from 4 – 14.5 m.

**Prohibitions** – 1) Due to the presence of the above structures in the areas of sea bounded by the lines joining the following points, anchoring and fishing with drag nets or with equipment that trawls and moves the seabed are prohibited:

**Area 1:**

- |                                |                                |
|--------------------------------|--------------------------------|
| a) 44°27'42" N - 012°17'18" E; | b) 44°29'35" N - 012°24'50" E; |
| c) 44°27'50" N - 012°31'32" E; | d) 44°26'00" N - 012°31'32" E; |
| e) 44°24'30" N - 012°35'00" E; | f) 44°24'35" N - 012°39'57" E; |
| g) 44°24'01" N - 012°40'08" E; | h) 44°23'17" N - 012°36'18" E; |
| i) 44°22'50" N - 012°36'18" E; | d) 44°23'00" N - 012°19'18" E; |

**Area 2:**

- |                                |                                |
|--------------------------------|--------------------------------|
| m) 44°32'30" N - 012°17'00" E; | n) 44°30'18" N - 012°20'57" E; |
| o) 44°30'18" N - 012°24'00" E; | p) 44°31'08" N - 012°24'00" E; |
| q) 44°31'08" N - 012°30'18" E; | r) 44°28'43" N - 012°31'24" E; |
| s) 44°28'55" N - 012°33'10" E; | t) 44°31'40" N - 012°31'47" E; |
| u) 44°33'42" N - 012°29'00" E; | v) 44°33'19" N - 012°27'37" E; |
| y) 44°32'05" N - 012°27'37" E; | v) 44°33'15" N - 012°17'03" E. |

Excluded from Area 1 is the area between the following points, where the prohibitions referred to above do not apply:

- a) 44°26'54" N - 012°28'42" E;      b) 44°26'54" N - 012°30'36" E;  
c) 44°25'18" N - 012°30'36" E;      d) 44°24'18" N - 012°31'18" E;  
e) 44°23'54" N - 012°28'42" E.

In order to safeguard the safety of shipping and the equipment at sea, the areas occupied by the platforms and crossed by the pipelines are generally prohibited to anchoring or trawler fishing within the territorial waters and those outside are declared to be dangerous. These areas are shown on the charts.

2) Access is prohibited to the area 200 m wide (500 m for leisure craft) that surrounds the fixed methane installations, as well as mobile ones and the vessels involved in drilling, installation and maintenance of platforms, wells or pipelines.

3) Transit, stopping and any type of fishing are prohibited within a 1,000 m radius of the AGIP and ENEL terminals.

**Warnings** – Ships and boats passing through the areas affected by the geophysical prospecting and search operations must pay the greatest attention to the signals that may be directed to them by the vessels intending to carry out these operations and by the boats charged with supervision. They must keep a safe distance of at least 4,000 m from the stern of vessels operating with trawled equipment, throughout the width of the sector 180° abaft the beam of the vessels themselves and in any case must not impede their course.

**Area reserved for disembarking** – Is bounded by the line joining the following points:

- a) 44°31'08" N - 012°24'00" E;      b) 44°31'08" N - 012°26'08" E;  
c) 44°30'18" N - 012°24'00" E;      d) 44°30'38" N - 012°26'08" E;

All vessels are prohibited from anchoring, stopping or navigating when the disembarking operations are under way.

**Anchorage** – Vessels waiting to carry out commercial operations in the road or at the outer moorings of AGIP and ENEL must anchor, according to their draught, in depths that are sufficiently safe, taking into account that during strong winds from quadrants I and II the anchorage can become dangerous for small ships. In the case of winds of exceptional violence vessels are advised to leave their anchorage to ride out the storm or seek shelter from the coasts of Dalmatia or Istria. In choosing the anchorage, take note of the existence of prohibited areas due to the presence of extraction equipment. Ships that intend to stop in the roadstead must anchor in the position allocated to them; to this end before anchoring they must contact the Maritime Authorities an/or the Corporation of Pilots by RTF/VHF channel 16 or 12 to notify the point of anchoring that they intend to assume and to obtain confirmation.

Due to the restrictions of the stretches of water within the channel Port there are no anchorages.

**Winds** – Those from quadrants I and II dominate in winter. In the summer fair weather breezes prevail (NW wind in the morning and SE in the afternoon).

Thick persistent fog, accompanied by calm, occurs more often in September-March, but can be encountered eleven months of the year.

**Tides** – The average excursion at high tides is 0.5 m. The establishment of the port is 10 hours 24 minutes.

**Currents** – With winds from the NW and N, there are S currents along the coast with speeds of 3-4 knots. With SE wind, the current flows S with a speed of 2-3 knots. The currents vary in direction and strength and depend on the wind. In the Channel Port the currents are very strong in the section between the entrance and Largo Baiona, but negligible elsewhere. The Canale Baiona is navigable for a short section and has a considerable hydro-dynamic capacity as at



low tide it gathers the waters drained from about 80 km of internal channels, making up the so-called "Pialassa" and directs them into the Channel Port thus helping to maintain the depths in the entrance.

**Entry instructions** – There is a preferred access (or exit) channel, marked on the charts, with an entrance between the Garibaldi B platform and the AGIP 4 Terminal which leads to an obligatory landing channel. Anchoring is **prohibited** within it.

The entrance to the obligatory landing channel can also be reached by means of a recommended access channel that passes further N of the preferred access channel. Its entrance is between the Garibaldi B and Garibaldi A platforms and vessels proceed on an Easterly course.

The **obligatory** landing channel, within which anchoring and stopping are **prohibited**, is identified as the line joining the following points:

- a) 44°29'57" N - 012°18'54" E; b) 44°30'18" N - 012°20'48" E; c) 44°30'18" N - 012°24'00" E;
- d) 44°29'45" N - 012°24'00" E; e) 44°29'45" N - 012°20'48" E; f) 44°29'54" N - 012°18'54" E.

Landing at the port and leaving it must take place by passing through the above channel keeping to starboard and therefore leaving the elastic landing light beacon to port, located in the centre of the channel. On entry leave the fixed drilling platforms PCW A and PCW B to starboard and the isolated danger light beacon to port.

**Pilotage** – Is **obligatory** for entry and exit and for movements within the port, except for those along the same quay that do not require the use of machines or tugs.

The area within which pilotage is obligatory is bounded as follows:

- a) for incoming vessels, 1 M from the head of the outer breakwaters;
- b) for outgoing vessels, from the head of the outer breakwaters;
- c) for mooring in the operational positions in the road or alongside ships for disembarkation operations it starts at least 0.5 M from the operational position to which the vessel is heading.

Exempt from obligatory pilotage are:

- vessels up to 500 g.r.t provided that the draught is no more than 4.3 m;
- naval vessels;
- fishing boats that are not suitable for Atlantic fishing;
- tugs employed by the port services and vessels used for local traffic and harbour works.

If the Master on board can speak Italian, vessels up to 1,500 g.r.t can make use of the pilotage service by means of VHF. For safety reasons, the Maritime Authorities can insist on a pilot being on board with particular weather conditions (Ministerial Decree of 2/09/96).

The pilotage service is ensured by the pilots of the corporation of Ravenna. The pilot is requested with plenty of notice on VHF channel 16, by telephone (0544/530453 – 530204) or by Shipping Agent.

**Tugs** – The port has 6 tugs with power from 5,000 KW. Tugs are obligatory for larger vessels (indicated in point 2 on page 65) and for ships over 1,600 g.r.t transporting liquid products in bulk of categories A and B or products that can develop toxic-noxious clouds. The latter, if longer than 120 m, must use at least 2 tugs.

**Regulations** – All ships and boats whether merchant or naval with a gross weight of more than 50 t or 7 m in width are prohibited from navigating within the port environment or to change berths without specific authorisation from the Harbourmaster of Ravenna.

While navigating in the port environment, vessels must:

- a) keep to the centre of the channel;
- b) keep their anchors ready to be lowered as necessary;
- c) keep their sails lowered and navigate by motor or tug;
- d) signal their presence in the case of fog with the correct acoustic signals;
- e) reduce speed keeping revolutions low compatible with good control, or if possible proceed just using headway in the stretched of water off the berths where tankers are operating with dangerous cargoes;
- f) provide their chimneys or exhaust pipes with effective anti-spark nets when passing or manoeuvring near the berths referred to in a) above, when tankers are berthed;
- g) get the attention of vessels under 50 g.r.t navigating in the channel with 4 short whistles, if necessary;
- h) compatible with the needs of good control, avoid leaving the propellers turning when crossing or overtaking vessels less than 50 g.r.t or 7 m in length, for the time needed to guarantee the safety of the smaller vessel;
- i) avoid anchoring where cables or pipelines cross the channel: these crossings are marked by posters positioned on the banks showing an upturned anchor on a white background. Vessels at the quays along the Channel Port must be moored correctly so that the passage of other vessels and the consequent movement of water does not compromise safety;
- l) vessels navigating along the Canale Candiano have priority over those moving from a berth, over those coming from the side channels and over the ferry in service between Marina di Ravenna and Porto Corsini; oil, chemical and gas tankers can only cross or pass other vessels in the outer harbour, at Largo San Vitale and in the section between Largo Trattaroli and the mouth of the Canale Piombone; ships of more than 150 g.r.t or wider than 12 m may not cross or overtake within the guarding moles, near the ferry crossing, near the Curva di Marina di Ravenna, between the Darsena San Vitale and the Darsena di Città or in the Canale Piombone; vessels used for port services and those no more than 150 g.r.t or 12 m in width can cross and overtake proceeding with particular care.

**Regulations regarding tankers** – On arrival in port the Master of the tanker must submit a declaration to the Maritime Authority stating that all the means needed to disembark are ready and the safety and fire service and installations on board are efficient and in condition to come into operation promptly if necessary.

Tankers must moor and position themselves such that the exit manoeuvre is possible without lowering the anchors.

Tankers who need to carry out works on board that require the use of oxy-acetylene flames or electric welders must be degassed beforehand and the permit obtained from the Maritime Authorities.

It is **prohibited** for tankers to stop in port which do not need to carry out commercial operations if they have not been degassed since the last disembarkation.

**Regulations for tankers and for vessels transporting dangerous cargoes in bulk** – Governed by Ordinance no. 48/88 issued by the Ravenna Harbourmaster. In particular:

- a) **Communication to the Maritime Authority**  
Italian and foreign vessels must provide the Ravenna Harbourmaster with

the formatted message required at least 36 hours before the expected time of arrival.

Vessels coming from ports less than 36 hours sailing time from the port of Ravenna, or routed to Ravenna in the course of navigation, must provide this communication as soon as possible and in any case always before entering the waters of jurisdiction of the Local Maritime Office of Ravenna.

b) **Radio telephone connections**

Vessels must establish and maintain a radio telephone connection with the Harbourmaster (see schedule in General Sailing Directions – Part I).

c) **Prevention of pollution**

Observe the regulations of MARPOL 73/78 – Appendices I and II and the prohibition arising from law no. 977 of 31/12/82, as well as the CEE 93/75 directive and Ordinance no. 14/96.

d) **Embarking and disembarking products**

Observe Ordinance no. 48/88 of the Ravenna Compamare. For details see the cited ordinance and the General Sailing Directions – Part I.

**Maritime Warning** – As well as keeping the Maritime Agencies informed on the arrivals and departures of vessels, the service keeps in contact with the vessels by VHF channel 9. The service is continuous: 6.00 am – 10.00 pm, including public holidays.

**Marina di Ravenna** – Only the part of the village sheltered by the port is clearly visible, made up of some large buildings among which a large **hotel** stands out, white with green roof; a block of flats with two red sections with blue windows except one in orange lies further inland.

**Lighthouses** – The lighthouse of Ravenna is located near the root of the Molo Guardiano Sud: it consists of an octagonal white tower, standing on a brick red two-storey building (figure 7).

**Figure 7**, Ravenna, lighthouse (2007).

**Tourist marinas** – The tourist marinas of Marinara and Marina di Ravenna are in the outer harbour of the Canale Candiano that connects the commercial port of Ravenna to the sea, between the Molo Guardiano Sud and the S outer breakwater. They are protected by two moles, one at right angles to the Molo Guardiano Sud and quayed, the other almost at right angles to the S outer breakwater.

**Regulations for leisure craft** – Starting from the entrance of the outer breakwaters, all leisure craft must proceed at a safe speed, so as not to cause movement of water and/or dangerous waves for the vessels at moorings or in transit.

It is **prohibited** to impede the free and safe transit of other vessels.

**Marina di Ravenna** – Is adjacent to the Diga Foranea Sud and consists of 5 T piers that extend from an L-shaped mole. The construction of other piers at right angles to the shore is planned. The depths vary between 0.6 – 4 m.

**Quay services** – About 1,000 berths, 1 crane, 1 travel lift of 100 t, 1 slipway, 1 haulage slip, boat storage, water supply, electrical supply, telephone point, fire extinguisher, fuel station, quay lighting.

**Port services** – Repair workshop, pilotage, mooring, security, skin divers, weather service, refuse disposal, public toilets/showers, public telephone.

**Accessory services** – Car parking, shops of every kind.

**Marina of Marinara** – Is adjacent to the Molo Guardiano Sud, from which 6 piers extend. The depths vary between 3.5 and 5.5 m.

**Quay services** – 685 berths, 1 fixed crane of 150 t and 1 mobile crane of 200 t, 1 travel lift of 50 t, 1 slipway, 1 haulage slip, boat storage, drinking water, water supply, electrical supply, fire extinguisher, fuel station, quay lighting.

**Port services** – Dockyard, repair workshop, pilotage, mooring, security, skin divers, sailing club, refuse disposal, public toilets/showers, public telephone.

**Accessory services** – Car parking, chandlery.

The village of **Porto Corsini** lies on the N bank of the Canale Candiano, made up of a collection of small multicoloured houses concentrated between the pine forest and the sea.

**RAVENNA** (Chart nos. 218 and 219) – The city is about 11 km from the sea, after a low flat area, covered by an extensive thick pine forest. Only the highest points of the city are visible from the sea.

Despite its considerable distance from the sea, Ravenna has a modern port, thanks to a channel (**Canale Candiano**) that joins the city to the village of **Porto Corsini**, where the entrance to the Channel Port is found.

**Conspicuous points** – Near Ravenna the coast is low and flat, often covered with mist and only visible at short range. The following can be seen before the coast: the AGIP **drilling plants**; the **terminals** of the outer oil pipelines, including the rotating pipeline of the AGIP 4 Terminal, the outer ring of which is painted in red and white stripes, and the four “Porto Corsini West”, PCWA and PCWB **fixed platforms**, connected with the gangway to the PCWT and PCWC respectively.

