

COSTS FOR FIELD INSPECTIONS AND WORK SUPERVISION IN THE HYDROGRAPHIC AND OCEANOGRAPHIC SERVICE OF THE NAVY

A. INFORMATION

1. According to what it is established in the Supreme Decree No. 192, dated 16 of April of 1969 and amended by Supreme Decree No. 784, dated August 14 of 1985, which approves the Organic Regulation of the Hydrographic and Oceanographic Service of the Navy, in its point 4.-9), SHOA will have the responsibility “to control, to check and to approve all hydrographic survey and maritime cartography work, fluvial or lacustrine, that for purposes of port works, maritime concessions or other aims are conducted for special circumstances, prior authorization from the Hydrographic and Oceanographic Service, by governmental, semigovernmental, autonomous, municipal or private entities. The Hydrographic and Oceanographic Service will be able to appoint a supervisor in order for him to inspect the faithful performance of the procedures, instructions and basic precision requirements established by such agencies, having the entities or private people conducting the work, to assume all the expenses arising from sending this supervisor”.
2. Therefore firms or private people conducting the works that require inspection will be responsible for all the expenses of sending staff from SHOA. Within these expenses are included, by way of example and not intending to be categorical on the list:
 - a. Relocation or fares to attend the area to be inspected.
 - b. Accommodation and food expenses for each staff member.
 - c. Daily cost of one or more staff conducting the inspection.
 - a. Furthermore, work supervision at SHOA will also represent a cost for the firm conducting the work, according to what is to be supervised.
 - b. In addition, according to what it is established in the Organic Regulation of the Hydrographic and Oceanographic Service of the Navy, in its point 44, the incomes SHOA receives “will include, among others, the result of works or studies conducted by the Hydrographic and Oceanographic Service of the Navy at the request of governmental, semigovernmental, autonomous, municipal entities or private people, as well as by the sale of nautical charts and other publications”.
 - c. By virtue of the foregoing, firms or private people who require data and hydrographic and oceanographic information gathered at this Service should pay for the cost SHOA assigns to its products and services.

B. GENERAL CONSIDERATIONS

1. About Inspections:
 - a. The unit of measurement to determine the cost of each inspection will be MD (man- day), taking into account the daily remuneration SHOA assigns to each employee, which amounts to 1.50 UF.
 - b. It will always be charged full day, regardless of whether the inspection is made at a fraction of the day, rounding up to the nearest whole number.
 - c. The period it takes to go from SHOA to the area to be inspected and vice versa, will be included in the time of the inspection.
 - d. The trip to the area of inspection will be by airplane from the IV Region to the north and from the VIII to the south, both regions inclusive.

2. About Supervisions:

- a. Total cost will be represented by the sum of partial costs of each supervision stage.
- b. In case supervision is rejected, the total cost of the following instance of supervision will increase 50%, and so forth.

3. Price Table:

WORK Supervision of Precision Bathymetries	PRICE
Oceanographic Stage	4.00 UF + IVA
Geodesic Stage	3.00 UF + IVA
Bathymetry Stage	0.50 UF + IVA the sounded ha.
Supervision of Bathymetries for Navigation	
Oceanographic Stage	4.00 UF + IVA
Geodesy Stage and Cartographic Compilation.	3.00 UF + IVA each one
Bathymetry Stage	N° of Ha. X (0.50 UF x N° of rows/21) + IVA
Aerophotogrametry Stage	N° of photogrammetric models used/10) x 1.50 UF + IVA
Exploratory Bathymetry Supervision	
Geodesy Stage	3.00 UF + IVA
Bathymetry Stage	N° ha. x (0.50 UF x N° rows/21) + IVA
Beach Lines Supervision	
Geodesy Stage	1.50 UF + IVA for works of up to 1 km of longitude value that will increase in 0.75 UF + IVA for each additional Km.
Aerophotogrametry Stage	0.03 UF + IVA for ha.
Coastline Planes Supervision	
Geodesy Stage	((0.75 UF x cant. of planes) + 1.5 UF) + IVA
Aerophotogrametry Stage	((3.0 UF x cant. of planes) + 1.5 UF) + IVA
Digital Files Stage	((1.5 UF x cant. of planes) + 1.5 UF) + IVA
Cartographical Stage	((3.0 UF x cant. of planes) + 1.5 UF) + IVA
Oceanography Stage	4.00 UF + IVA

Oceanographic Work Supervision	
Any Stage (tides, currents, waves, other).	4.00 UF + IVA each one
Sale of Monographs of Geodetic Vertex and Tidal Benchmarks	
Monograph or Benchmark	4.00 UF + IVA by coordinates in a datum.

Datum attached as annex	1.00 UF + IVA by coordinates in datum annexed.
Monograph of vertex with benchmark referred to the chart datum	6.00 UF + IVA by a vertex considering tidal benchmark.
Coordinate update, geodetic vertex and tidal benchmark.	Free of charge.

