

**United States of America  
FEDERAL COMMUNICATIONS COMMISSION  
EXPERIMENTAL  
RADIO STATION CONSTRUCTION PERMIT  
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WI2XQJ

(Call Sign)

XC      FX MO

(Class of Station)

0029-EX-CR-2019

(File Number)

NAME Rutgers University Institute of Marine and Coastal Sciences

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(c) of the Commission's Rules

Station Locations

- (1) Brigantine (ATLANTIC), NJ - NL 39-22-44; WL 74-23-56
- (2) Brant Beach (OCEAN), NJ - NL 39-36-55; WL 74-11-54
- (3) Loveladies (OCEAN), NJ - NL 39-44-10; WL 74-07-00
- (4) Cape May (CAPE MAY), NJ - NL 38-56-33; WL 74-53-00
- (5) Sea Bright (MONMOUTH), NJ - NL 40-26-31; WL 73-58-50; MOBILE: , within 25 km
- (6) Siasconset (NANTUCKET), MA - NL 41-14-57; WL 69-58-20
- (7) Block Island (WASHINGTON), RI - NL 41-09-09; WL 71-33-06
- (8) Belmar (MONMOUTH), NJ - NL 40-11-07; WL 74-00-29
- (9) East Moriches (SUFFOLK), NY - NL 40-47-18; WL 72-44-43
- (10) Edgartown (DUKES), MA - NL 41-20-59; WL 70-31-36
- (11) North Wildwood (ATLANTIC), NJ - NL 38-59-26; WL 74-47-59
- (12) Ocean City (CAPE MAY), NJ - NL 39-13-06; WL 74-38-20
- (13) Amagansett (SUFFOLK), NY - NL 40-58-09; WL 72-07-26
- (14) Lewes (SUSSEX), DE - NL 38-47-41; WL 75-05-20
- (15) Upper Township (CAPE MAY), NJ - NL 39-11-56; WL 74-39-10
- (16) Seaside Park (OCEAN), NJ - NL 39-55-58; WL 74-04-21

This authorization effective February 01, 2019 and  
will expire 3:00 A.M. EST February 01, 2021

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Brigantine (ATLANTIC), NJ - NL 39-22-44; WL 74-23-56

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz   | FX            | 49K9P0N             | 40 W (ERP)       |                           |
| 4500 kHz        | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4600 kHz        | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4900 kHz        | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz   | FX            | 24K9P0N             | 45 W (ERP)       | 0.001 %                   |
| 13430 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13450 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13530 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 16100-16200 kHz | FX            | 99K5P0N             | 40 W (ERP)       |                           |

## Frequency Information

Brant Beach (OCEAN), NJ - NL 39-36-55; WL 74-11-54

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 13430 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13450 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13530 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 16100-16200 kHz | FX            | 99K9P0N             | 40 W (ERP)       |                           |

Loveladies (OCEAN), NJ - NL 39-44-10; WL 74-07-00

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |
| 4500 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4550 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4800 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4900 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |

## Frequency Information

Loveladies (OCEAN), NJ - NL 39-44-10; WL 74-07-00

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 5250-5275 kHz | FX            | 24K9P0N             | 45 W (ERP)       |                           |

Cape May (CAPE MAY), NJ - NL 38-56-33; WL 74-53-00

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |
| 4580 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4800 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4900 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz | FX            | 24K9P0N             | 45 W (ERP)       | 0.001 %                   |

Sea Bright (MONMOUTH), NJ - NL 40-26-31; WL 73-58-50; MOBILE: , within 25 km

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |

## Frequency Information

Sea Bright (MONMOUTH), NJ - NL 40-26-31; WL 73-58-50; MOBILE: , within 25 km

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 4600 kHz        | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4800 kHz        | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4860 kHz        | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz   | FX            | 24K9P0N             | 40 W (ERP)       |                           |
| 13430 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13450 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13530 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 16100-16200 kHz | FX            | 99K9P0N             | 40 W (ERP)       |                           |
| 24450-24650 kHz | FX            | 199KP0N             | 40 W (ERP)       |                           |
| 25100 kHz       | FX            | 170KP0N             | 40 W (ERP)       |                           |