The building of the lighthouse, already described, stands near the root of the Molo Guardiano Sud. Some **large tanks** and four tall **chimneys** are visible behind the lighthouse. Approaching the coast, the equipment of various **industrial establishments** such as **chimneys, tanks, silos and towers** in the shape of frame-works appear behind the pine forest, in a SW position with respect to the Ravenna lighthouse.

**Numerous large buildings** stand on the shore immediately to the S of the entrance. The long low white building of the **Harbourmaster** is clearly visible between the root of the Molo Guardiano Nord and the root of the Diga Foranea Nord.

**Port of Ravenna** – Is a **Channel Port**, 11 km long. The first section goes from the entrance at Largo S. Vitale (about 8 km) and is on average 120 m wide and has a navigable channel 40 m wide accessible with a draught of 9.45 m. The second section goes from S. Vitale to the Darsena di Città and is on average 60 m wide with a navigable channel 25 m wide accessible with a draught of 5.18 m. The draughts permitted can vary according to the size of the vessels and the weather conditions (see below). The bottom is sandy.

The Darsena di Città in the shape of a funnel is about 600 m long and has a maximum length of 200 m. Vessels manoeuvre along the Channel Port in 4 basins: **Largo Baiona, Largo Trattaroli, Largo S. Vitale and Darsena di Città.**

**Regulations** – Due to the presence of aerial cables and electrical conduits, access to the port is permitted for vessels with a height of no more than 55 m; the restriction does not apply to vessels that are operating at the quays up to Largo Trattaroli. Vessels heading for the Darsena di Città may not have a height of more than 30 m.

The **entrance to the Channel Port** is bounded by:

- 1) two converging **outer breakwaters**, N and S, that start from the beach and extend out to sea to a distance of 2,580 m and terminate with a hard standing in the shape of a hammer protected by a breakwater of reinforced concrete blocks. The area enclosed between the outer breakwaters, the entrance to the same and the coast is called the **outer harbour**;
- 2) **two internal protection moles**, N and S, parallel to each other that identify the entrance to the appropriately named port.

The areas between the outer breakwaters and the protection moles include: to the S the tourist marinas of Marina di Ravenna and Marinara (described above) and to the N a service dock in the course of completion.

An **access channel** about 100 m wide being dredged to 11 m sets out from the 10 m depth contour heading WSW and, passing through the stretch of water of the outer harbour, reaches the entrance between the heads of the two protection moles.

This channel is marked by **two pairs** of red and green **light buoys**. The port is made up of three channels: the **Canale Baiona**, from the entrance of the internal moles to the road bridge; the **Canale Candiano**, from the junction of the Canale Baiona and the Darsena di Città; the **Canale Piombone**, between the junction of the Canale Candiano and the end of the branches that house quays or other equipment suitable for berthing ships or boats.

On passing the entrance to port on entry there is a small dock for fishing boats; immediately afterwards there are two small docks, one on each bank, for the ferry that connects Porto Corsini to Marina di Ravenna to berth.

**Regulations – Draught and size of the vessels:** 1) Navigation in daylight hours in the port environment is permitted for vessels heading for anchorages or berths with suitable depths and lengths to accommodate them, that have the following maximum sizes:

- From the **outer harbour** to the **Darsena S. Vitale**:

Overall length (m)	Width (m)	Draught (m)
250	35	8.23
	33 and less	8.23
245	35	8.53
	33 and less	8.68
235	35	8.84
	34	8.99
	33 and less	9.14
255 and less	36	8.84
	34	9.14
	32	9.29
	30 and less	9.45

Under good weather conditions and a tide above average sea level the draughts of vessels no more than 225 m long are increased by 0.15 m, with the maximum limit of 9.45 m remaining in place. At the maximum high tide vessels 200 m long and less than 25 m wide are permitted a draught of 9.60 m, provided that they are operating at the quays with the maximum depths and that during the stop the tide is no less than 0.4 m above the average sea level. Navigation by vessels 250, 245 and 235 m long is permitted provided that the tide is above the average sea level. With a low tide above 0.4 m the draught of other vessels longer than 200 m or wider than 30 m is reduced by 0.3 m.

- From the **Darsena S. Vitale** to the **Darsena di Città**: length 160 m, width 18 m, draught 5.18 m. For the SIR and CMC quays the maximum width is 16 m. Subject to authorisation in suitable weather and safety conditions, vessels 22 m wide with a maximum draught of 4.88 m can even moor.
  - **PIR piers** in the **Canale Baiona**: length 180 m, width 27 m, draught 9.14 m. In good weather conditions 185 m length, 33 m width and 8.53 m draught are permitted; vessels with a greater draught and which are longer than 150 m may only moor with the bow facing land.
  - In the **W branch of the Canale Piombone**: length 180 m, width 26 m, draught 6.55 that can increase to 6.71 m in good weather conditions and tide above average sea level.
  - In the **E branch of the Canale Piombone**: length 150 m, width 25 m, draught 5.79 m.
- 2) Navigation in the hours of darkness in the port environment is permitted for vessels heading for anchorages or berths with suitable depths and lengths to accommodate them, that have the following maximum sizes:
- From the **outer harbour** to the **Darsena S. Vitale**: vessels other than oil, chemical and gas tankers on departure with 190 m length, 30 m width and 8.53 draught; larger vessels can leave with the aid of at least two tugs within the following limits:

Overall length (m)	Width (m)	Draught (m)
210	30	8.23
200	29	8.38

On entry with ideal conditions the length is reduced by 10 m, the width by 1 m and the draught by 0.30 m with respect to the dimensions permitted for departure.

For oil, chemical and gas tankers, both entering and leaving, vessels with 150 m length, 28 m width and 7.32 draught are permitted. If they are not transporting liquids or products that can develop toxic-hazardous clouds (category A and B), the maximum length is 160 m.

- From the **Darsena S. Vitale** to the **Darsena di Città**: navigation by night downstream of the moving bridge is only permitted on departure for unloaded vessels moored with the bow facing the sea.
- Navigation by night upstream of the moving bridge is only permitted on departure for unloaded vessels with two stern screws and four wake rudders (Slavutich type) with the bow facing the sea.
- **PIR piers** in the **Canale Baiona**;
  - on entry:
    - a) with bow facing land 180 m length, 27 m width, 8.53 m draught;
    - b) with bow facing to sea 150 m length, 27 m width, 7.32 m draught;

- on departure:
  - a) with bow facing land 150 m length, 28 m width, 7.32 m draught;
  - b) with bow facing to sea 180 m length, 27 m width, 7.32 m draught.
- In the **Canale Piombone**: navigation is only permitted for small vessels (traffic, fishing, leisure) and those providing the support and connection service with the off-shore structures.

**Warnings** – Given the complexity of the subject, mariners are advised to be aware of all the Regulations (Ordinance no. 27/92 with subsequent alterations: Ordinance nos. 82/92, 71/93, 71/94, 74/01 of the Ravenna Compamare).

**Depths** – The depths at the entrance and in the basin centre are 9.45 m with minima of 3 m.

**Use of the quays** – In the Channel Port of Ravenna the quays take the names of the companies that use them.

**Canale Baiona:**

MOLES AND QUAYS					Max dimensions of vessels which can moor	
Quay name	Main use	Size (m)	Depth (m)	Draught (m)	Length (m)	Width (m)
<b>PIR pier inside/outside</b>	Petrochemicals	185	10.5	9.14	185	33

**Canale Candiano W side:**

MOLES AND QUAYS					Max dimensions of vessels which can moor	
Quay name	Main use	Size (m)	Depth (m)	Draught (m)	Length (m)	Width (m)
<b>Magazzini Generali PIR</b>	Commercial	1470	9.4	8.53	170	33
<b>Enel I.I.C.O. terminal</b>	Oil	270	12.5	11.5	261	33
<b>ENEL quay</b>	Oil	284	8.5	7.62	261	33
<b>Bunge quay</b>	Bulk cereals	330	9.4	8.53	261	33
<b>Alma Petroli quay</b>	Oil	240	10.5	9.14	240	33
<b>Lloyd quay</b>	Bulk	273	10.5	9.45	261	33
<b>Trattaroli Mare quay</b>	Passengers	412	//	9.45	261	33
<b>Trattaroli Ravenna quay</b>	Bulk	408	10.5	9.45	261	33
<b>IFA quay</b>	Bulk	278	10.5	9.45	261	33
<b>Marcegaglia quay</b>	Bulk	360	9.4	8.53	261	33
<b>Fosfitalia quay</b>	Commercial Steel	320	9.4	8.53	261	33
<b>Polimeri 1/2 quay</b>	Chemical	320	9.4	8.53	261	33
<b>YARA quay</b>	Bulk fertilisers	590	9.4	7.32 (sea side) 8.53 (centre)	261	33
<b>Fassa quay</b>	Bulk inert substances	195	6	5.18	90	18
<b>S.I.O. quay</b>	Various bulk	115	6	5.18		18
<b>Vecchio CAPO quay</b>	Various bulk	185.7	6	5.18	160	18
<b>Silos Granari Candiano quay</b>	Various	254	6	5.18	160	18

## Darsena di Città:

MOLES AND QUAYS					Max dimensions of vessels which can moor	
Quay name	Main use	Size (m)	Depth (m)	Draught (m)	Length (m)	Width (m)
Banchina Nord 1-3	Various	265	5.3	3.96		18
Banchina Nord 4-6	Various	337	5.3	5.18		18
Banchina di Ponente	Various commercial	200	2.5	2.5 – 3		18
Banchina Sud divided into:	Various commercial	675		3.2 – 5.18		18
Customs			3.5			
Almagià			3.5			
Samea	Bulk		5	3.66		
Ferruzzi 1-2			5	4.50		
Cme			3.5			
Sir			5	3.66		

## Canale Candiano E side:

MOLES AND QUAYS					Max dimensions of vessels which can moor	
Quay name	Main use	Size (m)	Depth (m)	Draught (m)	Length (m)	Width (m)
Banchina Adriatank	Chemical products	100	6	5.18	18	18
Petra external	Support	160		5.18		
Petra 1-9	Oil	656	9.4	7.62–9.14	180	33
S.Vitale 19-20	Bulk	190	10.5	9.45		
S.Vitale 18	Various	100	10.5	9.45		
S.Vitale 16-17	Various – Ro-Ro vessels	190	10.5	9.45		
S.Vitale 14-15	Bulk non-dangerous liquid goods	200	10.5	9.45		
S.Vitale 12-13	Various	190	10.5	9.45		
S.Vitale 11	Various	100	10.5	9.45		
S.Vitale 5-10	Various commercial	540	10.5	9.45	261	33
T.C.R. (berths 2-4)	Containers	415	10.5	9.45		
T.C.R. (berth 1)	Containers	220	10.5	9.45		
Banchina Setramar Ravenna	Various commercial	195	10.5	9.45		
Banchina Setramar Mare	Various commercial	380	10.5	9.45	261	33
Cereal Docks	Bulk farm products	662	10.5	9.45	261	33
Buzzi Unicem	Cement	141.63		9.45		33
Eurodocks	Various commercial	541 + 214	10.5	9.45	261	33

There is a **floating swing bridge** numbered 007 near the Banchina Adriatank, used for the transit of wheeled vehicles and equipped with mechanical propulsion for the opening manoeuvre and with 2 ramps that can be lowered onto the quays. Vessels needing to pass must ask for the bridge to be opened via VHF channel 12. The opening of the bridge is regulated by Ordinance no. 10/91 of the Ravenna Compamare, to which reference should be made for any particular regulations. It should be noted that maritime traffic has absolute priority over land traffic. The **lights** required (flashing yellow lamp in the centre and steady red lights on the two sides) on the bridge mark its operating position.



In line with the **Largo S. Vitale** 3 commercial docks open up that are fully quayed; the one furthest S is called the **Darsena AGIP**.

The other two are identified by numbered berths. Numbers 5 – 20 are allocated by proceeding from the sea towards the inside of the port.

**Submarine oil and gas pipelines** and an **aerial electrical conduit** (height above average sea level 60 m) extend from the Cereal Docks quay towards the other bank.

**Canale Piombone** W side, from N to S:

MOLES AND QUAYS					Max dimensions of vessels which can moor	
Quay name	Main use	Size (m)	Depth (m)	Draught (m)	Length (m)	Width (m)
Ex Adria off-shore Colacem	Inert bulk	256		6.71	190	26
Base Saipem	Various	430	7.5	6.71	140	26
Cantieri Ravenna CMT	Dockyard	325	7.5	6.71	190	26
Bacino Navi Ravenna	Dockyard	170		6.71	160	26
Nadep Ovest	Bulk	170	7.5	6.71	160	26
Nuova Nadep	Bulk	240	7.5	6.71	160	26
Soco	Bulk	240	7.5	6.71	160	26

**Canale Piombone** E side, from S to N:

MOLES AND QUAYS					Max dimensions of vessels which can moor	
Quay name	Main use	Size (m)	Depth (m)	Draught (m)	Length (m)	Width (m)
Rosetti	Dockyard	320	7.5	5.75	150	25
Secomar	Anti-pollution	60		5.75		25
Pier 12	Dockyard	60		5.75		25
Orioli	Dockyard/leisure	115		5.75		25
Base AGIP	Various	700	7.5	6.1		25
Della Pasqua	Dockyard/leisure	50		5.79		
Carnevali	Dockyard/leisure	38		5.79		

**Works in progress** – Dredging and quay refurbishment works are in progress in various areas of the Channel Port. For the regulations currently in force, in the various port areas, it is advisable to consult the Maritime Authorities.

**Lights** – See the List of Lights for all the light markers.

**Quay services** – About 1,068 berths, 2 slipways, 1 fixed crane of 20 t, 1 travel lift of 100 t, boat storage, drinking water, water supply, electrical supply, telephone point, TV aerial point, cable TV point, fuel station, quay lighting, fire extinguisher.

**Port services** – Repair workshop, security, pilotage, local guide, tugs, mooring, dockyard, refuse disposal, collection of used oil/spent batteries, public toilets/showers, deep sea diver, skin diver, FAX, VHF, weather service, public telephone, sailing club.

**Accessory services** – First aid, hospital, doctor's surgery, decompression chamber, car parking, ice sales, gas/LPG cylinders, diving centre, boat/dinghy hire, car/cycle hire, caravan parking, camping, chandlery, food stores,

laundry, restaurant, bar, shops of every kind, hotel, internet point, sports equipment, information office, letter box, post office, bank, cash point, pharmacy, Maritime Agency.

**Communications** – Ferry, buses, railway, taxis, motorway, airport (Forli), heliport (Forli).

**Authorities** – Compamare, Port Authority, Tourist Port Management, Customs, State Police, Tax Police, Fire Brigades, Carabinieri.

Immediately to the N of Porto Corsini there is a pine forest that runs parallel to the beach almost as far as Porto Garibaldi, interrupted in a few areas.

