

# HHW Helps Police Department Improve Officer Safety by Solving Radio System Interference Problem

## Industry

Rumson is a borough in Monmouth County, New Jersey, United States and is part of the New York Metropolitan Area.

## Challenges

The Sergeant put in charge of the radio system that is the primary communications method for its public safety first responders found a mess. Their FCC licenses needed to be updated, they needed to narrowband their radio system. Worst of all the wideband radio system was experiencing debilitating interference from a large northern New Jersey police department who was legally licensed on their input channel. To make matters worse, their incumbent consultant just walked away from the engagement.

## How HHW Helped

HHW's teams addressed each of Rumson's issues. We first looked at all of Rumson's licenses from the Federal Communications Commission. We ensure that all of the information was updated and technically correct. While we were in the process of correcting these issues, we also made all of their licenses narrowband compliant.

Next, we tackled the interference issue. We worked with the north New Jersey Police department to have them turn down their repeater. Although this helped alleviate the issue somewhat, it still was not acceptable by public safety standards. So, instead of trying to fight it out with

the other agency, HHW worked with the APCO and the FCC to obtain and license a new frequency for Rumson.

However, after running technical studies of the current transmitter location, we discovered that the radio system had many areas where it simply didn't work. After evaluating the locations that Rumson had access to, HHW recommended moving the transmitter to a new location. After running some theoretical models and obtaining a special temporary authorization from the FCC for testing the new repeater location, HHW prepared all of the paperwork and filed it with the FCC.

## Their Results

Once Rumson received its new license and its radio vendor installed the equipment to the specs that HHW recommended the Rumson system has been working great.

- The interference is completely gone, the radio system coverage now works as it is expected to and all of their FCC licensing is up-to-date.
- In fact, during the aftermath of Super Storm Sandy, the neighboring jurisdiction's police department ended up having to use Rumson's radio system as their was out of commission as a result of the storm.

“interference is completely gone, the radio system coverage now works as it is expected to”

all FCC licensing is up-to-date  
**100%**

worked with  
**APCO**  
and  
**FCC**