## Frequency Information

Sea Bright (MONMOUTH), NJ - NL 40-26-31; WL 73-58-50; MOBILE: , within 25 km

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 25500 kHz       | FX            | 170KP0N             | 40 W (ERP)       |                           |
| 26200-26420 kHz | FX            | 200KP0N             | 40 W (ERP)       |                           |

Siasconset (NANTUCKET), MA - NL 41-14-57; WL 69-58-20

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |
| 4500 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4800 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz | FX            | 24K9P0N             | 40 W (ERP)       |                           |

Block Island (WASHINGTON), RI - NL 41-09-09; WL 71-33-06

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |

## Frequency Information

Block Island (WASHINGTON), RI - NL 41-09-09; WL 71-33-06

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4500 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4550 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz | FX            | 24K9P0N             | 40 W (ERP)       |                           |

Belmar (MONMOUTH), NJ - NL 40-11-07; WL 74-00-29

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 13430 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13450 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13530 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 16100-16200 kHz | FX            | 99K9P0N             | 40 W (ERP)       |                           |

## Frequency Information

East Moriches (SUFFOLK), NY - NL 40-47-18; WL 72-44-43

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |
| 4500 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4800 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz | FX            | 24K9P0N             | 40 W (ERP)       |                           |

Edgartown (DUKES), MA - NL 41-20-59; WL 70-31-36

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |
| 4550 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 4900 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz | FX            | 24K9P0N             | 40 W (ERP)       |                           |

## Frequency Information

North Wildwood (ATLANTIC), NJ - NL 38-59-26; WL 74-47-59

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 13430 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13450 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13530 kHz       | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 16100-16200 kHz | FX            | 99K9P0N             | 40 W (ERP)       |                           |

Ocean City (CAPE MAY), NJ - NL 39-13-06; WL 74-38-20

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 12140 kHz | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13430 kHz | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13450 kHz | FX            | 100KP0N             | 40 W (ERP)       |                           |
| 13530 kHz | FX            | 100KP0N             | 40 W (ERP)       |                           |

## Frequency Information

Amagansett (SUFFOLK), NY - NL 40-58-09; WL 72-07-26

| Frequency     | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|---------------|---------------|---------------------|------------------|---------------------------|
| 4438-4488 kHz | FX            | 49K9P0N             | 40 W (ERP)       |                           |
| 4600 kHz      | FX            | 55K0P0N             | 40 W (ERP)       |                           |
| 5250-5275 kHz | FX            | 24K9P0N             | 40 W (ERP)       |                           |

Lewes (SUSSEX), DE - NL 38-47-41; WL 75-05-20

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 24450-24650 kHz | FX            | 170KP0N             | 40 W (ERP)       |                           |
| 25100 kHz       | FX            | 170KP0N             | 40 W (ERP)       |                           |
| 25500 kHz       | FX            | 170KP0N             | 40 W (ERP)       |                           |
| 26200-26420 kHz | FX            | 170KP0N             | 40 W (ERP)       |                           |

## Frequency Information

Upper Township (CAPE MAY), NJ - NL 39-11-56; WL 74-39-10

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 13450-13550 kHz | FX            | 99K9P0N             | 45 W (ERP)       |                           |
| 16100-16200 kHz | FX            | 99K9P0N             | 45 W (ERP)       |                           |

Seaside Park (OCEAN), NJ - NL 39-55-58; WL 74-04-21

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 13450-13550 kHz | FX            | 99K9P0N             | 45 W (ERP)       |                           |
| 16100-16200 kHz | FX            | 99K9P0N             | 45 W (ERP)       |                           |

## Special Conditions:

- (1) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at [https://www.sbe.org/sections/freq\\_local.php](https://www.sbe.org/sections/freq_local.php) to find the appropriate coordinator.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (5) Operation is subject to prior operation with the local SBE in 26200-26420 kHz band.
- (6) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number NA16NOS0120020. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.