**Conspicuous points** – The following can be seen in this section of coast: Marina Romea, the mouth of the Fiume Lamone, Casal Borsetti and the mouth of the Fiume Reno.

**Marina Romea** lies a few hundred metres from Porto Corsini, from which only the higher parts of certain buildings can be seen from sea, being half hidden by the pine forest, one of which has a red roof; a mushroom-shaped **tank** painted in red and white chequers is clearly visible (figure 8) near which stand two twin buildings. The **Fiume Lamone**, about 1 M to the N of Porto Corsini, is navigable for a short section, but is subject to silting up. Navigation in the river is dangerous and access is not recommended for those who do not know the area.

**Figure 8** – Tank near Marina Romea (2002).

**Small port of Marina Romea** – Is found at the entrance to the Fiume Lamone, on the S bank. The mouth of the river is protected by 2 moles about 60 m long. It is equipped with wooden **6 piers**, each about 30 m long. To access them it is necessary to pass through the channel bounded by dolphins, keeping to starboard. The depths of about 1 m are very variable. The marina is sheltered from all the winds, except the E wind.

**Quay services** – About 90 berths, 2 slipways, 1 fixed crane of 20 t, boat storage, water supply, electrical supply, fuel station, quay lighting.

**Port services** – Repair workshop, security, refuse disposal, public toilets/showers.

**Accessory services** – First aid, doctor's surgery, car parking, restaurant, bar, sports equipment, information office, post office (seasonal), bank, cash point, pharmacy (seasonal).

**Authorities** – Carabinieri.

**Casal Borsetti**, about 3 M to the N of Porto Corsini, stands at the edge of a pine forest and consists of an extensive group of houses, of a modest height, built along an artificial canal that joins the sea guarded by two protection moles 300 m long. Only small leisure craft can moor along its two banks as the depths are shallow.

The entrance can only be seen when navigating near the coast. Some breakwaters are positioned near both sides of the entrance parallel with the beach.

**Dangers – breakwaters** that are **awash** are positioned along the coastline of Casal Borsetti to defend it. They are unmarked and dangerous for shipping. Small posts with red and white bands are only positioned on a few of them.

**Port services** – Dockyard.

**Accessory services** – Car parking, sports equipment, camping, information office, bank, post office, pharmacy.

**Authorities** – Delemare, Tax Police.

About 1 M to the S of the mouth of the **Fiume Reno**, only visible by navigating along the coast, some low **buildings** with red roofs can be seen close to the beach, overlooked by a cylindrical yellow tank, supported by columns, that constitutes the **tower** of the aqueduct of the Foce Reno rifle range.

About 1.5 M to the N of Casal Borsetti a white building in the shape of a square **tower** can be seen on its own on the beach, alongside some low houses with red roofs. A noteworthy light yellow cylindrical **tank** stands on a tubular framework gantry, about 800 m further N on the beach with some low houses.

The **Valli di Comacchio** are 0.5 m deep on average, with a clay bottom, and meet the sea by means of the Porto Garibaldi channel (and the subsequent Canale Pallotta) and a channel called **Logo Novo**. The latter separates **Lido Di Spina** from **Lido degli Estensi**, both swimming centres immediately to the S of Porto Garibaldi. At Lido degli Estensi a grey 14-storey block of flats, 45 m high, with long white terraces on the N side, laid out at right angles to the beach and a white building (24 m high) almost on the beach, near the Porto Garibaldi channel, can all be seen.

**Tides and currents** – The very significant tides generate currents up to 5 knots inside the port.

**PORTO GARIBALDI** (Chart no. 215) – Is an important fishing port and the starting point of the waterway that connects Pontelagoscuro and Ferrara to the sea.

**Conspicuous points** – The useful reference points of the coast are often covered with fog, often covered with fog and are the two buildings of Lido degli Estensi (already described), and: the **lighthouse**, positioned 150 m from the root of the Molo N, consisting of a cylindrical **tower**, next to a two-storey house, all of a whitish colour (see the List of Lights); a **condominium**, 30 m high of a terracotta colour, 800 m to the N of the port, that overlooks the surrounding houses 10 m high, and an imposing metal **framework**.

**Regulations** – Empty and unloaded tankers are permitted to pass through the channel port only in the hours of daylight, from half an hour after dawn to half an hour before sunset, with a calm sea and wind and with visibility of at least 500 m.

Any trawlers, pontoons, traffic and leisure craft navigating in the channel in the opposite direction to that followed by the tankers must berth at the quays and stop for the time needed to allow free passage.

**Regulations for navigation** – Approved with Ordinance no. 31/99 of the Porto Garibaldi Circomare requires in particular:

- access to the port to be permitted for vessels up to 85 m long and 10 m wide; vessels with a gross weight of more than 150 t are **prohibited** from accessing the port, unless specifically authorised;
- that the Local Maritime Office establishes the positions of anchorages and berths, the times of access or start of navigation; authorisation

- must be sought for any variation (VHF channel 16);
  - in the port environment vessels must keep a constant lookout (VHF channel 14);
  - the speed, in any case no more than 6 knots, must be moderated so as not to cause difficulty or damage to other vessels, whether moored or navigating;
  - the use of the anchor, in the port environment, must be authorised, except in cases of emergency or *force majeure*;
  - vessels equipped for commercial traffic can navigate exclusively in the hours of daylight, with favourable weather conditions and visibility of at least 200 m; the passage of these vessels is signalled optically by suitable semaphore markers positioned in the axis of the channel as follows: at the head of the channel entry, N side, adjacent to the green light and on the quay, at the Lodo degli Estensi (S quay), near the fuel station. On semaphore access all vessels must give way to the passing vessel: incoming vessels must wait in the road, those leaving even coming from the Canale delle Vene or from other internal channels, must berth and wait for passage.
- The ferry service is regulated by Ordinance no. 22/93.

**Winds** – The prevailing and dominant winds are the SE and the NE.

**Currents** – Can reach a maximum strength of 5 knots.

**Channel Port of Porto Garibaldi** – Consists of the final section of the Canale Pallotta and is 1,800 m long and 35-40 m wide (maximum), with a central navigable channel 25 m wide. It is protected by two moles extending out to sea for about 300 m with an ENE direction and by a protection mole that extends 452 m out to sea, parallel with the other two, positioned about 50 m to the S of the Molo S. The port is sheltered from winds in quadrants III and IV.

**Dangers** – During SE and NE winds the entry manoeuvre is made dangerous by large waves that are raised at the entrance. The sand transported by the tidal currents often forms banks at about 300 m outside the entrance that are regularly dredged.

**Depths** – The depths are 4.8 m at the entrance and 4.4 m in the basin centre with minima of 3.3 m. The bottom is sandy/muddy.

**Use of the quays, depths and draughts** – The N bank is fully quayed (Banchina Nord) and is intended exclusively for trawlers drawing up to 3 m; however the S bank is only partially quayed and has very shallow depths (about 1 m).

MOLES AND QUAYS				Max dimensions of vessels which can moor	
Quay name	Main use	Size (m)	Depth (m)	Length (m)	Width (m)
Banchina Nord	Fishing boats	1500	3	20	10
Darsena Sud	Fishing boats	230	4	7 – 10	2.5 – 3.6
Nuova Darsena	Fishing boats	670	4	8 - 25	3 - 8

At the **Bachina Sud** section, near the office of the Italian Sailing Club, leisure craft can berth. 1,500 m from the entrance, to port on entry, there is a dock (Darsena Sud) with the development of quays for 230 m, that enables careful turning. It is reserved of fishing boats to moor, except for the diagonal section that extends for about 35 m in the W direction, towards the Orioli dockyard that is reserved for leisure craft to moor.

In the Darsena Sud the depths are 4 m on average. To the E of this there is a second dock (**Nuova Darsena**) with a haulage slipway on the inside. Leisure craft can berth in the Nuova Darsena; the depths vary from 3-6 m.

**Dock of the tourist port “Marina degli Estensi”** (see plan) – is part of the port complex of Porto Garibaldi: it is located in the most Southerly part and connects with the Canale Pallotta by means of a quayed **access channel** that opens up on the Banchina Sud, about 700 m from the entrance to the port. It is served by floating piers, provided with swinging arms and/or mooring dolphins. Entry to and exit from the dock are regulated by Ordinance no. 22/95 of the Porto Garibaldi Circomare, while other activities in the environment of the dock itself are regulated by the “Internal operating regulations”.

**Lights** – The light at the head of the Molo S is mounted on a metal column on a pedestal painted entirely red; the one at the head of the Molo N is similar, but painted green. A fog signal (foghorn) is positioned about 15 m from the head of the Molo N. A light on a red post is positioned on the head of the protection mole (S breakwater).

**Quay services** – About 480 berths 3 of which are for visitors, 2 mobile cranes of 16 t and 1 fixed crane of 3.5 t, 1 slipway, boat storage, drinking water, water supply, electrical supply, fire extinguisher, fuel station, quay lighting.

**Port services** – Repair workshop, dockyard, VHF, refuse disposal, collection of used oil/spent batteries, public toilets/showers, public telephone, sailing club.

**Accessory services** – Ice sales, cylinders (gas/LPG), boat/dinghy hire, car/cycle hire, car parking, chandlery, hotel, restaurant, bar, shops of every kind, food stores, laundry, caravan parking, camping, sports equipment, information office, internet point, letter box, post office, bank, cash point, pharmacy, emergency medical service (Comacchio), Hospital (Comacchio), first aid (Comacchio), decompression chamber (Ravenna and Ferrara).

**Communications** – Ferry for Lido degli Estensi, railway (Ravenna), motorway (Ferrara), airport (G. Marconi-Bologna).

**Authorities** – Circomare, Tourist Port Management, Carabinieri, Tax Police, Fire Brigade.

**Wrecks** – At 44°42'.0 N – 012°18'.2 E (about 3 M to the NE of Porto Garibaldi), in depths of 11 m, the hull of a sunken trawler can be found within the first area of artificial submarine barriers.

At 44°42'36" N – 012°24'24" E (about 7 M to the ENE of Porto Garibaldi) a wreck, probably of an aircraft, lies on the bottom. It is marked by a yellow ball.

**Mollusc farms** – To the NE of Porto Garibaldi there is a wide area intended for farming molluscs, within which a number of farms are positioned. The area, rectangular in shape, is marked by a N cardinal **light buoy** on the NE corner, by an E cardinal **light buoy** at the centre of the E side, by a S cardinal **light buoy** on the SE corner and by two special marker **light buoys** on the SW and NW corners. The following are **prohibited** in the stretches of water occupied by the farms: navigation, stopping, anchoring and fishing for all vessels not belonging to the leasing co-operative; it is also **prohibited** to approach within 500 m from the perimeter of the farms themselves.

**MARINA DEGLI ESTENSI**

**(PORTO GARIBALDI)**

**TOURIST DOCK**

**2007**

44°40'.5 N – 012°14'.1 E

In the section of coast between Porto Garibaldi and Goro, there are three recently developed tourist swimming centres on the sea shore: **Lido degli Scacchi**, **Lido di Pomposa** and **Lido delle Nazioni** 3, 4 and 5 km to the N of Porto Garibaldi respectively.

Seen from the sea the three centres look similar: tall modern buildings rising above the pine forest, almost on the sea-shore. About 1.4 M to the NNW of the lighthouse of Porto Garibaldi a conspicuous white **block of flats** with four rows of terraces can be seen.

Some tall modern **buildings** are clearly visible at the beach of Lido delle Nazioni, including one topped by a circular donjon on two floors; to its side there is a circular low construction on two floors with a single French window, similar to a helical ramp.

Just to the N ( $44^{\circ}44'.7$  N –  $012^{\circ}14'.2$  E) stands a significant characteristic **tank** on a framework, in the shape of a conical trunk with the greater base on top. There are also a number of **breakwater groynes** that extend from the beach for several tens of metres out to sea.

**Volano** – Is a small tourist centre made up of a small group of low houses covered by vegetation; it is located near the mouth of the Po di Volano, on the starboard bank. Some multicoloured beach huts can be seen on the shore.

About 0.5 M to the S of the light of the Port of Volano, at Lido di Volano, a 198 m long T shaped **pier** extends at right angles to the coast. It is intended for vessels equipped for passenger transport to berth. Its head is marked by a yellow **light** on a post (see List of Lights).

A large conspicuous **tank** can be seen about 4 M to the S of Volano.

The following can be seen from sea: the **lighthouse of Po di Goro** (figure 9) that stands alone on the low coast and consists of a white conical trunk shaped tower, next to a two-storey building; the pointed and isolated **bell tower of Pomposa**; the pointed **bell tower of Goro**, brick red with white pinnacle, visible at close range, on the starboard end of a row of trees; the **bell tower of Gorino**, in the centre of the village.

**Figure 9** – Po di Goro, lighthouse (2007).

The **Sacca di Goro** or **dell'Abate** is a vast semicircular bay, 3 M deep, that opens up between the mouth of the Po di Volano and that of the Po di Goro; it is exposed to the SE wind, which generally lasts for 2 or 3 days.

**Dangers** – In the environment of the Sacca di Goro, on very shallow depths, there are **mussel farms**, **tide gauges** and **dolphins** that impede the navigation of small boats. Therefore navigation within the Sacca di Goro outside the navigable channel that is marked by beacons is inadvisable and dangerous, even for boats of a modest size.

**Buoys** – An oceanographic buoy is positioned about 3.9 M to the SE of the mouth of the Po di Goro at the point numbered S1 with co-ordinates  $44^{\circ}44'32''.5$  N –  $012^{\circ}27'27''.0$  E (WGS84) at a depth of 21.5 m. The buoy is equipped with a yellow light with X topmark.

**GORO** – Is built on the bank of the Po di Goro and is 6 km from the sea. It is reached from the sea by means of the Po di Goro.

**Winds** – The prevailing and dominant winds are the NE and the SE.

**Warnings** – The access channel to the port of Goro is subject to silting up, often abeam of Volano; the depths diminish considerably. Contact the Maritime Authority before entering port.

**Regulations** – Starting from the entrance to the access channel, leisure craft must proceed at a speed of no more than 3 knots.

**Entry instructions** – Once abeam of Volano, at a distance of 600 m from the beach, follow a 3 M long channel bounded in the initial section by a row of dolphins to be left to port (maximum distance 10 – 20 m). The second section of the channel is marked by another row of dolphins that must, this time, be left to starboard (maximum distance 10 m).

**Port of Goro** (see plan) – Is formed by a wide basin of an almost square shape, enclosed by the banks and the defence breakwaters. To port on entry there is a **tourist dock (Goro tourist port)** with a number of floating piers in the form of a comb where about 125 leisure boats with a length of 6 – 13 m can moor.

The rest of the port is frequented by local fishing boats; the basins have an extent of 980 m, with three groynes for mooring on both sides.

In the S part of the port there is a haulage slipway for vessels up to 150 g.r.t.

The port is sheltered from N winds.

