Auxiliary Radio Communication System (ARCS)

AKF is an industry leader in the design and construction administration of Auxiliary Radio Communication Systems (ARCS) in all types of buildings. AKF has also served the FDNY in an advisory capacity as part of a committee developing new installation and maintenance standards for these systems.

Why ARCS exist:

Following the terrorist attacks at the World Trade Center on Sept. 11, 2001, the Fire Department realized that they needed to improve their ability to communicate from a central control location in each building lobby to firefighters working throughout the building.

How ARCS evolved:

Two types of systems have evolved to address this need:

1. A Radiating Coaxial Cable System, (often referred to as a leaky coax system) which acts like an antenna throughout the building and allows communication from the lobby console to and from firefighters working throughout the building.

2. A Radio Repeater System, which uses strategically-placed repeater equipment located throughout the building to amplify fire department radio transmissions.

ARCS in the 2014 Building Code:

As of October 1st of this year, the 2014 NYC building code takes effect, making it mandatory for ARCS systems to be in place for new high-rise buildings in all occupancy groups (with the possible exception of those buildings that can prove adequate radio coverage without these systems installed); and for certain existing high-rise buildings that replace their fire alarm systems.

For more information, please contact:

Mr. Charles Joyce, PE
Director, Fire & Life Safety
AKF Group, LLC
T: 212-626-0146 / CJoyce@AKFGroup.com