

REGULATIONS CONCERNING THE ORGANISATION OF THE HYDROGRAPHIC OFFICE OF THE REPUBLIC OF ECUADOR

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(Translated from the Spanish)

REGULATIONS OF THE HYDROGRAPHIC SERVICE.

CHAPTER I. — ORGANISATION.

ARTICLE I.

The Hydrographic Service, established by Executive Decree No. 123 of 15th February of the current year and consisting of a Governing Body, a Technical Board of Directors directly subordinate to the Ministry of War and Marine, and the following divisions: one Geodetic, one Topographic, two Hydrographic, one Tidal and one Calculators', is organised in the following manner:—

- (a) The Governing Body shall consist of the following staff:—
 - Chief of the Hydrographic Service, of Commander's or Captain's rank;
 - An assistant hydrographer, of Lieutenant's or Lieutenant-Commander's rank;
 - One principal and three assistant cartographers;
 - One boy messenger.
- (b) The Technical Board of Direction shall be composed of:—
 - A consulting Technician;
 - The Chief of the Hydrographic Service;
 - One clerk, Sergeant at Arms; and
 - One boy messenger.
- (c) The Geodetic Division shall be composed of:—
 - Head of Division, of Commander's or lower rank;
 - An assistant (the assistant hydrographer);
 - A secretary, Ensign; and
 - Six recorders, of Quartermaster's or lower rating.
- (d) The Topographical Division shall be composed of:—
 - Head of Division, of Lieutenant-Commander's or lower rank;
 - An assistant, of Sub-Lieutenant's or lower rank;
 - Six recorders, of Quartermaster's or lower rating.
- (e) The two Hydrographic Divisions shall be composed of:—
 - Head of Division, of Lieutenant-Commander's or lower rank;
 - Two assistant calculators, of Sub-Lieutenant's or lower rank;
 - Four leadsmen, quartermasters; and
 - Two boats with their respective crews.
- (f) The Tides Division shall consist of:—
 - Head of Division, of Lieutenant-Commander's or lower rank;
 - Three assistant observers, of Ensign's or lower rank;
 - Three assistant calculateurs, of Sub-Lieutenant's or lower rank; and
 - Three 2nd class seamen.
- (g) The Calculators' Division shall be composed of:—
 - Head of Division, of Lieutenant-Commander's or lower rank;
 - Four assistant calculators, of Lieutenant's or lower rank; and
 - One 2nd class seaman.

CHAPTER II. — OBLIGATIONS AND DUTIES OF THE STAFF.

Consulting Technician.

ARTICLE 2.

The following are the duties of this appointment: —

- (a) The general direction of and responsibility for all hydrographic operations
- (b) To present yearly to the Ministry of War and Marine, through the intermediary of the Administrative Authorities of the Fleet, a comprehensive report on the work done, with a summary of the scientific material which represents the total result of each hydrographic campaign;
- (c) To draw up in collaboration with the Authorities of the Military Geographical Service, the yearly allocation of the estimate of the Hydrographic Service and submit same to the Ministry of War and Marine for approval;
- (d) To submit to the Ministry of War and Marine, in collaboration with the authorities of the Military Geographical Service, the yearly programme of land operations, for approval;
- (e) The preparatory scientific work of Heads of Divisions in their respective branches; and the allocation of operations and organisation;
- (f) Instructions relating to the use and handling of all the instruments;
- (g) Technical organisation of all sections composing the Hydrographic Service with a view to the unity of the whole;
- (h) The theoretical and practical solution of all problems of higher Geodesy-Hydrography so that the staff may acquire complete knowledge of all studies and work which shall be undertaken; and
- (i) To keep a register in which shall be synthetically recorded, month by month, the work carried out by each of the Divisions; in which book a special page shall be opened concerning the technical contribution of Heads and members of the staff who may have excelled in the discharge of their duties, so that their merit may be taken into account by the higher Administrative Authority.

ARTICLE 3.

To request of the higher Administrative Authority the transfer of the Head and staff-members of one Division to another as may be required by the needs of the service, from the technical point of view, or their definite dismissal from the work of the same when they do not fulfil efficiently the duties entrusted to them.

Chief of the Hydrographic Service.

ARTICLE 4.

