



Management Plan

for Antarctic Specially Protected Area N° 166 PORT-MARTIN, TERRE-ADÉLIE

1. Description of values to protect

Originally, the historical site of Port-Martin was designated as Historical Monument N° 46, proposed by France, in Recommendation XIII-16 (Brussels, 1985).

Brief historical summary

The building of a base in Terre-Adelie was programmed as Expedition TA21's main task. This expedition left Brest (France) in November 1948 and reached the pack ice on February 11, 1949. Due to unfavorable ice conditions, it was unable to come ashore.

A new expedition, named TA3, succeeded on January 18, 1950 and on January 20, the final site was selected for the construction of the new base. The site took the name of Port-Martin as a tribute to J.-A. Martin, a member of the expedition who died on board. A team of 11 men, under the leadership of André-Franck Liotard, raised the main building – a pre-cut wood frame, with oblique relieving posts – and then built several annexes to house mainly scientific activities (magnetism, geodesy, ionospheric sounding, atmospheric optics, biology, etc.) as well as meteorology. Radio transmission antennae and wind machine towers were raised in the open spaces in between these buildings, along with an emergency shelter.

On January 6, 1951, the 17 members of the T4 relief crew, under the leadership of Michel Barré, came ashore. They enlarged the main building while continuing and developing scientific activities.

Relief team T5, under the command of René Garcia, reached Port-Martin on January 14, 1952, while a reduced crew, led by Mario Marret (4 men in total), were building a secondary base on Petrel Island (Pointe Geologie Archipelago).

During the night of January 23 to 24, 1952, the main building at the Port-Martin base was destroyed by fire. The supply boat, which was still nearby, was able to evacuate the men, three of which joining the original four that were dropped off at Pointe Geologie where they joined Mario Marret's team. During that wintering season, the seven men of this rebuilt team carried out a raid on Port-Martin to recover various supplies – including the two weasels – which had been left there.

Since then, only limited visits of at most a few hours were made to this base which is presumed to have been left as it was.

Building group

Today, what remains in Port-Martin are the ancillary buildings, including the shelter, a weather shelter and the coal and supply sheds. With snow covering the remains of the main station year-round, it is difficult to say precisely what was left after the fire. An archeological mission needs to be sent there to inventory what remains of the buildings and the furniture they contained. But the ancillary buildings, witnesses to the organization of a spatial base in Antarctica in the beginning of the 1950s, by themselves justify special protection.

In fact, Port-Martin is the perfect illustration of a base in Antarctica in the immediate post-war period, and its creation corresponds to the project of an International Geophysics Year. Yet, while it kept dog-sled transport from the Heroic Era, it borrowed Weasels (caterpillar tractors) from the Mechanization Era. Its goals, however, were resolutely part of the Scientific Era since, in spite of its brief actual operation, some progress in the study of earth sciences, weather and ionosphere are associated with it. As such, the site has a historical and cultural importance.

The short duration of its operation left a "snapshot" of this history. No change – except for some superficial pillage – has altered its original implantations.

Furthermore, for future archeology, the site represents an optimal site to design methods and techniques adapted to extreme archeological investigation conditions. The site is partially covered in a snow that needs to be considered, conceptually, as a specific type of sediment. From the Port-Martin deposit, archeologists should be able to promote new concepts as well as a methodology adapted to it. These could be used for future archeological study of other sites in Antarctica.

Therefore, Port-Martin must be considered not only as a historical bridge site, but also as an original archeological field, the exploitation and evaluation of which will require the design of specific, exemplary techniques, a new, privileged area for international cooperation in the spirit of the Treaty.



2. Goals and objectives

The goal of this management plan is to ensure the protection of the area and of its characteristics in order to preserve its proven and potential values. Its main objectives can be spelled out as follows:

- Avoid the degradation of the area's values as well as potential risks to them, by
- Preserving the site's integrity, including though strict access regulation until specialists formulate appropriate investigation methods for its development and its opening to the greatest number, and
- Designing a conservation plan *a minima* for the surface artifacts (antenna and wind machine towers, shelter, weather and tower shelter, etc.)

