



PAN AMERICAN INSTITUTE OF GEOGRAPHY AND HISTORY

PROJECT REQUEST FORM

Commission: Cartography Commission

Name of Project: Aeronautical Chart Standardization

Project No. (assigned by the General Secretariat): IPGH (PAIGH) No. 3.1.1.1

Agency executing the Project: Committee on Aeronautical Charts

Address: _____

Telephone () _____ Fax () _____ E-mail _____

National Section presenting the Request: United States of America

Priority set by National Section (if there is more than one): _____

Type of Project: _____

Pronat (National Project): Multi-national:

Name of responsible official: Raoul Alvarez

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I. Other Specifications of the Project:

a) Beneficiary countries: All member nations of PAIGH producing VFR Aeronautical Charts.

b) Other Member States which have confirmed their participation:

Name & Address: Argentina- Departamento Cartografia e Informacion Aeronautica
Direccion de Transito Aereo
1104 Cap Fed
Buenos Aires, Argentina

II. Justification of the Project:

a) Outline of the problem

Aviation has played an important part in the economic development of the Western Hemisphere. In a comparatively short period of time, airlines carrying passengers and freight have made isolated places accessible on a regularly scheduled basis. The increasing air traffic has of necessity led to the establishment of a requirement for the production of standardized aeronautical charts and flight information publications essential to flight planning, operations and safety. Aeronautical charts, in order to be most effective, must be made available through the application of modern cartographic technology in conformance with documented specifications and quality assurance criteria. This Project supports the strengthening of democracy by ensuring air safety for both business and tourism travel throughout the region. It fosters mutual confidence among nations by promoting common standards in the compilation and portrayal of aeronautical charts throughout the Western Hemisphere. Scientific and technical cooperation is enhanced between the military and civilian aeronautical communities and between PAIGH and ICAO.

b) Background

In 1977 at the XIII Consultation held in Quito, Ecuador the Pan American Institute of Geography and History (PAIGH) Committee on Aeronautical Charts set up a working group dedicated to the standardization of production specifications designed to prepare Visual Flight Rules (VFR) Charts which would enhance safety of flight. The continuation of the project was reaffirmed by resolution at the XIV Consultation (Santiago, Chile), the XV Consultation (Rio de Janeiro), the XVI Consultation (San Jose, Costa Rica), and the XVII Consultation (San Jose, Costa Rica).

The Working Group is comprised of personnel drawn from PAIGH Member States' national agencies which have the responsibility for aeronautical charting and/or flight information publications. Active participation has in the past included members from Argentina, Brazil, Canada, Chile, Colombia, Mexico, Panama, Uruguay and the USA. These representatives are the experts in aeronautical charting and have access to the excellent cartographic and air navigation data and resources of the agencies which they represent.

c) Objectives

The objectives of Project 3.1.1.1 are:

- (1) Continue to use the yearly meeting for the exchange of aeronautical data and as a forum for the discussion and resolution of problems in aeronautical charting.
- (2) Maintain a standardized glossary of terminology to be used in aeronautical charting.
- (3) Produce and maintain Technical Procedures for the Production of Aeronautical Charts to ensure compatibility and reliability of aeronautical charts produced by Member Nations.

(4) Maintain the Quality Control Manual for VFR charting. This will assist production elements in utilizing standard quality procedures in a production environment.

(5) Develop and maintain a standardized maintenance criteria for VFR charts to ensure consistency and compatibility of criteria among PAIGH member states.

(6) Develop and maintain VFR Specifications, Symbol Appendices, and Style Sheets to reflect current PAIGH aeronautical charting requirements for the scales 1:2,000,000; 1:1,000,000; 1:500,000; and 1:250,000.

(7) Promote the adoption of the English (Foot) System for aeronautical charting.

(8) Investigate the need for Instrument Flight Rules (IFR) chart specifications.

(9) Encourage cooperative mapping program agreements between member countries and mutual cooperation for aeronautical charting with the International Civil Aviation Organization (ICAO).

d) Stages

Since project establishment, the Working Group has been active in the preparation and dissemination of standardized VFR aeronautical chart production specifications in both Spanish and English language versions. The VFR Aeronautical Chart specifications are in need of constant updating and the 1999 meeting activities will be directed to accomplishing this requirement.

Working with the GREPECAS Sub-Group of the ICAO, the Committee encourages cooperation in the aeronautical charting field and the adoption of WGS-84 as the standard datum for building aeronautical charts.

III. Products or fruits to be generated by the Project. Benefits for the participating country or countries.

Published documents exist for the following manuals and specifications: Quality Control Manual for Aeronautical Chart Production (1990), Glossary of Cartographic Terms for VFR Aeronautical Charts (1992), Manual of Technical Procedures for the Production of Aeronautical Charts (Part I - Compilation) (1996) and 1:2,000,000 (1989), 1:1,000,000, 2nd Edition (1994), 1:500,000, 2nd Edition (1997) and 1:250,000, 2nd Edition (1998). Work continues on Part II of the Manual of Technical Procedures and a Product Evaluation Handbook for chart maintenance will be initiated.

PAIGH Member States actively engaged in VFR Aeronautical Chart production utilize these specifications as their basic guides.