The Chief of the Hydrographic Service shall:—

- (a) Give orders and instructions with respect to the execution of work, in agreement with the Consulting Technician;
- (b) Carry out the general inspection and control of all field and office operations;
- (c) Report weekly to the Consulting Technician concerning all work carried out at sea and on land;
- (d) Issue monthly reports, in agreement with the Consulting Technician, to the Administrative Authority of the Fleet, concerning the efficiency of the staff;
- (e) Draw up with the Consulting Technician, estimates of the monthly expenses of each Division, and present same to the Administrative Authority of the Fleet one month in advance, so that transfers may be effected at the appropriate date;
- (f) Superintend the discipline and employment of the staff according to the general programme approved by the Ministry of Marine;
- (g) Propose to the Administrative Authority of the Fleet, candidates for promotion and advancement, provided always that the requirements set forth in the Chapter of General Regulations be fulfilled;
- (h) Deliver to the Ministry of War and Marine, through the intermediary of the Administrative Authority of the Fleet, authentic copies of the hydrographic plans which, to a scale of 1 : 25 000, are to form part of the *Carta General de la Republica*. These plans shall be accompanied by legalised copies of the Minutes of calculations;
- (i) Specialise in the theoretical and practical studies affecting each one of the Divisions of the Hydrographic Service so that he may assume the responsibilities pertaining to his office;
- (j) Contribute his personal work in any Division which may request his co-operation;
- (k) Undertake the scientific publication in the form of year-books, bulletins, etc., of

work carried out by the Hydrographic Service, in conformity with the practice adopted by similar foreign institutions.

ARTICLE 5.

The Chief of the Hydrographic Service shall be responsible for the stock and the satisfactory upkeep of all instruments and other supplies which may belong to this Service.

In this connection he shall :—

(a) Draw up a yearly general inventory of all stock belonging to the Hydrographic Service and submit same, with the increases and decreases authorised by the Ministry of Marine, to the higher Administrative Authority ;

(b) Deliver to each Head of Division the material and instruments necessary in his department, first drawing up a detailed inventory, for example, of the accessories of an instrument indicating the condition and number of the items ; request from Heads of Divisions the corresponding receipts to cover the transaction and in order to be able to place responsibility in case of deterioration or loss caused by carelessness or negligence ;

(c) Store everything belonging to the Hydrographic Service ;

(d) Transmit to the Administrative Authorities of the Fleet at the end of each month, with a view to carrying out the requirements relating to remunerations set forth in the Chapter of General Regulations, a list of the staff which shall have operated outside or within the office, so that payments may be effected ; no payment shall be effected unless certified by the Head of the Division and seen and approved by the Chief of the Hydrographic Service. Pay-slips shall be signed by those concerned, and the daily hours of attendance sent weekly to the Ministry of Marine to be accounted for ;

(e) Increase scientific relations with similar foreign Academies and Institutions ;

(f) Form, increase and organise the Library with special works on Technical, Geographical and Hydrographic questions in general which shall be at the disposal of the Hydrographic Service ;

(g) Submit to the higher Administrative Authorities drafts of Rules and Regulations which may tend to improve the Hydrographic Service ; as also the draft of the yearly Estimates, previously approved by the Consulting Technician ; and

(h) Undertake the responsibility for the archives of the Hydrographic Service.

Heads of Divisions.

ARTICLE 6.

Heads of Divisions shall have the following duties and responsibilities :—

(a) The technical preparation of their respective staffs ;

(b) Direction and inspection of each one of the sections of work ;

(c) Contribution of personal work in the field and in the office ;

(d) Responsibility to their immediate superiors for the scientific soundness of the work entrusted to their Divisions ;

(e) To deliver the work with the appropriate reports within the time fixed by the Programme of Work ;

(f) To request from the Chief of the Hydrographic Service, as far in advance as may be necessary, all their requirements with regard to the movements and necessities of staff under their charge ;

(g) To draw up internal rules with regard to the precise standard by which their staff shall be governed and submit them to the Chief of the Hydrographic Service for his approval, after first obtaining a favourable report from the Consulting Technician ;

(h) To keep a journal in which shall be recorded the daily work carried out as also the attendance of the subordinate staff and other occurrences within the Division. This journal, signed by the Chief of the Hydrographic Service, shall be delivered monthly to the Administrative Authorities of the Fleet for the ultimate use of the Naval Command.

ARTICLE 7.

Heads of Divisions are directly responsible for the execution of the technical work ordered by their immediate Chiefs ; and consequently for the discipline, administration and organisation of the work under their charge.

ARTICLE 8.

Heads of Divisions shall be responsible for the satisfactory upkeep of the instruments and other material supplied to them by the Chief of the Hydrographic Service.

Assistants of Divisions.

ARTICLE 9.