The depths are about 3 m in the entrance and 2.5 m in the basin centre with minima of 2 m. The bottom is muddy/sandy.

The depths at the quays are 2 – 3 m and the draught permitted is 2 m.

**Warnings** – The port is subject to silting up; for information on draughts contact the local Maritime Authority.

**Light markers** – A white flashing light is positioned near the start of the channel for landing at the Port of Goro, at 44°47'25" N – 012°16'30" E. The start of the access channel to the Port of Goro, off the beach of Volano is marked by two **lit beacons**, on a base of reinforced concrete. The first, at 44°47'31" N – 012°16'31" E, is green; the second, to the N of the first, at 44°48'54" N – 012°17'10" E, is red (see the List of Lights).

There is a **fog signal** (foghorn) on the beach, to port of the access channel.

Four **lights** are positioned along the channel for landing at the Port of Goro, two with flashing red lights and topmarks and two with flashing green lights and topmarks. At the junction of the channel for landing at the Port of Goro and the Canale Foce Po of Varano there is a red flashing light with topmark.

The entrance to the Port of Goro is marked by two **lights** (on a green post to starboard on entry and on a red post to port), positioned on the ends of the E and W breakwaters respectively.

**Quay services** – Water supply, drinking water, electrical supply, quay lighting, fire extinguisher, 1 slipway, fuel station, boat storage.



**GORO**

**PORT**

**2007**

44°51'.0 N – 012°18'.0 E

**Quay services** – Car parking, refuse disposal, dockyard, repair workshop, VHF, sailing club, Shipping Agent/Maritime Agency.

**Accessory services** – First aid (Lagosanto-Ferrara), doctor's surgery (Goro), pharmacy, bank, cash point, restaurant, bar, post office, information office, ice sales, chandlery, shops of every kind, food stores, laundry.

**Authorities** – Locamare, Customs, Carabinieri.

**Gorino Ferrarese** – Is a marina that lies on the E side of the Sacca di Goro. Having entered the access channel to the Port of Goro, before reaching the second lit beacon, a navigable channel to starboard can be entered, marked by dolphins to be left to starboard, that leads to the fishing port. Several of the dolphins that mark the channel are missing.

**Quay services** – Slipway.

**Port services** – Repair workshop.

Near Gorino a passage opens up, called Conca di Navigazione, that joins the Sacca di Goro to the Po di Goro. Vessels up to 20 m long, 5.9 m wide a draught of up to 2.5 m can access. For information about the opening of the Conca di Navigazione contact the Technical Office of the Municipality of Goro.



CHAPTER 2

FROM PO DI GORO TO CHIOGGIA

(CHART Nos. 38 – 222)

**INFORMATION OF A GENERAL NATURE** – Up to Punta Tagliamento the coast follows a wide very low plain, the Northern part of which borders the Gulf of Venice. It is crossed by various water courses, the most important of which are the Fiume Po, the Adige and the Piave; it is fragmented by numerous channels which between them connect the various lagoons, the most extensive of these being that of Venice. The Po delta is made up of alluvial terrain. Where the rivers meet the sea they often cause sand banks to shift; the main access channels are dredged regularly. Fog is frequent in this area and can represent a danger to shipping.

Most of the ports are located on the mouths of the rivers or streams or on the lagoons; some of these ports constitute the bases for fishing fleets that operate up to 15 M out to sea.

**“Adriatic Traffic” obligatory naval reporting scheme** – See page 17.

**Traffic separation schemes** – See page 17.

**Areas for military exercises** – There are areas for firing exercises from the mouth of the Fiume Adige up to and beyond Punta Tagliamento, and an area for mine countermeasures, with the presence of underwater obstacles and mining by aircraft in the waters off the Isola di Pellestrina, E coast. For the details see the “Introduction to the Notices to Mariners” for the current year and chart no. 1050.

**Submarine pipelines** – Near populated areas, submarine pipelines (sewers or sea water extraction) of various lengths (even more than 1,000 m) set out generally from the shore out to sea and are shown on the charts; only those that can affect the safety of shipping are mentioned in this volume.

**Hydrocarbon exploration** – Fixed platforms that are suitably marked on the surface are installed about 11.5 M abeam of the mouth of the Fiume Brenta.

Mobile platforms for hydrocarbon exploration can be found at sea on near the Venetian coastline. Their presence is regularly marked with the appropriate Notices to Mariners.

**Tourist ports and tourist berths** – The most important is the Port of Chioggia. In the area of the Po and Venice and within the mouths of the rivers there are a number of tourist ports, marinas and berths.

**Warnings** – Following the considerable silting up that occurs after exceptional rains, in the various branches of the Po Delta navigation can be very dangerous even for small sized fishing boats; therefore navigation is not recommended, except in the Po di Levante, especially in the event of adverse weather conditions or with the tide below average sea level.

**Winds** – Expansion towards the coast of the area of high pressure affects the state of the weather in the Northern Adriatic for which the dominant winds are from quadrants I, II and III. The NE is a descending dry wind that is often very cold and of great strength. The SE is a hot humid wind, accompanied by high seas and usually by rain.

In the area of the Po Delta there are localised SW winds called Furiani by the locals which when accompanied by showers sometimes veer to the SE and raise the state of the sea.

Good weather comes with the NW wind which can raise large waves even if for limited periods.

**Tides and currents** – In the Northern Adriatic the tides have a certain significance. The sea enters the ports and channels of the lagoons rapidly and when leaving creates currents in different directions; on some occasions with very violent winds at sea, whirlpools or eddies can form. The average excursion of the tide is about 50 cm in Venice.

**PO DELTA** – Extends from the Sacca di Goro to Porto Caleri and includes a wide flat extension of the alluvial terrain the coastal extent of which exceeds 25 M. The numerous channels and islands that form the delta are easily confused due to the uniformity of the terrain and the scarcity of landmarks: consequently recognition of the different entrances to the river is rather difficult.

The large banks of fog that are encountered on the delta during a large part of the year make navigation and landing difficult.

The approach of the delta is indicated by the yellow colour of the seawater, that extends way out to sea and can be seen easily in good weather.

**Dangers** – The alluvial terrain and the deposits brought by the waters in the various branches of the river change the line of the coast that moves steadily to the E; the depths off the coast are uncertain and variable up to a significant way out.

It should be noted that near the lighthouse of Punta della Maestra, the depths reduce rapidly and that, 1 M to the SE of the lighthouse itself, there is less than 1 m of water.

As the shape of its delta suggests, the waters of the Po on entering the sea fan out heading N, E and S.

On meeting the sea they are almost immediately influenced by the circulation of the Adriatic and often veer appreciably to the E. In any case, the currents at the mouth of the Po are not to be feared as they tend to carry ships away from the dangerous shallows of the delta.

**Mussel farms** – Various farms are positioned near Chioggia:

- a fish farm is located about 3.5 M to the ENE of the mouth of the Po di Goro and is marked by 1 cylindrical yellow light buoy equipped with X topmark;
- another farm is located about 5.2 M to the ENE of the Po di Goro lighthouse and is marked by 1 cylindrical yellow light buoy equipped with X topmark;
- a sea farm is located about 8.4 M to the NE of the Po di Goro lighthouse, marked by 1 yellow spar buoy equipped with X topmark. It is **prohibited** to approach within 0.5 M from the plant;
- a mussel farm is found about 5 M to the NNW of the Punta della Maestra lighthouse and is marked by 2 special marker light buoys located on the E and W corners and by 2 conical day buoys with X topmarks located on the N and S corners;
- a mussel farm is positioned about 6.2 M to the NNW of the Punta Maestra lighthouse, marked at the corners by 2 cylindrical yellow light buoys and by 2 cylindrical day buoys;
- a mussel farm is located about 3.3 M to the NW of the Punta della Maestra lighthouse; the corners are marked by 4 cylindrical light buoys with X topmarks;

- a mussel farm is positioned about 4.5 M to the NE of the Punta della Maestra lighthouse, in the waters off the Sacca li Scardovari; the corners are marked by 4 cylindrical light buoys with X topmarks.

**Warnings** – In the section between the Po di Goro and the Po di Maestra, never approach within 4 M of the coast and head to sea as soon as the depth sounder signals depths less than 29-30 m.

In October and November there are floods in the channels which raise the waters 3-8 m above the normal level, so the channels and islands vary in shape and size, the depths change and the banks shift.

The entrances of the Po can occasionally be obstructed by ice.

The **Po di Goro** is navigable by boats of small displacement. 2 m of water are generally found at the mouth of the Po di Goro; the sand and the mud dragged down by the river cause frequent changes of depths that can therefore be less than those indicated on the chart.

Traffic in the **Po della Donzella** (also called **Po della Gnocca**) consists mainly of small vessels that, to avoid navigating along the coast which is very dangerous in winter, reach Venice by means of the internal channels. The banks at the entrance change position continuously.

From the Po della Donzella to Punta della Maestra various inlets open up frequented by local boats and obstructed by shallows. The most well known are: the **Sacca di Bottonera**, the **Sacca dei Scardovari** (connecting with the one above to the N) and the **Sacca del Canarin**.

The Silo Daccò, easily recognised from the sea, consists of a squat square building of a reddish colour, with a tower beacon in the centre; there are some low buildings around it which include some ware-houses and two cylindrical silos, very close together with conical roofs.

Near **Busa del Bastimento**, at 44°54'48" N - 012°30'48" E in depths of 3 m, there is an instrument **platform** in reinforced concrete that rises 3 m above the average water level. It is provided with markers (see the List of Lights).

In **Porto Tolle**, at about 44°57'21" N - 012°29'23" E, there is a very tall chimney the upper part of which is painted in red and white bands, marked at night.

At **Cà Dolfìn**, about 4.5 M bearing 245° from the Punta della Maestra lighthouse a tall **tank** can be seen even from a considerable distance near which there are two very tall radio aerials. Further inland, again at Cà Dolfìn, a large cylindrical silo can be seen.

**Punta della Maestra** (or **Punta di Maistra**) (44°58' N - 012°32' E), the most Easterly point of the delta on the mouth of the Po della Pila, is very low with a uniform appearance.

**Lighthouses** – The Punta della Maestra lighthouse consists of a cylindrical tower painted white, stands alongside reddish buildings. It constitutes an excellent reference point. There are some scattered houses behind the lighthouse. A **Racon** is operating on the lighthouse tower that responds with the letter “P” in Morse code (see “Radio Services for navigation” – Part I).

**Buoys** – A wave measuring buoy is positioned about 3.3 M to the E of Punta della Maestra, at 44°55'00" N - 012°38'00" E; it is equipped with a flashing yellow light.

An E cardinal semi-elastic light beacon is anchored 2.5 M bearing 097° from the Punta della Maestra lighthouse.

**Conspicuous points** – Between Punta della Maestra and Chioggia the coast remains low with extensive swamps behind. The points of reference, especially in the Southern part, are not very conspicuous. Other than the Punta della Maestra lighthouse the most notable are: the tall **tank**, already mentioned, situated at Cà Dolfin, and two very tall **aerials** on frameworks near the tank itself; the Maestra **bell tower**, of a squat shape, with a sharp peak next to the sizable church; the imposing characteristic **water tower** situated just N of the entrance to Porto Levante, 52 m high and equipped with two ringed balconies; another **tower with tank** that stands between Porto Caleri and Porto Fossone; the **Fort** of Brondolo; the **houses** of Sottomarina di Chioggia.

The **Po della Maestra** is only navigable by small boats.

**Breakwaters that are awash** – Some barriers are positioned parallel to the coast between Punta della Maestra and Porto Fossone within 300 m from the shore:

- about 2.1 M to the NW of the Punta della Maestra lighthouse, near the S mouth of Barbamarco 200 m long level with the water;
- about 3.9 M to the NW of the Punta della Maestra lighthouse, near the N mouth of Barbamarco 350 m long level with the water;
- about 1.7 M to the ESE of the Albarella water tower, in front of the Scanno Cavallari, 300 m long, with 1.5 m head of water, marked by posts;
- between the village of Rosapineta and Porto Fossone, about 1,400 m long, with 1.5 m head of water.

**Submarine pipe-line** – Extends from the Scanno Cavallari, at about 45°03'54" N - 012°22'24" E, out to sea, the terminal of which is at 45°04'24".5 N - 012°24'16".2 E, marked by a **yellow light beacon** with X topmark. A **buoy field** for gas tankers to moor is centred on the terminal with a radius of 250 m.

**Regulations** – Vessels drawing 7.8 m fully laden up to 24,000 t gross weight can moor at the buoy field, provided that the strength of the wind does not exceed 25 knots and the height of the waves does not exceed 4 feet.

Transit, mooring, stopping, fishing by whatever means, underwater and any other activities are **prohibited** within 500 m from the light beacon; excepted are gas tankers heading to the terminal and vessels involved in the discharge and policing services.

**Anchorage** – Is instituted in the section of sea off the mouth of the Po di Levante, at 45°04'02" N - 012°24'30" E, for commercial operations and for lightering vessels on barges. Vessels at anchor will have to observe the standards for preventing collisions at sea; those passing through the area moreover are obliged to keep their distance and proceed at reduced speed, such as not to impede or interfere with or harm the commercial operations in progress.

**Safety regulations regarding mooring, unloading and liquid propane gas landing operations in the buoy field situated at Porto Levante** (Ordinance no. 69/92 of the Chioggia Compamare and subsequent alterations) – Apply to Italian and foreign vessels unloading liquid propane gas at the terminal. The Regulations contain all the fire prevention and anti-pollution measures to be adopted on board and on land, as well as the procedures for requesting the pilot, tug and mooring services.

In particular vessels waiting to moor must stay at anchor in the Chioggia road, outside the traffic separation schemes (see below) in the area called **C.S.T. (gl)** (Chioggia Small Tankers), notifying their position to the Compamare. The mooring area,

shown on the chart, is bounded by the following points:

- a) 45°10'.20 N - 012°25'.00 E;
- b) 45°10'.20 N - 012°26'.18 E;
- c) 45°09'.28 N - 012°25'.00 E;
- d) 45°09'.28 N - 012°26'.18 E.

For more details see the above-mentioned Regulations and their subsequent alterations.

**Sea farm** – Is positioned immediately E of the mouth of the Po di Levante (Porto Levante) and is marked by a yellow light buoy equipped with topmark located on the outermost corner and three small yellow buoys with X topmarks located on the other corners.

The **Po di Levante**, upstream of the dredged channel, is only navigable by small boats.

A **water tower** (already mentioned) stands on the **Isola Albarella** to the N of the entrance of the Po di Levante, and is a landmark by day and by night (the upper balcony houses a public operation). The steeple of the tower is provided with a light to enable boats to steer, with suitable anticipation, on the leading line of the entrance to Porto Levante.