3. Management activities

- A program of *in situ* conservation and maintenance of superstructures, including the shelter;
- A study program characterized by constant monitoring of artifacts' and structures' condition as well as of the factors which affect them:
 - through a study of weather data recorded during decades by an *in situ* automatic American station,
 - through automatic sensors transmitting relevant data on the various levels of snow stratigraphy
- An on-site and off-site conservation program for artifacts, including a surface objects inventory through :
 - cartography and recording of the disposal of historical artifacts around the shack,
 - recording other relevant historical data,
 - preparing a SIG
- National Antarctic program directors operating in the area or those interested in the area will carry out consultations to ensure application of these provisions.

4. Designation duration

The area shall remain an Antarctica's Specially Protected Area (ASPA) for an undetermined period.

5. Document, maps and reference photography

Annex A: Port-Martin – Plan des environs de la base (originellement) au 1/300 par Paul Perroud, in Vallette Y. et J. Dubois, Terre-Adélie 1950-1952, Expéditions Polaires Françaises, Résultats techniques N° G.III, 53, Paris 1955.

Annex B: Carte Expéditions Polaires Françaises – Expéditions antarctiques 1948 – 1953: « Terre-Adélie – Port-Martin », 1/20 000

Annex C: Plan levé de 1950 à 1952 par les Expéditions antarctiques françaises – 1/5000

6. Definition of the area

The area is centered on a point (geographic coordinates: 66°49'S/141°23'E) which corresponds to the marker known as the "Astrolabe pillar" located on the left hand side of the "refuge shelter" (see map in Annex A). The exact geographic points delineating the polygon, as described below and presented on the map in Annex A, may be added to the description of the area as soon as it has been surveyed by an ad hoc expedition.

6(i) Limits of the proposed area

These limits are defined by the polygon drawn on the plan (annex A, scale 1/300). New maps will need to be drawn in priority in order to tag the polygon's angles to the GPS differential.

In order to delineate the designated area, the polygon's angles lie on the outside boundary of the remains, going beyond them by approximately 6 metres. The remains are as follows:

- to the north: the pole of the ionospheric sensor's Trombone antenna, the wind machine tower NNW angle, the workshop's NNW angle, the workshop's ESE angle;
- to the west: the workshop's WSW angle, the supply shed's W angle, the wind machine tower's south angle;
- to the south: the wind machine tower's south angle, the meteorological tower's SSW angle, the pluviometer location (cote 20,60);
- to the east: the pluviometer (cote 20,60), the weather shelter's E angle, the pole of the ionospheric sensor's Trombone antenna.

Furthermore, the area includes a 200 m-wide band running parallel to the coast line as represented on the IGN 1/20 000 map (Annex B) and from Sphinx Mountain to Bold Mountain (Annex C) on the 1/5000 map (Drawn by the French Polar Expeditions in 1950/1952). Coastal presence of several landing points and, underwater, of a known shipwreck.

6(ii) Reserved access area inside the area

The area that falls within the limits defined above and which includes the marine band shall be declared a reserved access area. All buildings and furnishing artifacts within the area are presumed to be of historical origin. The reserved access duration shall be limited to the end of the inventory work and expert evaluation of the land, onsite items of value and the archeological field.

6(iii) In-area buildings

All buildings inside the area are considered to be of historical origin.

6(iv) Location of other protected areas within direct proximity of the area designated

There are no other protected areas within direct proximity of the area offered for classification.



7. Permit criteria

Access to the reserved area is forbidden without a permit delivered by a competent national authority. Such permits may come with general and specific conditions.

The general conditions determining permit issuance include, in order of priority:

- activities relating to experts' tasks (topographers and archeologists and related sciences specialists) specifically entrusted with necessary surveys and studies for a better site knowledge and improvement of the historical site management plan;
- preservation, consolidation, conservation and maintenance operations of surface structures;
- installation and maintenance of automatic stations that may be set up there and future repairs thereto;
- finally, all management activities aimed at reaching the plan's objectives.

At first, tourism-related activities and educational and leisure activities shall be limited until completion of the phases of archeological study and high structure's possible reinforcement operations (safety measures and historical monuments preservation). The duration of this limited access period shall be left up to the discretion of the competent national authority.