IV. Program of Activities:

Description	Milestone Chart (year and trimester)
a. 1999 working meeting to be held in Santiago, Chile.	April, 1998
b. Complete work on the "Technical Procedures for the Production of Aeronautical Charts, Part II (Color Separation)".	1999 publication date.
c. Initiate work on a "Product Evaluation Handbook" for the evaluation of aeronautical charts.	2000 publication date.
d. Continue resolution of differences with the Aeronautical Charts Task Force, ICAO on subjects of mutual concern.	Ongoing.
e. Initiate work on the revision of the 1:2,000,000 Scale VFR Aeronautical Chart Specifications, Edition 1, 1989.	2000 publication date.
f. Provide updates/change notices to keep the currently published Specifications current.	Ongoing.

V. Financial Contribution of PAIGH, by calendar year - Budget Estimate

Items	Total US\$ Amount	Disbursement Schedule (year and trimester)
Description		
002	6,000.00	To be purchased by PAIGH (1999/1st trimester).
009	2,400.00	Disbursed at 1999 meeting (1999/2nd trimester).
013	600.00	Disbursed at 1999 meeting (1999/2nd trimester).

Financial Contribution of the Sponsoring Agency (United States of America)

List Appropriate Code Descriptions	Total US \$ Amount	Disbursement Schedule
002 Airfares	3,900.00	1999 meeting.
009 Per Diem	2,600.00	1999 meeting.
013 Materials	300.00	1999 meeting.
023 Miscellaneous Expenses - Salaries	7,500.00	As work is accomplished throughout 1998/1999.
TOTAL US\$	14,300.00	

Financial Contribution of other Agencies

Contributing Agencies	Code and Description	Amount (US\$)
<p>Argentina - Departamento Cartografia e Informacion Aeronautica, Direccion de Transito Aereo</p> <p>Brazil - Instituto de Cartografia Aeronautica</p> <p>Chile - Servicio Aerofotogrametrico de la Fuerza Aerea</p> <p>Colombia - Instituto Geografico "Agustin Codazzi"</p> <p>Mexico - Direccion General de Geografico del INEGI</p> <p>Uruguay - Servicio de Sensores Remotos Aeroespaciales, Fuerza Aerea Uruguaya</p>	<p>Professional services (salaries) of participants during and after meeting to complete project work. Agencies may send more than one participant to the meeting.</p>	<p>18,000.00</p>

VI. Obligations of the Contributing Agency if the Project Request is approved:

a) *Request for Funds:*

Requests should be made through the respective National Section, which shall receive the notification from the General Secretariat after the Directing Council or General Assembly has finalized. Once the Request for Budgeted Approved Funds has been received, with the proper authorization, the first disbursement of 50% of the amount approved by the Directing Council or General Assembly, shall be dispatched. These funds shall be delivered under the responsibility of the respective National Section in order to implement the project.

b) *Statements of Accounts:*

The Requestor, with the referendum of the Contributing Agency shall present trimestral Statements of Accounts, with original receipts, through the National Section, or before requesting the second disbursement of funds.

All Statements of Accounts must be presented 30 days after the activity has concluded. If the activity shall be continuing into the next fiscal year, a partial statement of expenses must be presented by NOVEMBER 30 OF THE CORRESPONDING YEAR and a final statement when the activity has terminated. A copy of the Statement of Accounts must be sent to the respective Commission Chairman, who must give his approval regarding the beneficial utilization of the funds. The Secretary General shall not be able to provide additional funding to those projects which do not comply with this stipulation and shall inform the Responsible Official, the Chairman of the National Section and the Chairman of the respective Commission accordingly. The Responsible Official shall not be allowed to present new projects.

c) *Progress Report:*

The Responsible Official, with the referendum of the Contributing Agency, shall present trimestral Progress Reports to the General Secretariat, with copies to the Commission and National Section, on or before requesting the second disbursement of funds.

d) *Final Report:*

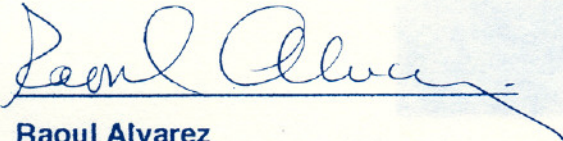
The Requestor, with the referendum of the Contributing Agency, shall present the Final Report to the General Secretariat, with copies to the Commission and National Section.

The report shall consist of:

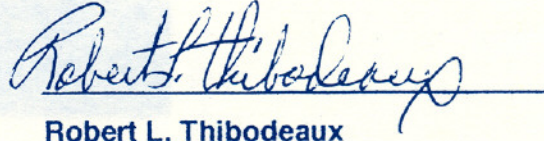
- 1) Compilation of the papers presented by the participants (in the case of technical meetings with guest speakers invited to make presentations on specific topics.
- 2) The results obtained, in relation with the objectives and goals of the project.
- 3) An article prepared by the responsible official for publication in the corresponding Journal.
- 4) Financial Report or Statement of Accounts.

All rights shall be the property of PAIGH, including the rights to the title, royalties, and patents of any work financed by PAIGH or that is carried out by one of its members regardless of status, as part of his or her official duties. In the case of joint participation with other institutions, PAIGH shall acknowledge the co-edition (expressedly agreed upon), or the simultaneous publication, provided that PAIGH receives the credit.

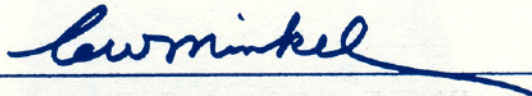
The Responsible Official and (the primary Supporting agency) are in agreement with the content of this project proposal and accepts its inherent obligations.



Raoul Alvarez
Vice Chairman, Committee on
Aeronautical Charts
Cartography Commission



Robert L. Thibodeaux
Chairman, Committee on
Aeronautical Charts
Cartography Commission



Signature and seal of the National Section