**Winds** – The prevailing winds blow with particular violence and are from quadrants I and II; the NE wind dominates particularly in the winter as does the SW wind in the autumn.

**Currents** – Are strong and are influenced by the winds and the state of the rivers.

**Tides** – The excursions are evident above all during SE and SW winds.

**Entry instructions** – To access the marina of Albarella and the subsequent docks (Marina Porto di Levante, Porto Levante, Nuova Marina di Porto Levante) vessels must head for the access channel (chart no. 222), marked at the entrance about 1.5 M from the coast by a series of small red radar-reflecting buoys with reflecting white bands, to be left 10 – 15 m to port on entry. The channel is subject to frequent silting up through sea storms.

**Warnings** – Before using the channel, contact the Locamare of Porto Levante on VHF channel 14 or the pilots' Corporation of Chioggia or the Management of the Port of Albarella on VHF channel 9 and 16.

**Tourist marina of Albarella** (see plan) – Is situated just beyond the entrance to the Porto Levante, to starboard on entry, on the S side of the Isola Albarella. Modern in concept and equipment, the marina is enclosed by an outer mole and a small inner mole and is quayed internally with tall sides (quays not suitable for berthing). A double toothcomb pier (piers rooted at tight angles to the central one) about 200 m long sets out from the central quay. Other piers set out from the Banchina Nord. The heads of the two moles are marked by lights (see the List of Lights).

The depths at the entrance vary from 2.8 to 4.5 m, with 5 m at the basin centre, with a minimum of 2.8 m; the bottom is mud/sand.

**Regulations** – On arrival at the port make contact with the Management of the berths on VHF channels 9 and 16.

Vessels up to 25 m long and 7.5 m wide can moor.

**Quay services** – 453 berths 45 of which are for visitors, haulage slipway, 1 slipway, 1 fixed crane of 5 t, 1 travel lift of 50 t, electrical supply, water supply, fuel station, fire extinguisher, quay lighting, boat storage.



**ALBARELLA**

**MARINA**

**2007**

45°03'.7 N - 012°21'.5 E

**Port services** – Dockyard, FAX, VHF, weather service, refuse disposal, collection of used oil/spent batteries, public toilets/showers, public telephone, security.

**Accessory services** – Emergency medical service at Albanella, first aid at Porto Viro, pharmacy, ice sales, car parking, chandlery, shops of every kind, food stores, sports equipment, bar, restaurant, hotel, internet point, information office, decompression chamber at Padua.

**Communications** – Railway, motorway (Rovigo), buses (Rosolina Mare), airport and heliport (Venice).

**Authorities** – Locamare, Tourist Port Management, Customs, Carabinieri (Rosolina), National Police (Porto Tolle), Tax Police (Porto Levante), Fire Brigade (Adria).

**Prohibitions** – About 100 m upstream of the centre of habitation of Porto Levante there is an area where anchoring is prohibited due to a submarine telephone cable.

**Porto Levante** – Stands on the marsh of the Po di Levante, 2 Km from the sea. The tourist berth of Porto Levante is an entirely private dock. It is connected to the river by a channel with a bridge over it; within there is a pier for 40 vessels (maximum length 7 m). The outer moles of the mouth of the Po di Levante are marked by **lights**.

The depths vary between 1 and 1.5 m.

**Quay services** – 130 berths, fuel station (7.30 am – 7.00 pm), water supply, electrical supply, quay lighting, 1 fixed crane of 2.5 t, boat storage.

**Port services** – Local pilot, dockyard, public toilets, public telephone, VHF.

**Accessory services** – Ice sales, car parking, boat/dingy hire, chandlery, bar, restaurant, hotel, food stores.

**Authority** – Delemare.

**Marina di Porto Levante** – Is a tourist dock that is found by proceeding along the Fiume Po di Levante, on the port bank.

The depths at the entrance vary from 2.5 to 3.5 m; in the basin centre they are 3 m with a minimum of 2.5 m. the bottom is sand/mud.

Boats up to 20 m long and 9 m wide can moor there.

**Quay services** – 550 berths, 1 slipway, 1 fixed crane of 30 t, electrical supply, water supply, fuel station, fire extinguisher, quay lighting, boat storage.

**Port services** – FAX, VHF, weather service, refuse disposal, collection of used oil/spent batteries, public toilets/showers, public telephone, security.

**Accessory services** – First aid (Porto Viro), ice sales, car parking, chandlery, food stores, diving centre, sports equipment, bar, restaurant, decompression chamber (Padua).

**Communications** – Motorway (Rovigo), buses (Rosolina Mare) airport and heliport (Venice).

**Authorities** – Delemare, Tourist Port Management, Customs, Carabinieri (Rosolina), National Police (Porto Tolle), Tax Police (Porto Levante), Fire Brigade (Adria).

**Marina Nuova di Porto Levante** – Is found on the port of the Po di Levante about 1.5 M from the centre of habitation of Porto Levante. It is a dock, also private, with 400 m of quays and with two piers. The maximum length permitted for mooring is 15 m. The depths vary from 2 to 4.5 m. The bottom is sand.

The dock is currently undergoing expansion works.

**Quay services** – 200 berths 10 of which are for visitors, 1 fixed crane of 7.5 t, 1 mobile crane of 3.5 t, water supply, electrical supply, drinking water, quay lighting, boat storage.

**Port services** – Repair workshop, dockyard, security, pilotage, local guide, mooring, skin divers, refuse disposal, ice sales, weather service, public toilets/showers, public telephone.

**Accessory services** – Car parking, bar, restaurant.

**Porto Caleri** is a small passage, seldom used, that leads to the internal channels; it is recognised by a long block of flats with a red roof and a double superstructure in the centre, also having a red roof.

Between Porto Caleri and Porto Fossone, at about 45°07'48" N - 012°19'18" E, the above-mentioned grey 40 m high **tower** is clearly visible with a cylindrical tank with a metal lightning conductor on top. Just N of the tower a complex of large modern buildings can be seen.

**Wrecks** – A sunken hull lies at 45°05'30" N - 012°40'30" E, about 14.5 M to the E of Porto Caleri, in depths of about 29 m. .

**Mussel plants** – A yellow light beacon with X topmark at 45°07'.3 N - 012°28'.0 E marks a mussel farm area. The area marked on the charts is **prohibited** to anchoring, fishing or navigation.

**Area for firing exercises** – Attention is drawn to the existence of an area for firing exercises near the coast between Porto Fossone and Porto di Brondolo. For the details see the "Introduction to Notices to Mariners" of the current year and chart no. 1,050.

**Porto Fossone** – Is the mouth of the Adige; the **Fiume Adige** communicates with the ports of the Lagoon. The river can be navigated by small boats up to Verona, after which there are **barriers** at Chievo and before at Rovereto. At Porto Fossone the depths are very shallow and subject to variations. Near the banks at the mouth of the river two structures are installed on posts that are awash and extend out to sea up to a distance of about 600 m from the shore.

There is a **private dock** at Porto Fossone on the bank of the Adige, to port on entry, that can accommodate 70 vessels 5 of which are for visitors with a maximum length of 10 m and depth of 1.6 m.

The principal services are provided. Radio connection is by VHF channel 9.

**Dangers** – An **elastic light beacon** with X topmark used for determining oceanographic data is positioned at 45°09'00" N - 012°23'00" E.

The village of **Bacucco** lies to the N of the mouth of the Adige; it is recognised by the number of tall modern buildings and is clearly visible from the sea.

**Porto di Brondolo** is the mouth of the Fiume Brenta: access is difficult and not at all safe. The rapids that follow the winter rains form whirlpools at the entrance that cause the sand banks to move. The **Fiume Brenta** communicates by channels with Chioggia, Padua, Vicenza, with the Adige and with the Po.

**Marina di Brondolo** – Is a private berth in the village of the same name, on the bank to starboard on entering the Fiume Brenta, consisting of about 500 m of quays and 3 piers. The average depths are 2.5 m. There are 120 berths available 12 of which are for visitors, for boats with a maximum length of 15.5 m.

The berth provides adequate services and equipment. The radio connection is by VHF channels 9 and 16.

**Warnings** – Immediately to the N of the mouths of the Adige and Brenta rivers two sheet piles are found that extend at right angles to the coast up to a distance of 1,000 m. Each is marked with an E cardinal light (see List of Lights).

**Platforms** – Three frameworks for hydrocarbon research equipped with the required light markers and called **CAMPO ADA** are found at about 45°10'.80 N - 012°35'.50 E.

**Dangers** – There is an explosives discharge area about 29 M to the ESE of the port of Chioggia.

**Wrecks** – The wreck of the M/V Edvokia II lies in depths of about 24 m at 45°11'23" N - 012°27'50" E, covered with 16 m of water. It is not marked on the surface.

**Regulations** – Between the mouth of the Brenta and the Southern outer dyke of the Port of Chioggia an area intended for sailing boat regattas has been identified, centred at 45°12'.85 N - 012°19'.50 E with a radius of 0.6 M. When the races are in progress, passing vessels must not impede the regatta course and the fishing boats that have to pass through or near the area in question must give priority to the sailing boats involved in the regatta.

**Navigating the lagoon** – Navigation in the Venetian Lagoon, that extends from the mouth of the Fiume Brenta and the mouth of the Fiume Sile, is governed by the Inspectorate of the Port of Venice (Veneto Region) and by the Harbourmaster of Chioggia and Venice (see chapter 3).

**Submarine cables** – A fibre optic submarine telephone cable connects Chioggia with Umag (on the coast of Croatia); it is marked on the charts.

**Winds** – The NE wind is frequent in winter and sometimes last for more than a week; the SW wind brings rain and is more frequent in autumn. The NE, E, SE and SW wind blow with particular violence. Approaching the coast there is some shelter from winds in quadrants III and IV; cross winds are the NE, E and SE winds. In the Porto Interno vessels are safe in any weather. The NE, E and SE winds raise high waves in the outer harbour.

**Currents** – Are strong and influenced by the rainwater in the rivers and by adverse weather raging at sea: they do not always follow the tides. During fresh NE and SE winds the current between the dykes is very strong, sometimes even reaching a speed of 4 knots.

**Tides** – The excursion varies between 30 and 70 cm; under the influence of the SE wind it reaches 1.2 m. The highest tides are encountered in October, November and December; the lowest in January and February. The establishment of the port is 10 hours and 30 minutes.

**Weather warning signs** – A high tide and visibility to the N of the Prealpi mean changes in the weather can be expected. A clear sky with bright stars herald a strong NE wind; a NW wind with a cloudy sky often warns, if it veers to the NE, of rain.

**CHIOGGIA** (Chart no. 221) – Built on an island, it is joined to the Lido di Brondolo by a bridge with 43 arches and to Sottomarina by a wooden swing bridge and by an embankment with two concrete bridges at the end. The Canale Longobardo connects it to the Fiume Brenta. The fishing is very active and is conducted with trawlers.

**Conspicuous points** – Coming from the sea, Chioggia can be recognised by the two **outer dykes** that delimit the access to the lagoon between Sottomarina and Caroman. On the NW end of Sottomarina, near the root of the Diga Sud, stands the **Forte S. Felice** on which

the building of the old lighthouse can be seen. From the sea, along the length of coast between the mouth of the Brenta and the Diga Sud, landmarks are the **tall buildings** of **Sottomarina**, which extends along the coastline. The following are particularly recognisable: the tall massive **bell tower of the Duomo** (43°13'.0 N - 012°16'.7 E), square in reddish bricks, with **greyish dome**; a large **cylindrical tank** on concrete framework. With clear weather the distant **Colli Euganei** hills can easily be seen.

The port can be reached from within by means of lagoon channels, from the sea by an external channel and two lagoon channels.

**Biological protection area** – called “**Area Tegnue**” is instituted with the Ministerial Decree of 03/08/06, within the protected area instituted with the previous Decree of 05/08/02. Any fishing activities are **prohibited** in the areas marked on the Charts centred on:

- a) 45°14'.85 N - 012°28'.50 E;
- b) 45°13'.70 N - 012°29'.50 E;
- c) 45°10'.30 N - 012°31'.00 E;
- d) 45°12'.00 N - 012°25'.00 E.

Underwater activity within 200 m of the fixed plants, from the static nets, from the site areas and from the merchant ships and within 300 m of naval vessels is also **prohibited**; all vessels are also prohibited from anchoring within the ports. The area is marked on the charts.

**Fishing for bivalvia mussels** – In the area of the Maritime Department of Chioggia, fishing for **bivalvia** mussels through the use of a hydraulic dredger is regulated by the appropriate Decree of the Ministry of Farm Policies.

In particular it is **prohibited** in areas and in periods established from time to time.  
For the details see the local Authorities.

**Traffic separation scheme** – In order to increase the safety of navigation of the ships moving in the Chioggia road, vessels entering or leaving the port of Chioggia must use, within the limits of the area of sea under its jurisdiction, the traffic separation schemes shown on chart no. 222, observing Rule 10 of the “regulations for the prevention of collisions at sea” (List of Lights 3019).

**Anchorage** – Again in order to increase the safety of ships moving in the Chioggia road, an anchoring area is instituted for small cargo vessels, called **C.S.C.** (Chioggia Small Cargo), the limits of which are shown on the chart.

Vessels lightering cereals must moor in the above-mentioned area or, alternatively, in favourable weather conditions, in the point at 45°14'.6 N - 012°20'.0 E.

**Regulations** – Vessels at anchor or that are carrying out lightering operations must in any case observe the current standards in matters of maritime and harbour policy, those of a sanitary or customs nature and the regulations for prevention of collisions at sea; those in transit must keep a safe distance and proceed at a speed such as not to obstruct or harm the commercial operations under way.

**Works in progress** – Between the two breakwaters of the port of Chioggia, near the N breakwater, works are in progress to construct the E breakwater of the so-called “Porto Rifugio” and the navigation basins. The site area is **prohibited** for transit and stopping by vessels not involved in the works. All passing vessels must proceed at the minimum speed needed to manoeuvre in order not to create wave motion and keep a distance of at least 50 m from the vessels involved in the works. The area is marked by 7 yellow light **buoys** equipped with X topmarks.

Facing the entrance to the port of Chioggia there is a protection dyke, bearing roughly NE. The areas affected by the works are marked on the chart.

**Lighthouse** – Is located near the root of the South dyke ( $45^{\circ}13'.8$  N -  $012^{\circ}17'.9$  E); it consists of an 18 m high white framework.

**Lights** – A light is positioned on each head of the two breakwaters: green metal columns with pedestal on the Diga Nord and red ones on the Diga Sud; a green hut with pedestal on the root of the Diga Nord.

Lights are positioned on the new curved outer dyke positioned facing the entrance to the port, consisting of a red metal column with pedestal on the N end and a green one on the S end.

**Fog signals** – Two fog signals (foghorns) are positioned on the head of the Diga Sud and on the NW point of the Forte S. Felice respectively. For the other markers see the List of Lights.

