

Hydrographic Commission on Antarctica

## National Report by

(PERÚ)







INTERNATIONAL HYDROGRAPHIC ORGANIZATION HYDROGRAPHIC COMMISSION ON ANTARCTICA (HCA)

## 14th CONFERENCE TROMSO – NORWAY

28 – 30 JUNE, 2016







- The mission of the Directorate of Hydrography and Navigation is to manage, operate and research the activities related to environmental sciences in the sea, river, lake an Antarctic field to contribute to national development, support and safety navigation, Naval Forces and mariners in general.
- This Directorate has been serving the Peruvian state and national and international community for almost 113 years
- Likewise, It has been actively involved in campaigns and expeditions in Antarctica since 1985.







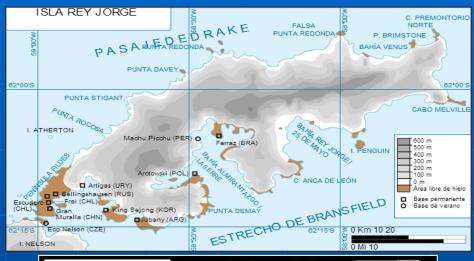
#### HYDRO-MORPHOLOGY SURVEY Harbor Chart H-7113 "MACKELLAR COVE"

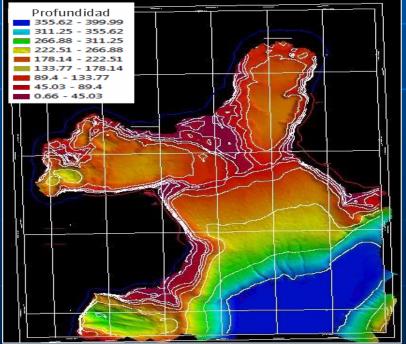
#### a. Location

The work area is located in Mackellar cove, at Admiralty Bay, between Latitude 62° 06' South and Longitude 58° 25'West Antarctic Continent. Chart scale 1:15,000

### **NEW TECNOLOGY AND EQUIPMENTS**

First Hydrographic-Morphology Survey with Multibeam technology on board of the AEH-178 hydrographic vessel.









# 2. SURVEY ANTAR XXII (2013-2014)



#### MONITORING OF THE COASTAL PROFILE VARIABILITY IN THE MACKELLAR COVE OF THE ADMIRALTY BAY



Coastal profile survey was carried out using the method of walking with the DGPS-Trimble Total Station in Real-Time Kinematic (RTK) mode for updating the Antarctica charts.



eveling works "Machu Picchu" research station



Topography survey to find the chart datum line



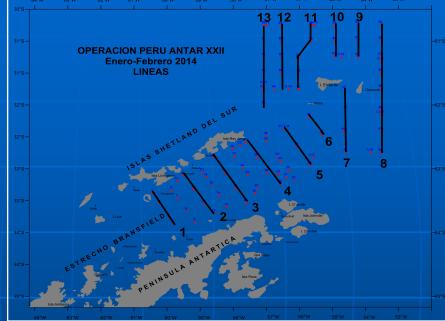
New beaches because of global warming



# 2. SURVEY ANTAR XXII (2013-2014)



Oceanographic Cruise in the Brandfield Strait during the Austral summer.





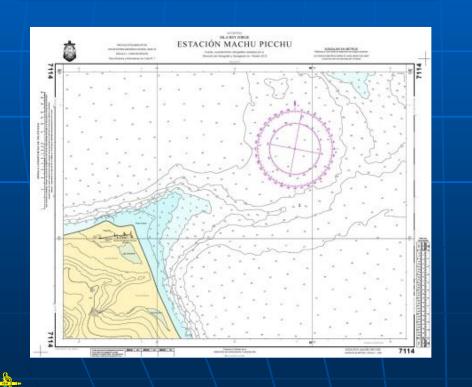


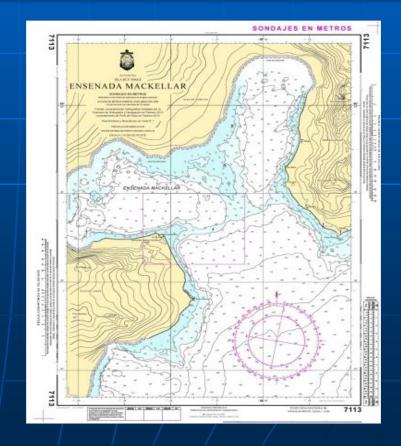
Salinity measurement in Guildline salinometer





