

Artifact Context Report - 2021/10/08

Catalogue number / No de catalogue: 1972.0351.001 of/de 9 part(s)/pièces

Article / Nom de l'article: Recorder, ionospheric;;Sondeur ionosphérique

Model / Modèle:

Serial number / No de série:

Manufacturer / Constructeur:

Manufacturer address / Adresse du constructeur: Canada

Manufacturer Acronym / Acronyme de constructeur: Marconi

Date Manufactured / Date de fabrication: circa;;vers 1948

Measurements / Dimensions

Length;;longueur	152.0	cm
Width;;largeur	076.2	cm
Height;;hauteur	182.0	cm

Context - Function / Contexte - Fonction

Records on photographic film the virtual heights of reflection of the different regions of the ionosphere , for radio frequency pulse transmissions in the range 0.6 mc/s to 20 mc/s. (ref.1)

Context - Canada / Contexte - Canada

Equipment developed under contract, to specifications of Defence Research Board, radio physics laboratory, Ottawa. Wanted to place it in orbit with a satellite.

Context - Technical / Contexte - Technique

The transmitter sweeps all or part of the HF frequency range, transmitting short pulses. These pulses are reflected at various layers of the ionosphere, at heights of 100-400 km, and their echoes are received by the receiver and analyzed by the control system. The result is displayed in the form of an ionogram, a graph of reflection height (actually time between transmission and reception of pulse) versus carrier frequency. An ionosonde is used for finding the optimum operation frequencies for broadcasts or two-way communications in the high frequency range.

Groups / Groupes

Physics;;Physique

Categories / Catégories

Miscellaneous;;Divers

Sub-categories / Sous-catégories