The **External Channel** (figure 10) between the two breakwaters is dredged to 9.5 m: there vessels access the first section at the N breakwater and proceed gently to the S of the axis between the two dykes.

The heads of the breakwaters are marked by **lights**. A Racon is mounted on the N dyke. A foghorn is mounted on the S dyke.

The External Channel is marked as follows: to starboard by a green light **beacon** at  $45^{\circ}14'00''.7$  N -  $012^{\circ}18'35''.8$  E; to port by **two** red light **beacons** located are located at  $45^{\circ}13'56''.5$  N -  $012^{\circ}18'37''.3$  E and  $45^{\circ}13'55''.8$  N -  $012^{\circ}18'01''.9$  E respectively.

**Figure 10** – Chioggia, new outer dyke and access channel (2007).

**Dangers** – The remains of what is probably an instrument post lie at about  $45^{\circ}14'.02$  N -  $012^{\circ}17'.85$  E, at the N limit of the External Channel.

It is dangerous to pass within 200 m of the heads of the dykes, because of the submerged rocks located on their extensions.

**Submarine pipelines** – A buried gas pipeline sets out from the point at  $45^{\circ}15'.196$  N -  $012^{\circ}17'.962$  E (about 0.7 M to the S of the cemetery of Pellestrina) via the Canale di Caroman, passing to the N of the Ottagono di Caroman, then via the Canale Nuovo di Caroman turning to the S heading SE, following broken lines, and lands at Sottomarina near S. Martino.

**Electric conduits** – An electric conduit connects Caroman to the directional light beacon of the entrance to the port of Chioggia. There are notices bearing the word “**danger**” along the route of the cable outside the navigable channel. Therefore vessels that are preparing to cross this area should pay attention.

**Submarine cables** – The lagoon area that extends 200 m to the W of the line joining the old lighthouse of S. Felice with the light on the root of the Diga Nord, bounded by the following points, is **prohibited** for anchoring and fishing by any means that drag the seabed, due to the presence of submarine telegraph cables:

- a) 45°14'06" N - 012°17'34" E;
- b) 45°14'06" N - 012°17'34" E;
- c) 45°13'19".5 N - 012°17'26".5 E;
- d) 45°13'19".5 N - 012°17'17".5 E.

**Prohibitions** – 1) Mooring and fishing by any means are prohibited on the dolphins that bound the channels of the lagoon.

2) Mooring is prohibited at the buoys of the Italian Navy off the Forte S. Felice, without specific authorisation to be requested in good time from the Harbourmaster of Chioggia.

**Internal navigation lines** – Various channels set out from Chioggia that link up all the parts of the Venetian Lagoon and connect it with the routes of the main rivers of Northern Italy. An important artery is the **Canale Lombardo Esterno**; this artery is obligatory for all vessels going from Venice to Brondolo (and vice versa) without stopping at Chioggia.

**Pilotage** – Is obligatory for vessels with a gross weight over 500 t. the pilot embarks about 1.5 M from the breakwaters of the port of Chioggia.

**Tugs** – The port has a tug of 1,200 HP available.

**Entry instructions** – Vessels coming from the open sea via the Canale Esterno reach the **Outer Harbour** and must, if heading for the **Porto Interno**, enter the lagoon channel that starts at the buoy situated to the NE of the light on the Diga delle Saline; however if they are heading for the **Canale Lombardo Esterno**, they must pass through the **Canale Interno**, dredged to 7 m, that stretches out to the N of the Diga delle Saline from the Outer Harbour. The first section of the last channel, bearing SW – NE, is not marked. The last section of the Canale Interno, heading almost parallel, widens gradually to allow vessels to turn around.

The entrance to the Canale Lombardo Esterno is marked by a starboard side **light buoy**.

The draught permitted for vessels passing through the channel to the commercial port by means of the Canale Lombardo Esterno is 6.5 m.

With fresh winds from the NE, SE and with the Bora, that raises high waves on the bar at the entrance, special precautions must be taken when entering the port; with exceptional SE gales it can be dangerous to try to enter. These winds sometimes seriously obstruct the small vessels coming from the Canale Caroman heading for the Porto Interno.

During E and NE winds and an incoming current it is advisable for vessels heading for the Canale Lombardo Esterno, especially if disembarked, to stay at anchor in the Outer Harbour. The current can be significant and obstruct the entry and exit manoeuvres; there is an area sheltered from the current along the dolphins to the NW of Forte S. Felice.

**Port of Chioggia** – Is located in the S part of the lagoon, starting from the root of the breakwaters; it consists of an Avamporto and a Porto Interno. Stopping in the former and the latter is not dangerous whatever the weather.

**Avamporto** (figure 11) – Is formed where the Perognola and Caroman channels meet. Vessels seeking shelter, with inflammable cargoes and those that cannot enter the Porto Interno because of their draught anchor there.

Vessels can anchor to the N of the Diga delle Saline, keeping N to the dredged channel, on a bottom with a fair hold; the anchorage is always good whatever the weather, except from the E.

Small boats can anchor off the Forte S. Felice, mooring with the stern to the quay.

**Figure 11** – Chioggia, outer harbour (2007).

**Mooring buoys** – Two mooring buoys are arranged in the Canale Perognola, to the W of the Maritime Station, in the following positions (distances and bearings from the bell tower of the Duomo, already mentioned under landmarks):

- a) 1,350 m bearing 309°.5;
- b) 1,530 m bearing 305°.

Other mooring buoys are located to the SW of the old lighthouse of S. Felice (see plan).

There is a tourist marina in **Sottomarina**, called **Darsena Molosella**; the landing is private and consists of a quay with 3 pontoons for 150 berths 10 of which are reserved for visiting boats. To access reach the Avamporto, then turn to port on entry, around the Forte S. Felice, heading for the town, and after about 750 m turn to port to enter the Sottomarina channel; pass through this and finally turn to port again.

There is a civil hospital, first aid, a post office and a pharmacy at Sottomarina (at Borgo Madonna).

The **Canale Caroman**, that leads to the Ottagano Caroman (figure 12) from the Vigo basin, is navigable and marked to the W by dolphins.

About 280 m bearing 230° from the Madonnina di Caroman there are isolated boulders of differing sizes, in depths of 1.4 m and 2.5 m (at low tide).

A **shallow depth** extends in the Canale Caroman, formed by the sea current and the SE gales.



**PORT OF CHIOGGIA**

**MOORING BUOYS**

**2007**

Positions of mooring buoys (with respect to the old lighthouse of S. Felice)			
No.	Bearing	Distance	Notes
1	251°	240 m	The diagram just shows the positions of the mooring buoys, regardless of their structural characteristics.
2	241°	172 m	
3	228°	440 m	

Figure 12 – Chioggia, Ottagano Caroman (2007).

**Porto Interno** – Consists of the Bacino di Vigo, the Canale Lombardo Interno and the Canale S. Domenico, the Bacino della Stazione Marittime and the Canale Lombardo Esterno.

To access the Bacino di Vigo head for the red light of S. Domenico and follow the channel marked at the entrance by a day buoy and a dolphin, with a tall pile indicating another channel, 100 m to the E of the buoy.

On entry to the Bacino de Vigo, steer gradually so as to pass no more than 10-15 m from the posts that flank the Diga delle Saline.

Ships and sometimes pleasure craft moor parallel to the **Diga delle Saline**, back from the dolphins so as not to touch the bank.

Only pleasure craft, small naval boats and the mail boats of the Lagoon Navigation Company [A.C.N.I.L.] can moor along the Rivetta Vigo, as mooring is prohibited for traffic and fishing boats.

There are no moorings in the Bacino di Vigo: the dolphins of the Diga delle Saline are each provided with three rings.

To access the **Canale Lombardo Interno** it is necessary to pass through the Bacino di Vigo. Vessels displacing up to 550 t can moor in the channel; vessels of up to 1,000 t gross weight that draw up to 4 m can berth at the section of quay facing the Cement Factory.

The W bank of the channel is only quayed up to the Cement Factory and at the fuel stations; the E bank is fully quayed; fishing boats can moor there in two tiers.

**Sporting Club Marina di Chioggia** – Is a tourist marina constructed on the Isola Saloni subdivided into two basins.

The **Darsena Le Saline** (see plan) lies along the N side of the Diga delle Saline; the entrance is marked by **lights** and by dolphins positioned along the starboard side of the entrance. It is bounded by a protection mole with three arms, bordered by cat's eyes, and by an inner mole bearing approximately E. Within the basin, rooted at the Diga delle Saline, there are some comb-shaped floating piers. The depths inside are about 3 m.

The **Canaletta Modrin** (see plan) is a dock that lies to the S of the Diga delle Saline and the Bacino di Vigo is accessed from there.

**CHIOGGIA**

**SPORTING CLUB**

**MARINA DI CHIOGGIA – DARSENA LE SALINE**

**TOURIST BERTH**

**2007**

**45°13'.6 N - 012°16'.7 E**

**CHIOGGIA**

**SPORTING CLUB**

**MARINA DI CHIOGGIA – CANALETTA MORIN**

**TOURIST BERTH**

**2007**

**45°13'.5 N - 012°17'.0 E**

Use of the quays, depths and draughts – At the Scalo Saline are as follows:

Names of Moles and Quays	Main use	Size (m)	Max. vessel length (m)	Max. vessel width (m)	Depths (m)	draughts permitted (m)
Banchina Levante "Marittima" M/1-M/2-M/3	Commerce	200	90	18	4.3	4
Banchina Ponente "Marittima" M/5-M/6	Commerce	185	185	27	5	4.7
Banchina "Marittima" M/4	Commerce	110	95	18	5	4.7
Scassa Ro/Ro	Commerce	15	185	27	5.6	5.3
Canale Lombardo Esterno C/1-C/2	Commerce	185	185	25	5.6	5.3
C/3-C/4-C/5-C/6-C/7	Commerce	465	185	25	5.6	5.3

**Quay services** – About 300 berths in total for vessels up to 24 m long, water supply, electrical supply, quay lighting, fire extinguisher, slipway, crane.

**Port services** – Boat storage, mooring, security, repair workshop, skin diver, weather service, refuse disposal, public toilets/showers, public telephone, sailing club.

**Accessory services** – Ice sales, car parking, chandlery, shops of every kind, food stores, bar, restaurant, bank/exchange, first aid at Sottomarina.

The **Canale di S. Domenica** is reserved for fishing boats and has depths of 3 m.

The **Bacino della Stazione Marittima (Porto Commerciale)**, located to the W of the Diga delle Saline, is provided with port equipment and is dredged to about 5 m. It is reserved for ships carrying out commercial operations. The quays, suitable for berthing, are: to the E the **Banchina Nicolò De Conti**, to the S the **Banchina Andrea Renier** and to the W the **Banchina Mario Schiavuta**.

To reach the basin vessels must pass through the already mentioned access channel, dredged to 7 m.

**Canale Lombardo Esterno** – Flanks the W part of the island and is dredged to about 7 m up to the **Banchina Todaro** inclusive (6.5-7.5 m). Starting from the N are the **Banchina Luigi Rizzo** and the **Banchina Salvatore Todaro** for an overall length of 650 m one after the other up to the customs barrier. Mooring is permitted alongside the quays in a single file (for a number of vessels between 4 and 7), for vessels and boats so as not to obstruct the free and safe passage in the channel.

The entrance to the Canale Lombardo Esterno is reached through the above-mentioned access channel dredged to 7 m.

**Terminal Fluviomarittimo Val da Rio** (see plan) – Is a new port area; it is located in the N part of the island that lies 2.4 m to the SW of the entrance to the port of Chioggia. It is reached by means of the Canale Lombardo Esterno, marked by dolphins. The area currently in use is developed from the quays of Punta Ostregghi and part of the N shore of the island.

**Depths** – At the entrance to the port they are 8 m with minima of 4.5 m; the bottom is muddy with a good hold.

**CHIOGGIA**

**VAL DA RIO**

**TERMINAL FLUVIOMARITTIMO**

**2007**

**45°13'9 N - 012°18'9 E**

Use of the quays, depths and draughts – Are as follows:

Name	Main use	Size (m)	Max. vessel length (m)	Max. vessel width (m)	Depths (m)	draughts permitted (m)
V/1	Commerce	-	160	25	5.3	5
V/2-V/5	Commerce	-	160	25	6.3	6
V/3-V/4	Commerce	-	169	25	6.8	6.5
V/6	Commerce	145	140	25	6.8	6.5
V/7-V/8-V/9-V/10	Commerce	440	185	27	6.8	6.5
V/11	Commerce	135	120	25	6.8	6.5
V/12	Commerce	130	130	25	6.8	6.5
V/13	Commerce	230	160	25	6.5	6.2

**Quay services** – Water supply, quay lighting, fire extinguisher, 8 mobile cranes (max 65 t).

**Port services** – Tugs of 1,800 HP, mooring, repair workshop, skin diver, FAX, VHF, weather service, refuse disposal, collection of used oil/spent batteries, public toilets/showers.

**Accessory services** – Ship's Husband/Maritime Agency, gas/LPG cylinders, boat/dingy hire, car/cycle hire, car parking, bar, emergency medical service, hospital/first aid.

**Communications** – Taxis, airport in Venice.

**Authorities** – Compamare, Customs, Carabinieri, State Police, Tax Police, Fire Brigade.

CHAPTER 3

LAGOON OF VENICE

(CHART Nos. 924 – 38)

**INFORMATION OF A GENERAL NATURE** – To the N of Chioggia there are numerous notable points of reference. The following can be recognised: the **bell towers of Pellestrina** and S. Pietro in Volta, the **Rocchetta lighthouse**, the **Torre Piloti**, the **village and bell tower of Malamocco**, the large **buildings of the Lido** and the numerous **spires of Venice**.

The Lagoon of Venice (chart no. 222) consists of the wide lagoon basin that extends from the mouth of the Fiume Brenta to the mouth of the Fiume Sile. It is separated from the sea by a tongue of land, reinforced artificially for lengthy sections by strong wide walls (**Murazzi**) in which three mouths or ports open protected by dykes. Two of these, **Malamocco** and **Porto di Lido**, are accessible by ships of high tonnage. The port of Malamocco is accessible by large tonnage ships with deep draughts up to the industrial area of Marghera. The third, that is the port of Chioggia, has been described in Chapter 2. Small boats can also enter the Lagoon by means of **Brondolo**, **Piave Vecchia** and **Cortellazzo**.

**Lagoon navigation** – Is regulated by the Inspectorate of the Port of Venice (Veneto Region) and the Harbourmasters of Chioggia and Venice.

**“Adriatic Traffic” obligatory naval reporting scheme** – See page 17.

**Traffic separation schemes** – See page 17.

**Regulations** – 1) (Ordinance no. 248/63) – In the waters under the jurisdiction of the Maritime Department of Venice it is absolutely **prohibited** for all vessels and boats in general to discharge oily residues, washing water or bilge water and mixtures containing hydrocarbons within the ports or along the coastlines (see also Ordinance no. 18/78).