Assistants of Divisions shall :—

- (a) Replace Heads of Divisions when ordered to do so by the Chief of the Hydrographic Service ;
- (b) Hold themselves under the direct orders of the Heads of their Divisions ;
- (c) Be responsible for the execution of technical work ordered by the Heads of their Divisions as also for discipline and the organisation of the work ;
- (d) Submit to the Heads of Divisions, within the time fixed by the general programme, a report relative to the requirements of the preceding paragraph and of any amendments and other urgent necessities which might conveniently be introduced for the improved conduct and working of the Divisions ;
- (e) Be responsible for the satisfactory upkeep of the instruments and other material under their charge.

Official Accountant.

ARTICLE 10.

The Official Accountant of the Hydrographic Service shall be the official Accountant of the Administrative Authority of the Fleet.

The following are his duties and responsibilities :—

- (a) To conform as to economic management in every respect to the Laws of Finance (*Ley de Hacienda*) and to the prescriptions and regulations issued by the fiscal authorities ;
- (b) To deliver to the Chief of the Hydrographic Service sums corresponding to the payment of material, journeys, freights, commissariat, wages and salaries of the staffs of Divisions who may be operating outside the seat of the Hydrographic Service ; and
- (c) To request from the Chief of the Hydrographic Service duly legalised pay-slips bearing the visas of the Heads of Divisions and of the Consulting Technician, the receipt of the employee concerned, and the signature, as having been seen and approved, of the Chief of the Hydrographic Service.

CHAPTER III. — GENERAL REGULATIONS.

ARTICLE 11.

The economic management of all work carried out by the Hydrographic Service shall be supervised by the Administrative Authority of the Fleet.

ARTICLE 12.

The staff of the Hydrographic Service shall enjoy the prerogatives granted by the laws ; and shall have the rates of remuneration hereafter detailed when the Heads and other officials have tested their efficiency, subject always to the judgment of the Consulting Technician :—

- (a) To those operating outside the office (measurements, observations), in accordance with the following grades and provided always that they have passed through the *plaza de Guayaquil* (Establishment of Guayaquil) :

	\$
Consulting Technician.....	8.00 daily.
Captain or Commander, Chief of the H. S.....	8.00 "
Lieutenant-Commander.....	7.00 "
Lieutenant.....	6.00 "
Sub-Lieutenant or Ensign.....	5.00 "
Sub-Officer or Sergeant.....	1.00 "
Seaman.....	0.60 "

- (b) To those working in the office, even when the latter is subject to displacement :

	\$
Consulting Technician.....	4.00 daily.
Captain or Commander, Chief of the H. S.....	4.00 "
Lieutenant-Commander.....	3.50 "
Lieutenant.....	3.00 "
Sub-Lieutenant or Ensign.....	2.50 "

(c) For urgent journeys and when no boat of their own is available, the staff shall be paid travelling expenses according to their destination.

ARTICLE 13.

Office hours shall be as follows :—

<i>Morning</i> :	From 7.30 to 10.00	Office.
	From 10.00 to 10.30	Interval.
	From 10.30 to 11.30	Office.
<i>Afternoon</i> :	From 1.30 to 3.30	Office.
	From 3.30 to 4.00	Interval.
	From 4.00 to 5.30	Office.

The Chief of the Hydrographic Service is empowered to order night-work whenever circumstances may render it necessary.

ARTICLE 14.

No standard time-table shall be kept for observations at sea or on land ; hours shall be subject to conditions of place or weather, which are completely variable. Thus, for instance, when it is a question of astronomical observations for the calculation of longitudes, latitudes and azimuths, and of geodetical observations for the determination of azimuth angles and altitudes, no limited time shall be set for the work since it is usually carried out at different hours of the day and night ; everything depends on the nature of the observation and on the most favourable circumstances for obtaining data answering in the strictest manner to the needs of scientific principles. In this connection the Division instructed to carry out this class of work shall be installed at the observation point and a look-out kept, day and night, until the work is terminated. In this case the Head of Division shall determine the watches.

ARTICLE 15.

An established hierarchy shall be the principal characteristic of the discipline of the Hydrographic Service ; for this reason petitions or requests of any nature whatever shall be made through regular channels. Any irregularity in this sense will incur the utmost rigour which the case calls for.

ARTICLE 16.

Heads and other officials shall be dismissed from the Hydrographic Service for any of the following reasons ; repeated insubordinate conduct ; absence from camp or leaving work without justification ; showing neither improvement nor perseverance in study ; contracting any contagious disease or becoming physically incapacitated.

ARTICLE 17.

