

SECOND INTERNATIONAL WORKSHOP FOR PORT METEOROLOGICAL OFFICERS
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SERVICIO METEOROLOGICO NACIONAL
ARGENTINA

Since the mid 20th Century the Servicio Meteorológico Nacional (SMN) of Argentina has recruited selected ships under the Voluntary Observing Ship Programme of the World Meteorological Organization (WMO). The meteorological data in WMO SHIP code thus obtained represent the main source of real time information for weather analysis, forecasts and warnings for the harbours, coastal waters and open seas under the responsibility of the SMN and provide important inputs to the regional numerical weather prediction model produced by our Organization for some decades to now.

VOS STATUS

During the 1990's the number of recruited ships by Argentina amounted, in average, to 15 (fifteen) units. Unfortunately, this figure dropped dramatically in the last few years, participating at present only 5 (five) vessels in the WMO VOS Programme. The following table provides an overview of the significant decrease in terms of ships recruited and meteorological observations received in WMO SHIP code at the SMN.

Year	1999	2000	2001	2002
Number of ships recruited	5	5	4	5
Total number of meteorological observations in SHIP code	1290	2213	644	453

Note: an updating of the International List of Selected, Supplementary and Auxiliary Ships –WMO N° 47- including this new status is in process and will be submitted to the WMO Secretariat in the short term.

The figures above are far from satisfying the SMN expectations for an efficient meteorological coverage of the South-West Atlantic area. This lack of basic data is attributed to the following facts:

- a) The number of merchant ships has steadily and remarkably decreased during the last years due to the closure of merchant companies;

- b) Successive changes in the ships ownership and widespread use of flag of convenience;
- c) Privatization of the Governmental maritime companies;
- d) Reduction in the number of crew members. This fact forces the crews to put the strength on navigational tasks rather than any other activities such as the meteorological observation on board, which is only done during the short spare time they have, or may even be omitted;
- e) Conversely, the number of foreign fishery vessels has increased during the same period; however, economic as well as legal reasons induce their owners not to provide any meteorological information that could reveal their geographical position to the local authorities;
- f) Ship companies claim not to be able to take up meteorological tasks due to budgetary constrains;
- g) Ships navigating in our area do not follow a fixed schedule of operations;
- h) There are no regular routes Westward-Eastward or viceversa;
- i) The routes of the recruited vessels are, mostly, parallel to the coast;

In view of this dramatic situation, the SMN of Argentina enforced some years ago, and encompassed with the first signals of the decline, a promotional program among the national maritime agencies oriented to revert this unfortunate situation. The program consists in the preparation and issuing of promotional newsletters to all the ship companies registered in our country oriented to encourage their involvement in the WMO SHIP Program.

It is worth adding that the SMN of Argentina has, since the 1960's, an annual award scheme for the VOS through which our Organization rewards the collaboration and contribution of ship companies, ship Masters and crews to the meteorological science.

Port Meteorological Officers

The SMN is well aware of the essential work of the national PMO (Port Meteorological Officer) services. In this sense and in order to strengthen its capabilities at the national level, the SMN includes in the Meteorological Inspector Course syllabus (delivered at the WMO Regional Meteorological Training Center (RMTC) Buenos Aires – component SMN-), practical and theoretical subjects for the PMOs training. The lectures delivered to the future Meteorological Inspectors include information on international regulations (SOLAS), WMO marine Programs (VOS, GMDSS), maritime telecommunications, instrumentation for ships, etc. .

However, and due to severe budgetary constrains, our Institution has been forced to transfer this trained personnel to other bases such us land synoptic stations, reducing to a minimum the number of PMOs in active duty. Nevertheless, the present staff of PMOs widely satisfies the requirements of services of the recruited ships.

Observations / Instruments

When visiting recruited vessels PMOs provide training in weather observing and in the use of meteorological instruments and WMO codes. Unfortunately, the only meteorological supplies provided to the recruited vessels at present are Ship Observations Logbooks.

No software packages are in use for the coding of VOS reports at present; however, it is in the interest of the SMN to develop a project oriented to adapt the softwares currently in use in some WMO member countries to the needs of our region.

The meteorological instruments on board ships are in all cases property of the ships' owners. The SMN repairs, contrasts and provide maintenance services to all the meteorological instruments used on board the recruited ships at the WMO Regional Instruments Center (RIC) – Buenos Aires -.