NAUTICAL CHART N° 7114 "Machu Picchu Base Station" Edition: October 1st 2013 Scale 1: 4000 NAUTICAL CHART N° 7113 "Mackellar Cove" Edition: November 1st 2013 Scale 1: 15,000





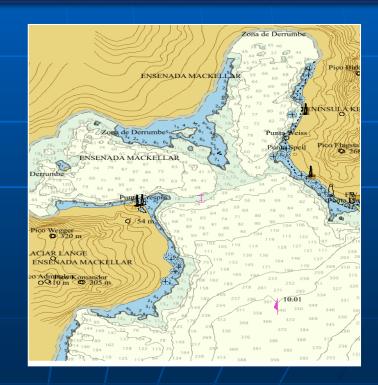




ELECTRONIC NAUTICAL CHART ENC Code: PE607114 "Machu Picchu Base Station" Edition: October 1st 2013 Scale 1: 4000



ELECTRONIC NAUTICAL CHART ENC Code: PE507113 "Mackellar Cove" Edition:. November 3rd 2013 Scale: 1: 15,000



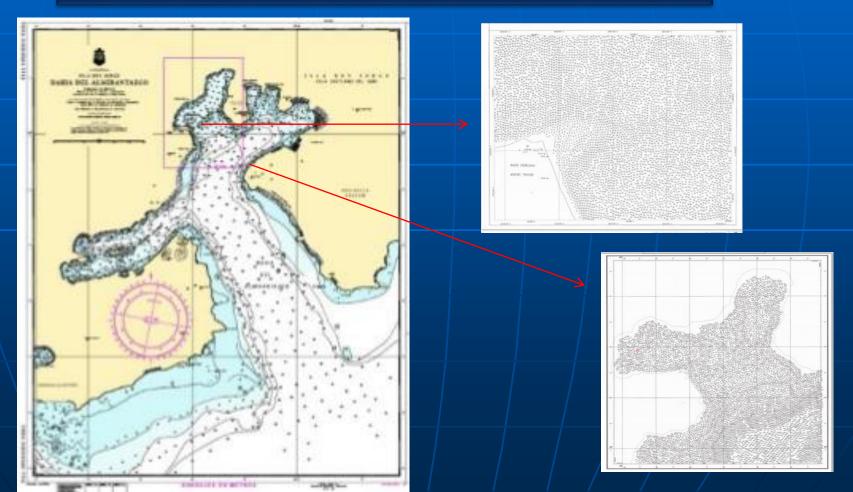




# 4. NEW CHART – INT 9125



NAUTICAL CHART N° 7112, Admiralty Bay (INT-9125) Peru is working with Brazil to have about September 2016, the new edition of the international chart using the last Peruvian survey with multibeam technology.





The Directorate of Hydrography and Navigation has planned the following activities in 2016:

- Distribution of National Antarctic nautical charts in paper and electronic format.
- Conversion of National Antarctic Nautical Charts in the format established for producing international charts (INT) to be sent to IHO – HCA.
- Oceanographic Research cruise in Bransfield Strait.
- Collection of meteorology data
- Sail and collect information in the first hydro-oceanographic vessel with polar capacity.





# 6. HYDRO-OCEANOGRAPHIC VESSEL WITH P<u>OLAR CAPACITY</u>



### **DESIGN:** Type ECHO HMS

### **DIMENSIONS:**



### CAPACITY:

- Estudios oceanográficos (física / química / geológica / biológica)
- 2. Levantamientos hidrográficos.
- Clase Polar PC-7: Navegación en verano u otoño en hielo delgado del primer año que puede incluir trozos de hielo viejo
- 44 Apoyo logístico a la estación científica Qantártica
  - Operaciones con helicóptero





## "A natural reserve devoted to peace and science"