Where it is a question of filling vacancies in any Division this shall be done by means of an eliminating competitive examination according to the programme drawn up by the Consulting Technician who shall be one of the members of the Board of Examiners. In the case of civil employees the proceedings shall be the same as for officers. For the final counting of votes, from 0 to 10, the personal merit of the competing officer or employee shall be taken into account by his presenting the certificates of his merit awarded annually by the Administrative Authority of the Fleet.

ARTICLE 18.

Officers who are carrying out surveys for the Hydrographic Chart at the time of examinations in the Hydrographic-Geodetic Branch shall, in order to avoid their abandoning field-work, take these examinations before a competent Board nominated by the higher Administrative Authorities. This arrangement holds good for advancement up to Sub-Lieutenant inclusive.

ARTICLE 19.

Campaigns shall be yearly ; and the operations at sea and on land shall always begin on the 10th of January of each year.

ARTICLE 20.

In case of absence of the Chief of the Hydrographic Service his functions shall be delegated to the Head of Division of highest rank or greatest length of service.

ARTICLE 21.

Should it be necessary temporarily to replace a Head of Division for reasons of illness, dismissal or leave, the respective Assistant or sub-Head of Division shall act as his substitute.

ARTICLE 22.

Appointments of titular Heads and Assistants of Divisions shall be made by the Ministry of Marine, at the request of the Chief of the Hydrographic Service through the intermediary of the Administrative Authority of the Fleet, provided always that candidates have proved competent in the work of the Hydrographic Service.

ARTICLE 23.

The Service of Communications shall be carried out by the same branches of the Fleet as are charged with distributing the necessary material.

ARTICLE 24.

The yearly periods of leave granted by the Law shall be given in strict order.

ARTICLE 25.

The meridian of Greenwich shall be adopted for the calculation of longitudes for the Hydrographic Chart.

ARTICLE 26.

The scale of sheets forming part of the General Map of the Republic shall be that adopted by the Military Geographical Service.

ARTICLE 27.

Hydrographic symbols shall be those adopted by the International Hydrographic Bureau of Monaco, and topographic symbols those used by the Military Geographical Service of Ecuador. Magnetic charts shall follow universal standards.

ARTICLE 28.

Journals of field-work and observations, sheets of recording instruments, calculation sheets and plans in general shall be the property of the State and shall form the archives of the Hydrographic Service. These documents to be authentic must bear the signature and quality of the respective operators, the certificate of conformity of the Head of the Hydrographic Service and the visa of the Consulting Technician. With regard to copies of the aforesaid documents it shall be sufficient that they bear the visa of the Chief of the Hydrographic Service.

ARTICLE 29.

The carrying out of checking and comparisons shall be considered as an absolutely fixed rule both in field and in office operations; by this means relative responsibility is established among the technical staff attached to the Hydrographic Service.

ARTICLE 30.

The subordinate staff is strictly forbidden to supply to persons outside the Service any results whatsoever of operations, without the due authorisation of the Chief of the Hydrographic Service.

ARTICLE 31.

The Head of the Tidal Division shall be responsible for the Establishment of the Port and the daily publication of tidal reports; moreover, he shall submit to the Chief of the Hydrographic Service a monthly report concerning the general activity of the Division under his direction, at the same time giving suggestions relative to improvements in the tidal service both within and outside the Republic.

The Tidal Office shall be governed by special regulations approved by the Ministry of Marine.

ARTICLE 32.

Chiefs and Officers of the Fleet who, after five consecutive years' service in the survey of the Hydrographic Chart of the Republic, desire to obtain the title of Government Hydrographic Engineer, shall, as a first condition, submit proof to the higher Administrative Authorities that they have worked during five consecutive years in the Hydrographic Service and that they have attained within this period the highest degree of technical efficiency.

ARTICLE 33.

The capacity of the candidate having been proved, the latter shall immediately request from the Board appointed by the higher Administrative Authorities the theme of a thesis to be developed by him within a maximum period of three months. The thesis shall bear on the solution of a practical case of Geodesy-Hydrography.

ARTICLE 34.

The Board shall have the right to request the candidate to explain orally doubtful or incomplete points of the thesis, or anything they may consider necessary, confined to the development of the thesis in question; the procedure shall be that adopted in the Universities of the Republic for the conferring of professional titles.

ARTICLE 35.

Theses approved with the note *outstanding* by the examining body shall be published by the State.

ARTICLE 36.

The present regulations shall come into force on the date of their approval.

ARTICLE 37.

The Regulations promulgated by the Executive on 4th February 1932 are cancelled.