2) (Ordinance no. 676/72) – In the area of the high seas under National jurisdiction and starting from the territorial limit all tankers with a gross weight equal to or greater than 150 t, and all ships whether tankers or not, with a gross weight equal to or greater than 20,000 t, the construction contracts of which were concluded after 28 February 1971, are forbidden to discharge hydrocarbons or mixed hydrocarbons.

**ISLAND OF PELLESTRINA** – Is long, narrow, low and sandy and extends from Chioggia to Malamocco and constitutes a natural bank of the lagoon, the high construction of the **Murazzi** defends the island from the sea.

**Conspicuous points** – The **bell tower of Pellestrina** is notable, being square, with a reddish roof and standing next to the building of the church; that of S. Antonio is square, slender and sharp.

Between the two churches can be seen the **Chiesa dei SS. Vito e Modesto**, with two characteristic bell towers. Just N of this church a large cylindrical tank on a tower can be seen. The houses, almost all low and of a reddish colour, continue with short gaps up to **S. Antonio**; an uninhabited section follows up to the small bell tower of Porto Secco, not very high.

About 300 m to the N of the Chiesa di S. Pietro in Volta a **large cylindrical tank**



on a donjon can be seen. The Island of Pellestrina does not offer mooring facilities on its coastal side, as the coastline is consista of Murazzi.

**Internal navigable channel** – Connects Chioggia to Venice. About 50 – 70 m wide and 3 m deep, it runs along the centre of Pellestrina and that of S. Pietro in Volta and is bounded all along its route by dolphins that are clearly visible (also at night). A quay extends at each of the above centres of habitation used by fishermen to moor their boats. The NW wind raises swell.

**Services** – The entire quayed shore is also used by leisure craft; a fuel station is available in Pellestrina at the quay; during the summer season it is also open on Sundays.

**Breakwaters** – To protect the coastline of Pellestrina there are a number of transverse **groynes** and a **breakwater that is awash**, parallel to the shore, which reduce the depth to about 1.5 m; therefore all vessels are **forbidden** from navigating within 500 m of the coast.

In the stretch of sea off the coastline of the Venice Lido, level with the town of Alberoni, longitudinal **defence works** that are **awash** are positioned along the coastline, about 3,220 m long with 4 groynes at right angles to the line of the coast, which join the shore to the aforementioned barrier. A series of yellow marker buoys is positioned on the outside spaced 100 m apart. It is **prohibited** to pass or anchor near the groynes or the barrier.

**Mussel farms** – Numerous farms are found about 1.5 M to sea from Pellestrina; each one is marked in the centre by a **cylindrical light buoy** with X topmark, painted entirely yellow.

The sea areas around the plants centred on the buoys with radii of 1,000 m are prohibited to navigation, anchoring and fishing. The prohibited areas are marked on the nautical charts.

**VENICE** (Chart no. 222) – Stands upon a close-knit archipelago of 112 islets, joined by 400 bridges and interwoven by 176 canals. A very long road and rail bridge (3,601 m) joins the city to the land.

The **Port of Venice** includes the following port areas: Porto di Malamocco, Porto Marghera, Porto Commerciale and Porto di Lido. Two large navigation channels connect Porto Marghera with Malamocco (**Canale Malamocco – Marghera**) and with the Porto Commerciale (**Canale Vittorio Emanuele**) respectively. Other minor channels connect with one another and the various port areas.

**Access to the port** – There are **two entrances**: by means of the Porto di Malamocco and by means of the Porto di Lido; the first constitutes the normal access, the second is intended for vessels heading for the dry docks and the other moorings of the Porto Commerciale and the Porto di Lido, or coming from them, as well as, just for the needs of the port traffic, the passage of vessels heading to or from the port area of Marghera. Passage in the entrances takes place strictly to starboard.

Large ships can reach the Port of Venice by the Lido to the N and Malamocco to the S. The draughts allowed depend upon the lengths of the ships and are connected to the width of the turning basins and by the depths present, as well as the weather and tidal conditions.

**Conspicuous points** – The **Island of Malamocco** (or Lido) is long, low and narrow, and covers the view of Venice from the sea. However in clear weather the massive tower of the **Campanile di S. Marco**, terminating in a greenish square pyramid with white corners surmounted with a golden angel, is easy to see (figure 13). This bell tower dominates the entire city and is much higher than all the others in the lagoon, which are fairly similar. The **bell tower of Malamocco** is clearly visible from a distance, of a red colour and a square shape with a high pyramid shaped dome. In conditions of good visibility the **Colli Euganei** hills can be made out, to the WSW of the city.

Inland a **very tall chimney** stands out with red and white faces near which, above all by night, the flames of gas discharges of Marghera are notable.

Approaching the coast the following can be recognised from S to N: the already mentioned bell towers of Chioggia and Pellestrina, the bell tower of Malamocco; the white building of the Hotel des Bains, the reddish building with dome of the Albergo Excelsior and the Venice Lido Hospital building; the tower with black and white layers of the lighthouse of Piave Vecchia.

Closer to the coast the lights on the heads of the dykes can be seen.

**Figure 13** – Venice, Campanile di S. Marco (2007).

**Warnings** – Pay maximum attention to the **oceanographic platform** studying the dynamics of the great masses, anchored at 45°18'8 N - 012°30'9 E. Anchoring and fishing are **prohibited** within 200 m of the platform, as well as mooring to its structures.

A **buoy field** is positioned at 45°15'.05 N - 012°45'.66 E to mark an area of scientific research, made up of 3 light buoys with yellow lamps equipped with X topmarks, positioned at the corners of a triangle with 60 m sides.

**Anchorage** – There are no safe external anchorages, especially during the SE wind. When this wind blows strongly vessels must weigh anchor, put to sea and sometimes take shelter under the coast of Istria. The best anchorage is located between the N dyke of the Porto di Lido and Piave Vecchia, in about 15 m, on a bottom with a good hold. This anchorage can be held during winds from the N. Take care to anchor N of the access leading line to the Porto di Lido in order not to impede shipping and to avoid the risk of collision in fog. Oil tankers heading for the Canale di S. Leonardo (see below) while waiting to enter generally anchor to the SE of the entrance to Malamocco at the point located about 3.8 M from the head of the N dyke, bearing 300° from it, in depths of about 19 m on a muddy bottom. The anchorage is exposed to the NE wind.

**Anchorage in the roadstead** – Again in order to increase the safety of the navigation of vessels moving in the roadstead of Venice, with Ordinance no. 74/91 and subsequent alterations the Venice Compamare instituted the following anchorage areas, differentiating between cargo ships and oil tankers, situated outside the landing and departure routes of vessels from the ports of Malamocco and Lido. The limits of the areas are shown on chart no. 222.

**Malamocco anchorages:**

**M.S.C. area** (Malamocco Small Cargo), for cargo ships of less than 5,000 t gross weight.

**M.B.C. area** (Malamocco Big Cargo), for cargo ships of more than 5,000 t gross weight.

These ships can anchor in the stretch of water called M.L.A. & M.B.C., subject to the approval of the Venice Compamare, if not occupied by ships intent on lightening operations;

**M.S.T. area** (Malamocco Small Tanker), for gas tankers and ships transporting dangerous liquids in bulk of less than 20,000 t gross weight.

**M.B.T. area** (Malamocco Big Tanker), for gas tankers and ships transporting dangerous liquids in bulk of more than 20,000 t gross weight.

**Lido anchorages:**

**L.S.C. area** (Lido Small Cargo), for cargo ships of less than 5,000 t gross weight.

**L.B.C. area** (Lido Big Cargo), for cargo ships of more than 5,000 t gross weight.

**Anchorage for lightening:**

**M.L.A. & M.B.C. area** (Malamocco Lightening Area and Malamocco Big Cargo) is intended mainly for oil tankers interested in lightening operations of mineral oils and can be used for cargo ships of more than 5,000 t to anchor, subject to the consent of the Venice Compamare, unless already occupied by oil tankers lightening.

Therefore cargo ships and oil tankers take note that it is obligatory to anchor in the stretches of water assigned to them.

**Wrecks** – 1) It is **prohibited** to anchor or fish by trawling or underwater means in the area off Malamocco shown on the charts centred at 45°17'.25 N - 012°35'.05 E of 1 M radius, due to the presence on the bottom of a wreck with explosive material, covered by 14.5 m of water.

2) A medium calibre chain lies on the bottom at 45°18'.1 N - 012°26'.5 E.

3) The wreck of the steamship "Vrmaç" lies at 45°21'48" N - 012°26'42" E. The hull is leaning at about 45° with the bow facing land and the superstructure covered by 8 m of water, while the end of the mast is 1.4 m below the surface.

4) The wreck of a torpedo boat lies off the entrance of the Porto di Lido at 45°23'.45 N - 012°34'.66 E (WGS 84) in depths of 18 m.

5) An admiralty type anchor lies at 45°19'.316 N - 012°25'.194 E, about 3.5 M to the E of the Bocca di Malamocco.

**Submarine pipelines** – A pipeline starts from the point on the coast at 45°21'28" N - 012°20'30" E heading out to sea bearing 116°, up to the point at 45°21'03" N - 012°23'09" E; it terminates with a Y diffuser protected by anti-net boulders, dangerous for fishing and anchoring. It is marked by a light buoy with X topmark, all in yellow (see the List of Lights).

Anchoring and fishing are prohibited in the surrounding area.

**Submarine cables** – The strip of sea 200 m wide astride a line joining the head of the N dyke of Malamocco and the outer light beacon located at about 45°19'.44 N - 012°23'.07 E is prohibited for mooring and fishing due to the presence of an electrical cable.

**Lighthouses and lights** – The Rocchetta lighthouse, located SSW of the Forte Alberoni, consists of a cylindrical tower painted white with a black stripe, on a reddish house, beside the pilots' tower, in the shape of a mushroom (figure 14).

**Figure 14** – Malamocco, Rocchetta lighthouse and pilots' tower (2007).

The light on the head of the N dyke is arranged on the green tower beacon on a building with the lower part painted white and the upper part green (figure 15); the one on the head of the S dyke is on a cylindrical red tower.

**Figure 15** – Malamocco, light on the N dyke (2007).

The light on the head of the Palada delle Ceppe dyke consists of a metal column with pedestal all painted red, on a concrete plinth.

A three-colour P.E.L. (Port Entry Light) is installed on the gallery of the Pilots' Tower that marks the safe route for entering the navigable channel outside the dykes of the Porto di Malamocco.

**Light beacons and buoys** – An elastic light landing beacon with red and white stripes (safe waters) is arranged about 3,400 m to the ESE of the light on the head of the N dyke, and is equipped with a radar reflector; the channel is marked by **3 light beacons** the positions of which are (with respect to the light on the N dyke):

- red beacon: at 1.2 M bearing 115°;
- red beacon, port side, with topmark: at 0.63 M bearing 120°;
- green beacon, starboard side, with topmark: at 0.6 M bearing 111°.

Two other light beacons bound the channel inside the dykes.

**Works in progress** – Construction works are in progress in the Bocca di Malamocco to control the tidal flows in the lagoon (Mose). These works are expected to continue until the end of 2012 and affect the following areas:

- e) Molo Nord: construction works to reinforce the dyke and shoring up operations;
- f) navigation channel;
- g) area between the curved deposit and the S dyke.

Navigation, stopping, anchoring, fishing and any maritime activities are **prohibited** in the stretch of water off the area of the works until 31/12/2012. The area is bounded at sea by a light buoy equipped with topmark.

In order to guarantee the safety of all the vessels passing through the mouth of the port of Malamocco – the area affected by the works – the navigation channel shown on the chart has been identified by red and green marker buoys.

Works are also in progress to complete the outer dyke and the area bounded to the N by the Molo della Bocca di Malamocco and to the S by 2 yellow light buoys where navigation, stopping, fishing and any maritime activities are **prohibited**. The area affected by the works is suitable marked by yellow light buoys and beacons. All vessels navigating in the vicinity must keep at least 50 m from the area affected by the works and navigate at the minimum control speed.

**Entry instructions** – The discharge flames of a Power Station can be identified at a distance of about 30 M in good visibility for landing by night: with a clear atmosphere and a covered sky the faint reflection of the lights of the city of Venice can also be seen. Approaching closer the Piave Vecchia lighthouse, the air beacon of Venice airport and the lighthouse on the N head of the entrance to the Porto di Lido can be recognised in succession.

When landing in poor visibility or in fog, the trace of the sandy shore and the coastline of the Cavallino with the Piave Vecchia lighthouse appear on the radar screen; approaching closer, the clear configuration of the Venetian estuary with the three mouths of Lido, Malamocco and Chioggia appear on the screen. Landing by radar is helped by the radar responders (see the List of Lights) installed on the heads of the N dykes of the entrance to the Porto di Lido and the Porto di Malamocco.

**Rules for landing** – 1) All vessels landing via Lido or via Malamocco, both on entry and heading for the anchorage, are absolutely obliged to contact the Pilots' Station by VHF or RTF at least 2 hours before arrival.

Any delays must also be announced to the Pilots' Station by RTF by means of VENEZIA PT RADIO (2182/2023 – for 1680) or directly by VHF, at least 2 hours before the previous notice.

2) Vessels intending to wait in the roadstead must, as soon as they are anchored, notify the Pilots' Station as to the exact position of the anchorage in terms of bearing and distance from the head of the N dyke (Racon) of the entrance to the Porto di Lido.

3) In the case of fog all approaching vessels without radar, or with radar out of operation, must ask by VHF for radar assistance in approaching the anchorage from the Pilots' Station.

4) Vessels heading at night for the entrance to Malamocco must check their course using the Piave Vecchia and Rocchetta lighthouses. With mist or fog it is advisable to recognise the coast by means of radar, also making use of the foghorn located on the Malamocco dyke.

5) For vessels heading for the entrance to the Porto di Lido, the landing is easier by night than by day because of the shape of the coast which is low and uniform. With mist try to see the Piave Vecchia lighthouse. The air and sea lighthouse of Murano is easy to see.

**Traffic separation schemes** – In order to increase the safety of navigation of vessels moving in the Venice road, the Harbourmaster of Venice has established with Ordinance no. 71/93 that vessels entering or leaving the port of Venice must use, within the territorial waters, the traffic separation schemes shown on Chart no. 222, observing the regulations of Rule 10 of the “regulations for the prevention of collisions at sea” (List of Lights 3019).

**Pilotage** – Is obligatory for vessels of more than 500 t gross weight. The service is continuous. There are two pilots' look-out stations: one at S. Nicolò di Lido, the other at Alberoni (Malamocco), about 70 m to the N of the Rocchetta lighthouse. The Alberoni station is equipped with radar to assist the vessels.