A granted permit shall be valid for duration not to exceed the time required for execution of the tasks for which it was issued.

7(i) Access to the area and travels within

For people with a permit, access points or areas shall be through land sighting point(s) defined according to several scenarios (including staff and/or equipment landing, most common weather conditions in the area, etc.). The limits of these approach points shall be defined following the best advice provided by sailors, pilots and conservation consultative bodies (archeologists and heritage protection specialists).

They shall also be based on the hypothesis that as long as archeological works have not been carried out, any substantial increase of the number of visitors would be deleterious to those values to be protected.

Aircraft landings shall take place outside the area on points which, should they be in very close proximity, should be chosen after consulting pilots and heritage conservation specialists. These people's opinion shall be based, in particular, on the fact that landing too close to site buildings

- could be dangerous for equipment and crews (lifting surface artifacts),
- would disrupt space distribution of surface artifacts,
- would risk damaging existing structures by spraying surface items and ice particles.

Therefore, landings and approaches shall take place on landing and approach sites designated in agreement between pilots and heritage agents. Their definition through examination of ground conditions is part of the heritage site management plan.

Land vehicles are not allowed inside the area except for light vehicles that may be required for scientific and/or archeological artifacts conservation work. In such case, these vehicles' gross weight shall not exceed 1.2 tons and they will need to be fitted with low-pressure tires, preferably adapted to snow and névé, or with tracks made of rubber or similar flexible materials.

7(ii) Authorized activities within the area

Among activities authorized within the area are heritage and archeological identification visits, visits for restoration, preservation and/or protection purposes, including installation, service and maintenance of automated surveying and/or remote transmission equipment.

Permit holders must make sure that their visit will not disrupt any program underway.

7(iii) Building installation, modification or removal

Any surface anthropogenic (man-made) remnant and a *fortiori* any underground item is assumed to form part of the historical heritage.

No remains and no item belonging to historical structures may be removed from the site, except for restoration and/or preservation purposes, and in such cases, only after issuance of an explicit authorization by the relevant authority.

No structure or scientific equipment may be set up in the area except for essential scientific reasons or for management activities authorized by the relevant authority.

7(iv) Camp location

Authorized visitors shall define a camp area according to local conditions and the requirements of their work. For each campaign, ground boundary of the various camp modules shall be indicated on a small-scale map (1/2000 for instance). These maps shall be turned into the relevant issuing authority after each campaign.

7(v) Restrictions on materials and organisms authorized inside the area

- in compliance with the provisions of Annex II to the Madrid Protocol, live animals or plants, poultry products and by-products, including powdered eggs, may not be imported inside the area.
- chemical products are forbidden in the area, except those introduced for authorized scientific activities under the conditions spelled out in a permit. Any chemical must be taken out of the area at the end or prior to the end of the activities for which permits were issued.
- depositing fuels, foodstuff or any other material is forbidden except when needed for those activities for which permits were issued. All introduced substances shall be removed as soon as they are no longer required. Permanent storage is forbidden.



7(vi) Collection or removal of items or materials inside the area not brought by the permit holder

Collection or removal of materials or items that were not brought inside the area by the permit holder is forbidden.

However, materials may be picked up or removed from the area for the sole purposes of restoration, preservation or heritage protection, or for scientific reasons in compliance with the objectives of the management plan, under a separate permit issued specifically for this purpose by the relevant authority.

7(vii) Waste elimination

All waste materials produced by working parties or visitors will need to be removed from the area.

7(viii) Measures needed to meet the management plan's goals and objectives

Area visits shall be strictly limited to scientific and management activities.

7(ix) Visit Reports

The Parties shall ensure that the main holder of each permit issued present to the relevant authority a report on activities carried out in the area. The Parties must keep in their archives a copy of these activities, and in the annual information exchange, they must provide a summary description of the activities carried out by people under their jurisdiction, with enough details to allow for a review of the management plan efficiency. In as much as possible, the Parties shall place the originals or the copies of these reports in archives accessible to the public in order to keep a usage log to be used in the management plan review and the area scientific use organization. Their posting on a dedicated website may be considered.



