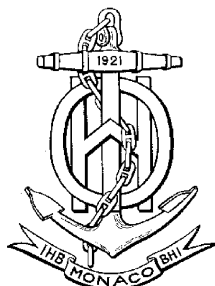


# INTERNATIONAL HYDROGRAPHIC ORGANIZATION



## IHO TRANSFER STANDARD For DIGITAL HYDROGRAPHIC DATA

**Supplementary Information for the Encoding of S-57 Edition 3.1  
ENC Data**

**(S-57 Supplement No. 2)**

**June 2009**

S-57 Supplement 2 incorporates the contents of S-57 Supplement 1.  
Supplement 2 therefore supersedes Supplement 1.

Supplement 2 shall be considered as an integral component part of S-57 3.1.

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## 1. Introduction to S-57 Edition 3.1 Supplement No. 2

Supplement 2 promulgates several minor additions and changes to S-57 Edition 3.1.

Supplement 2 incorporates the contents of Supplement 1. Supplement 2 therefore supersedes Supplement 1.

This supplementary addition to S-57 comprises:

- from Supplement 1 - Three new feature object classes;
- from Supplement 1 - Three new attributes;
- from Supplement 1 - Two new attribute values for Category of Restricted Area;
- new in Supplement 2 - Addition of temporal attributes to navigation aid equipment object classes - FOGSIG, RADSTA, RETRFL, RTPBCN and TOPMAR;
- new in Supplement 2 - Changes to the definitions for the enumerates of the attribute CATZOC.

This document is structured so that its contents may be easily used in conjunction with the existing S-57 Edition 3.1. It contains pages describing the various changes to S-57 Edition 3.1 as well as numbered sections corresponding to the relevant sections of the ENC Product Specification (Edition 2.0) and the Use of the Object Catalogue for ENCs (Edition 2.1). For ease of use, red text is used in the document to highlight the new changes introduced since S-57 Edition 3.1 Supplement 1.

Supplement 2 shall be considered as an integral component part of S-57 3.1.

Enhancements implemented in the superseded Supplement 1 remain optional for ENC producers.

New changes introduced in Supplement 2 define changes to the standard with regards to the encoding of temporal attributes for some navigation aid equipment objects and the definitions of CATZOC values A1 and A2.

The need for these enhancements is explained in IHO Circular Letters 94 of 2005 and 32 of 2009.

## 2. S-57 (EDITION 3.1) Appendix A Chapter 1 (IHO Object Catalogue)

### 2.1 Correction to Object Class – Fog Signal

The attributes PEREND and PERSTA have been added to object class fog signal.

#### GEO OBJECT CLASSES

Object Class: <b>Fog Signal</b>
---------------------------------

Acronym: **FOGSIG**

Code: **58**

Set Attribute\_A: CATFOG; DATEND; DATSTA; NOBJNM; OBJNAM; **PEREND; PERSTA;**  
SIGFRQ; SIGGEN; SIGGRP; SIGPER; SIGSEQ; STATUS; VALMXR;

Set Attribute\_B: INFORM; NINFOM; NTXTDS; SCAMAX; SCAMIN; TXTDSC;

Set Attribute\_C: RECDAT; RECIND; SORDAT; SORIND;

#### Definition:

A warning signal transmitted by a vessel, or aid to navigation, during periods of low visibility. Also, the device producing such a signal. (IHO Dictionary, S-32, 5th Edition, 1890)

#### References:

INT 1: IR 1, 10-16, 20-22;

M-4: 452-452.8;

#### Remarks:

Distinction: signal station, warning;

## 2.2 Correction to Object Class – Radar Station

The attributes PEREND and PERSTA have been added to object class Radar Station.

### GEO OBJECT CLASSES

Object Class: <b>Radar Station</b>
------------------------------------

Acronym: **RADSTA**

Code: **102**

Set Attribute\_A: CATRAS; COMCHA; DATEND; DATSTA; HEIGHT; NOBJNM; OBJNAM;  
**PEREND; PERSTA**; STATUS; VALMXR; VERACC; VERDAT;

Set Attribute\_B: INFORM; NINFOM; NTXTDS; SCAMAX; SCAMIN; TXTDSC;

Set Attribute\_C: RECDAT; RECIND; SORDAT; SORIND;

#### Definition:

A station with a transmitter emitting pulses of ultra-high frequency radio waves which are reflected by solid objects and are detected upon their return to the sending station. (International Maritime Dictionary, 2nd Ed.)

#### References:

INT 1: IM 30; IS 1;

M-4: 485.1; 487.3;

#### Remarks:

The object [radar station] is used to encode the technical equipment itself independent of the building or structure where it is installed. This building or structure, e.g. mast, tower, building, radar dome is a different object.

Distinction: radar line; radar range; radar transponder beacon;

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/908035033013006113>