WDG-CAP.

ADDRESS ALL COMMUNICATIONS TO
LIGHTHOUSE INSPECTOR
BUFFALO, N.

DEPARTMENT OF COMMERCE
LIGHTHOUSE SERVICE

775

LIGHT
JUL24 1914
HOUSES

OFFICE OF INSPECTOR, 10TH DISTRICT
ROOM 304, FEDERAL BUILDING
BUFFALO, N. Y.

July 23, 1914.

Buffalo Bkw. N. End Lt.-Sta., N.Y.
Preliminary test of fog-signal.

Recd thro. test when Crocus is available. Plans & Mach. layout, detailed actual cost, descriptn & plant, data covering performance Photos etc desired for info of Bu

Hydrog.
~~Engr. Corps.~~
Mar. Engr.
Personnel
Accounts.
Contracts
Chf. Clk.
Dep. Commr.
Commr.

Commissioner of Lighthouses:

Referring to Bureau letter dated July 17, 1914, and previous correspondence relative to installation of diaphone fog-signal at the Buffalo Breakwater North End Light-Station, N. Y., this installation was given a preliminary trial July 16, 1914, at which time Mr. J. P. Northey of the Diaphone Signal Co., and an installation foreman of the Fairbanks-Morse Co., were present to witness and advise as to operating the plant. The installation was found in good operating condition barring minor defects such as leakages at pipe joints, etc., usual to first installations.

The signal was tried out daily, the keepers instructed in the operation of it, and July 21st it was put in Service Commission as per telegraphic notice to the Bureau.

The diaphone is believed a most effective signal; it has been plainly heard with the wind northwest at the site of the wreck of Light-Vessel No. 82, a distance of almost twelve miles.

The strength of the blast at that distance gives assurance of a greater range of audibility. The characteristic of two short blasts in rapid succession is also very distinctive.

The compressors operate well but with a vibratory effect on the structure which will be watched and reported on with recommendation in the future.

The contract with the Diaphone Signal Co. for the purchase of the equipment provides for a thirty day service test before payment. This period will be construed as beginning July 21, 1914.

This office will await the Bureau's advice in regard to such further tests or trials it may be desired to make. In case it should be desired to use the tender Crocus in connection with such tests, it may be stated that the Crocus will be placed in drydock in a few days and will not be available for about 10 days thereafter.

Bureau of Lighthouses, Washington.

July 29, 1914.

Returned to Lighthouse Inspector, Buffalo, New York. Take measures to make a thorough test of the diaphone installation as soon as the tender Crocus is available and submit full report to the Bureau. Also forward to the Bureau plans ~~of the~~ and layouts of the machinery, description of plant, with photographs, ~~and~~ data covering the performance of the installation, and detailed statement of the actual cost. Report also with reference to the vibrations of the structure when the compressors are running. Your views as expressed in next to the last paragraph are concurred in by the Bureau.

Acting Commissioner.