C. INSPECTION AND SUPERVISION OF BATHYMETRY OF PRECISION

1. Inspection:

- a. It will be carried out by at least two professionals, one from the hydrography area and the other from the oceanography area.
- b. When using echo sounding, by rule it will last one work day, plus the time it takes for inspectors to move from one place to another. In case echo sounder is NOT used, all other alternative methodology, such as: bathymetry with extended bar system, should be consulted at SHOA, with the purpose of analyzing case by case the situations, for these alternative sounding methods the inspection will last the time it requires the full work.
- c. In case, there are inconveniences making difficult or hindering the inspection, the inspector will one day in the area. If it is not yet possible to carry out the inspection, they will return to SHOA and in coordination with the firm conducting the work, it will be fixed a new inspection date.
- d. This new inspection will be considered, for payment purposes, as a second inspection.

2. Supervision:

It will include Oceanography, Geodesy and Bathymetry stages.

D. INSPECTION AND SUPERVISION OF BATHYMETRY FOR NAVIGATION

1. Inspection:

- a. It will be carried out by at least two professionals, one from the hydrography area and the other from the oceanography area.
- b. By rule it will last two work days, plus the time it takes for inspectors to move from one place to another.
- c. In case, there are inconveniences making difficult or hindering the inspection, the inspector will wait one day in the area. If it is not yet possible to carry out the inspection, they will return to SHOA and in coordination with the firm conducting the work, a new inspection date will be scheduled.
- d. This new inspection will be considered, for payment purposes, as a second inspection.

It will include Oceanography, Geodesy and Bathymetry, Aerophotogrametry stages and Cartographic Compilation.

E. EXPLORATORY BATHYMETRY SUPERVISION

1. Inspection:
Exploratory bathymetries will not be supervised in the field.
2. Supervision:
It will include the Geodesy and Bathymetry stages.

F. INSPECTION AND SUPERVISION OF BEACH LINES

1. Inspection:
 - a. "IN SITU" modality will be carried out by a professional, prior coordination with the Maritime Authority, the firm conducting the work and this Service.
 - b. The inspection after the date determined by the firm conducting the work will require two professionals.
 - c. By rule the "IN SITU" inspection will last one day of work, duration in posterior modality will be estimated case by case, influencing elements such as line length and topographic features of the land. In both cases you must add the time it takes for the inspector to move from one place to another.
 - d. In case there are inconveniences making difficult or hindering the inspection, the inspectors will wait one day in the area. If it is yet not possible to carry out the inspection, they will return to SHOA and coordinate with the firm conducting the work and it will be fixed a new inspection date.
 - e. This new inspection will be considered, for payment purposes, as a second inspection.

2. Supervision:

It will include Geodesy stage and when aerial photographs are used, Aerophotogrametry.

G. INSPECTION AND SUPERVISION OF COASTLINE PLANES

1. Inspection:
 - a. It will be carried out by at least two professionals.
 - b. It will be divided in two stages. The first one will have as purpose to inspect the instruments and methodologies applied to geodetic measurements. In the second stage, subsequent to the delivery of the work to be supervised for this Service, inspectors will contrast the planes with the reality of the land.
 - c. By rule the first stage will last $\frac{1}{4}$ of a day for each plane to be surveyed and the second stage $\frac{1}{2}$ day for each one of them, plus the time it takes for the inspector to move from one place to another.
 - d. In case there are inconveniences making difficult or hindering the inspection, the inspectors will wait one day in the area. If it is yet not possible to carry out the inspection, they will return to SHOA and coordinate with the firm

- conducting the work and it will be fixed a new inspection date.
- e. This new inspection will be considered, for payment purposes, as a second inspection.

INSPECTION AND SUPERVISION OF OCEANOGRAPHIC WORKS

1. Inspection:

- a. It will be carried out by a professional of the oceanographic area. In special circumstances, conditioned by the spatial coverage of the works or the type of instruments used, a second inspector will be appointed, which will be informed to the firm at the proper time.
- b. By rule it will last two days of work, plus the time it takes to move him or the inspectors from one place to another.
- c. In case there are inconveniences making difficult or hindering the inspection he or the inspectors will wait one day in the area. If it is yet not possible to carry out the inspection, they will return to SHOA and in coordination with the firm conducting the work a second inspection will be scheduled.
- d. This new inspection will be considered for payment purposes, as a second inspection.

2. Supervision:

It will include, normally, the Tide, Current and Wave stages. Including other stages will depend on the objectives they have set in the oceanographic study.

I. SALE OF BATHYMETRIC INFORMATION

1. The bathymetric information for sale corresponds to the one available at the moment of request. This has been obtained by SHOA in hydrographical surveys.