Telecommunications

The reports in SHIP code are transmitted in real time, from the recruited VOS to the SMN via telephone or fax and in Ship Observations Logs in delayed time mode.

At the moment the SHIP reports received are input into its operational data base and into the WMO Global Telecommunication System (GTS).

On the other hand, VOS reports received via the GTS at the WMO Regional Telecommunication Hub (RTH) Buenos Aires are automatically plotted, in real time, in the weather synoptic charts, and stored in the SMN data bases.

Quality control

At present, under an joint program between the SMN and the SMARA (Servicio Meteorológico de la Armada Argentina) quality controls are applied to the SHIP reports received from the recruited vessels according with minimum quality control standards MQCS-IV (Version 4, june 2001). After this QC the data package sent to Hamburg global collection center.

Marine Services provided by the SMN

The marine meteorological services produced and broadcasted by the Servicio Meteorológico Nacional of Argentina, provide the necessary meteorological support to all the maritime activities taking place within the METAREA VI, in accordance with the responsibilities taken on by Argentina as a Member of the World Meteorological Organization (WMO) and as a signatory of the Convention for the Safety of Life at Sea (SOLAS).

With the same intention the SMN provides meteorological support to marine activities taking place in the Antarctic Ocean within the area limited by 60° South and the Antarctic coasts and 20° and 90° West, through its VCOM. MARAMBIO ANTARCTIC METEOROLOGICAL CENTER (CMAVM) - Base Marambio - Antarctic Peninsula-.



Each Center issues two Weather Bulletins for Shipping per day, in Spanish and English. The broadcasting of such information is done according to the schedules published in WMO publication N° 9, VOLUME D "WEATHER REPORTING INFORMATION FOR SHIPPING". The marine meteorological services are broadcasted by an integrated system composed by the SMN, the Argentine Coast Guard (PNA) and the governmental radio station -Radio Nacional- .

The means of transmission of the Weather Bulletins for Shipping are the NAVTEX system (518 kHz); Internet through the SMN web sites at <http://www.meteofa.mil.ar>, a system that additionally enables marine users to have access to satellite weather images, weather maps and meteorological radar images and information. Marine users also have round the clock access to forecasts and warnings via telephone and facsimile.

On October 1, 1992, the SMN started the transmissions of the English version of the Weather Bulletins for Shipping issued by the RSMC Buenos Aires via Safetynet-INMARSAT; two years later the Bulletins issued in English by the CMAVM were included in these satellite transmissions. To achieve this aim, the Bulletins issued by each Center are concentrated at the Regional Telecommunication Hub (RTH) Buenos Aires and transmitted via the WMO Global Telecommunication System (GTS) to the World Meteorological Center (WMC) Washington, which in turn retransmits the mentioned Bulletins to the Coastal Earth Station Southbury (U.S.A.) for AOR W.

The message headers are WWSTO2 SABM and WWAAO2 SAWB for the Bulletins issued by the RSMC Buenos Aires and by the CMAVM, respectively.

The first pair of products is broadcasted at 02:30 UTC and the second at 17:30 UTC as stated in the transmission Schedule for Full Global Maritime Distress and Safety System (GMDSS) Service.

The Bulletins issued by the RSMC Buenos Aires and the CMAVM follow the structure below:

a) Heading in "C" Code:

1:31:06:01:00
SECURITE

b) Contents of the Bulletins:

PART ONE:	GALE WARNING
PART TWO:	SYNOPTIC SITUATION
PART THREE	FORECAST FOR
	a) COASTAL AREAS
	b) OCEANIC AREAS

c) Both Centers issue their products twice a day according to the following schedule:

PARTS OF THE BULLETINS	MORNING	EVENING
➤ GALE WARNING	09:00 UTC	21:00 UTC
➤ SYNOPTIC SITUATION	09:00 UTC	21:00 UTC
➤ FORECASTING TIME PERIOD OF 18 HOURS	12:00 UTC TO 06: UTC	00:00 UTC TO 18:00 UTC

Users' feedback

In response to national biannual surveys, the maritime companies have reported the effectiveness in quality and timing of our marine meteorological services, a fact that encourages our Organization to continue promoting the WMO VOS Programme for the benefit and safety of the human life and property at sea.