Ships up to 1,500 t gross weight with local Masters on board can enter and leave without a pilot, only if equipped with VHF, subject to authorisation from the Pilots' Station and while remaining in constant VHF contact with them .

The Pilots' Corporation of the Veneto Estuary has access to 6 pilot boats equipped with radar and VHF; they provide service in any weather. The pilot request signals must be announced at least 2 hours in advance to the Pilots' Station by radio, by VHF channel 13 or by Venezia PT Radio, with radio telephone, to find out whether to head for the Porto di Lido or the Porto di Malamocco and for the designation of the eventual anchorage point. In the absence of radio contact, vessels must head exclusively for the Lido roadstead. Vessels heading for the Porto di Lido embark the pilot near the lit landing beacon situated about 2.5 M to the ESE of the head of the S Lido dyke; those heading for the Porto di Malamocco embark the pilot upon request near the above-mentioned Lido landing beacon, or otherwise near the lit landing beacon about 2 M to the ESE of the head of the S Malamocco dyke.

**Tugs** – The service is ensured by 15 tugs. The guard tug keeps a constant look-out (24 h) on VHF, channels 10, 13 and 14.

Vessels that want to enter by night must give notice so that the mooring can be provided for, as there are no single hold anchorages within the port itself.

**Particular regulations** (Ordinance no. 304/64 of the Venice Compamare) – In view of the need to control the conduct of navigation near the Port of Venice and in particular the entry and exit of ships and boats to and from the ports of Lido and Malamocco, the following is laid down:

e) for a 2 M radius from the head of the N dyke of Porto di Lido and from the head of the N dyke of

Malamocco, fishing boats, rowing, sailing and motor boats and tugs on their own or towing barges of small craft must give way to vessels even if towed entering or leaving the port;

- f) if it is clear that the aforementioned fishing boats, boats and tugs are not giving way, ships must give a warning with a succession of short whistles (not less than four);
- g) ships and boats about to enter or leave the ports of Lido and Malamocco must keep strictly to starboard of the centre-line of these entrances, navigate with care and at the minimum speed needed to maintain control; they must also control their navigation such as to avoid, as far as possible, contemporary passage through the entrances in question; if for any reason the contemporary passage cannot be avoided priority is given to vessels leaving.

**Entry instructions** – The access channel is flanked by banks of sand. By day enter by passing between the beacons bounding this channel (see below) and following the leading line (287°20') of “**Rocchetta lighthouse** (see below) – **Torre Spignon**” until abeam of the Western bastions of the Forte S. Pietro.

With very strong NE winds and strong incoming tidal currents, the entry is dangerous. In this case, manoeuvre to the N of the parallel of the light on the N dyke and steer for the channel with the bow heading about 250°, maintaining minimum steering speed and with judicious use of the propulsion. It is dangerous to stop the engine, and even worse to go into reverse, even if the bow is facing the breakwater. As soon as the ship is in the shelter of the dyke, the helm takes control.

**PORT OF MALAMOCCO** (Chart no. 223) (figure 16) – Consists of a channel between the islands of Pellestrina and Malamocco, protected by two outer dykes (N and S). The port is found where the S. Leonards, S. Pietro, Spignon, Fisolo and Rocchetta channels meet: the S. Pietro and Spignon channels lead S to Chioggia; the Fisolo and Rocchetta channels lead N to Venice; the Canale S. Leonards heads to the port of the same name and to the Malamocco-Marghera grand navigation channel (see below).

**Figure 16** – Malamocco, port (2007).

**Port rules** – See page 114.

**Mooring buoys** – Along the centre-line, at the start of the Canale Fisolo, 3 mooring buoys are arranged, about 800 m bearing 306°, 900 m bearing 313° and 1,00 m bearing 320° from the Rocchetta lighthouse respectively.

**Prohibitions** – It is prohibited to anchor anywhere inside the port of Malamocco.

The **Malamocco access channel** and the branches for the ports of S. Leonardo and Marghera are marked, port and starboard, by pairs of red and green lights positioned on beacons and dolphins, about 1,000 m from one another, each being equipped with a fog signal.

For other notices on the markers see the List of Lights.

**Warnings** – In general dolphins are arranged along the sides of the internal channels of the lagoon to mark the access. It may be that the dolphins are not in place, or that the depths of the channels are shallower due to silting up, so contact the appropriate Maritime Authority.

**Currents** – The current between the dykes sometimes reaches speeds of over 5 knots. To the W of the Palada delle Ceppe dyke there is an area with depths of 50 m due to the effusive action of the whirlpools generated by the current.

**Tides** – The establishment of the port of Malamocco is 10 hours and 30 minutes. The time of the high tide and the draught of the ship must be taken into account when entering port, especially when having to proceed to Venice.

**MALAMOCCO-MARGHERA NAVIGATION CHANNEL** (Chart nos. 222, 223 and 225) – Starts at the internal limit of the port of Malamocco and extends for about 2.7 M to the WNW, where it branches into two directions: the first for the nearby dock of Porto S. Leonardo, the other (about 6 M) to the N up to Marghera. The first section, called **Canale S. Leonardo**, has depths of 14.5 m below the average sea level; the second section, called **Canale Litoraneo**, has depths of 12.5 m below the average sea level, while the final section of about 1 M has depths of 10 m.

The **dock of Porto S. Leonardo** also has depths of 14.5 m. There is a long pier for oil tankers to berth.

The Canale Malamocco-Marghera is provided with a lighting system (sodium lights on both sides, spaced at 80 m intervals) switched on in conditions of poor visibility in addition to the maritime markers already in place.

**Warnings** – 1) About 48 m to the E of the Rocchetta lighthouse there is a vertical **steel post** emerging about 3 m without any markers.

2) When passing through the **Canale S. Leonardo** pay attention to the transverse current coming from Canale Spignon.

3) An aerial conduit (**oil pipeline**), about 50 m above the water, crosses the Canale Litoraneo just S of turning basin no. 4 that faces the Canale Industriale Sud.

h) In the Canale Litoraneo Malamocco-Marghera there is an aerial electrical line carrying 132,000 V with an average height of 60 m above average sea level; in the Canale Industriale Nord and in the Canale Industriale Sud there are 2 more Edison aerial electrical lines, carrying 130,000 V and 60,000 V and 50 m and 81 m above average sea level respectively.

**MALAMOCCO-BASIN OF S. MARCO NAVIGATION CHANNEL** (Chart no. 222) – Passage through this channel is almost abandoned, despite the relatively deep depths;



its route is marked by dolphins on both sides. The various sections take different names, according to the locations that they are passing. The depths in the channel are liable to reduce due to silting up.

draught permitting, large ships can pass through the channel at half tide, so that if for any reason (breakdown, false manoeuvre, need to avoid a collision, etc) they run aground, they can set themselves free as the waters rise. It is convenient and obligatory to navigate in the channel at reduced speed; pay great attention to boats and vessels passing through and always keep to starboard. Pay attention in the curves: approach initially from the outside of the curve and avoid the points around which there are always lower depths.

The **Canale Rocchetta** constitutes the first section of the grand navigation channel and is the hardest to pass through in the presence of a strong current. With an incoming current bear in mind that the vessel turning to starboard suffers, because of the current, a strong drift to port; if this drift is significant increase speed in order to free the ship from the transverse current as soon as possible. Leaving from the Canale Rocchetta is not difficult if the current is forward; greater precautions must be taken however if the current is rearward. In the latter case it is best to reach the Rocchetta turn with very little headway, so as to be able at the opportune moment to force the turn with an increase in speed, acting on the helm and thus reducing the drift.

The **Canale di Malamocco** is the second section of the grand navigation channel. After Malamocco the channel splits in two: the port branch leads to Poveglia. When outgoing, the current leaving the Canale di Poveglia can make the navigation of ships heading for Venice difficult.

The **Canale di S. Spirito**, to starboard of the Island of Poveglia, constitutes the third section of the grand navigation channel. Near the divide it is wise to pay attention to the variations in the depths. Also remember that the S. Spirito turn is always more difficult for ships of a certain size because of the continuous silting up.

The **Canale Orfano** is the fourth section of the grand navigation channel. It starts after the asylum of S. Clemente; at its outlet into the Canale di S. Marco it widens considerably. The exit manoeuvre requires attention. With an outgoing current make a very tight turn and if necessary drop anchor; with an incoming current the turn to be made will never be too wide. Vessels heading to leave the port of Venice via that of Malamocco must enter the Canale Orfano with an incoming current and make a wide turn; with an outgoing current make a tight turn.

**Group of posts for checking the compasses** – Is found in the Canale Rezzo, to the W of S. Clemente, and are for small boats. The azimuths are:

- e) San Giorgio 030°04';
- f) Mancina 038°41';
- g) San Clemente 078°40';
- h) Torre Excelsior 105°17';
- i) Malamocco (bell tower) 169°59';
- j) Totte Piloti (old semaphore mast) 182°18'.

**Anchorage in the roadstead** – To the E of the entrance to the Porto di Lido there are two anchorages, called “big” and “small”, intended for cargo ships, according to their gross weight (**L.S.C. area**, **L.B.C. area**, see page 102).

**Regatta areas** – To the NE and to the SW of the entrance to the Porto di Lido two permanent areas are established for regattas, marked on the chart and called Area A and Area B respectively. Area A has a diameter of 1 M and is intended for floats, Area B has a diameter of 2 M and is intended for deep sea vessels.

All vessels passing through the two areas must proceed with care and if there is a regatta (when the boat of the judge is flying an orange flag) must not interfere with the course, giving way to competing boats.

**Works in progress** – Construction works to control the tidal flows (Mose) re in progress in the Bocca di Lido.

The site areas are located on the E-W banks of the Canale S. Nicolò and on the E-W banks of the Treporti navigable channel. The navigable areas of the channels are identified by **red and green buoys** and are only those that refer to the positioning of posts to illuminate the turn of S. Nicolò (near the airport), to the Canale S. Nicolò, to the Canale Treporti and to the Canale Retro Isola Artificiale (being laid out). They are positioned from time to time following the successive phases of the works.

Vessels passing near the above stretches of water must navigate exclusively within the Canale S. Nicolò as identified by the buoys, keeping a distance of at least 30 m from the vessels involved in the works at the turn of S. Nicolò and navigating at the minimum speed necessary to not cause wave motion. For any information contact the operations room of the Harbourmaster and the Pilots' Tower on VHF channels 13-16. At the fork of the channels of S. Nicolò and Treporti the construction of an artificial island is in its final phase. The stretch of water off this area is bounded by a pair of **yellow light buoys**.

Navigation, berthing and stopping are **prohibited** in the area affected by the works until they are completed, which is expected to be in 2012.

**Dredged area** – In front of the entrance to the Porto di Lido, on the entry leading line, there is an area (marked on the chart) that is dredged to 11 m. However because of the considerable area it is subject to rapid silting up, and it is possible to find regions where the depths are considerably less than those indicated.

The depths encountered in the access channel to the Porto di Lido are 10.5 m throughout its length. Vessels drawing 9.6 m are permitted to enter the channel.

**Entry instructions** – Vessels with large draughts manoeuvre onto the axis of the channel before reaching the level of the outer light beacon.

In clear weather the **leading line** (300°40') of the two lights is very easy to see.

With high waves, especially with NE or SE winds, the larger ships must pay great attention on entering the dykes since because of the current and the shallow depths they can easily lose control.

However the wind is not dangerous even if violent, provided that the sea is not agitated.

With adverse weather conditions the entry is therefore dangerous for larger ships and for those with reduced speed.

**Rules for landing** – See the same paragraph on page 104.

**Pilotage and particular regulations** – See the same paragraphs on page 105.

**PORTO DI LIDO** (Chart no. 226) (figure 17) – Passage through the Porto di Lido is possible under any sea conditions, even for large ships.

**Internal anchorage** – With the NE wind, small ships can anchor in the entrance to the Canale di Treporti; they are not sheltered from the SE wind in this area.

**Figure 17** – Porto di Lido, entrance (2007).

**Port rules** – See page 114.

**Mooring buoys** – See explanatory plan.

**Regulations regarding mooring** – 1) Mooring is permitted:

- c) at the dolphins near the S shore of S. Nicolò di Lido, immediately to the SSW of the masonry pier of the Magistrato alle Acque;
  - d) at anchor in the stretch of water off La Certosa and the Forte S. Andrea, so that the vessel is to the W of the 10 m depth contour, in order not to interfere with navigation in the Canale di S. Nicolò.
- 2) Ships with a gross weight of 500 t or more **must** use the mooring services.

**Prohibitions** – Ships and boats are generally forbidden to moor and fish in the 100 m wide areas of sea astride the line joining the landing points of the submarine cables and the water and gas pipelines.

The landing points are indicated in the appropriate notices positioned on posts on the shore, and by posts with spherical topmarks.

**Markers** – 3 **light beacons** are anchored in the section of the outer channel in the following points:

- elastic light beacon, painted in red and white stripes and equipped with radar reflector, 2.5 M bearing 117° from the light on the head of the S dyke;
- elastic light beacon, painted red and equipped with radar reflector, 1.4 M bearing 112° from the light on the head of the S dyke;
- elastic light beacon, painted green and equipped with radar reflector, 1.3 M bearing 107°.5 from the light on the head of the S dyke.

Two leading line lights (300°40') mark the axis of the navigable channel and are arranged: one (forward) about 495 m bearing 018° from the old semaphore tower and the other (rearward) of the Island of Murano. They are as follows: the front one of an iron framework on a reinforced concrete platform, covered in sheeting painted in black and white stripes (figure 18); the rear one of a cylindrical tower in concrete the upper part of which is painted with black and white stripes (figure 19).

To make it easy to identify the leading line by day a signal is arranged on the back of the high balcony of the rear **light**, consisting of a polygon terminating at the top with a spire and inside which 4 black disks have been located in a dial. The top of the spire is about 1 m above the top of the light's dome.

## PORT OF VENICE

## BUOYS AND MOORINGS

2007

B Buoy for Large Ships  
 BS Supplementary buoys  
 Ma Buoys for vessels up to 4,500 t

POSITIONS OF MOORING BUOYS			
Name	Point of reference	Bearing	Distance
B2	Campanile S. Marco	148°	290 m
B3		113°	420 m
B4		106°	660 m
BS1		114°.8	320 m
BS2		107°	620 m
B5	Camp. S. Pietro Castello	204°	735 m
B6		191°	840 m
B7		079°	440 m
B8		055°	630 m
Ma1		035°	1260 m
Ma2		038°	1075 m
PP1		003°	630 m
B13	Camp. S. Nicolò di Lido	331°	535 m
B14		334°	435 m

The moorings are provided buoy to buoy and not single attachment.

The diagram just shows the positions of the mooring buoys, regardless of their structural characteristics.