

# **Emergency Services**

Southern Idaho, USA

**Case Study** 



#### THE CUSTOMER

Fire and Police services in four Southern Idaho counties - Lincoln, Gooding, Jerome and Twin Falls – needed to improve communications and reduce costs by consolidating to a single despatch system. Radio users are spread across a wide area.

#### **SITUATION**

The users of the emergency services' mobile radios are spread across a large area, but required a system that gave them all access to the same radio channel. They identified that a simulcast system - that simultaneously broadcasts from many transmitters on the same frequency - would deliver what they needed.

However, simulcast systems can be expensive to buy and maintain because precise control of the transmitters is required to receive an undistorted audio signal in coverage overlap areas. Over time the transmitter frequencies drift and the audio signals that modulate the transmitters have to be corrected.

# RESPONSE

The Fire and Police Services chose a TaitNet Quasi-Sync system for its key advantage over traditional technology: the Tait system uses advanced computer technology to virtually eliminate the maintenance. TaitNet QS uses high stability oscillators to maintain a very stable transmitter frequency.

"Tait Quasi-Sync is one of the best systems I have seen. The Southern Idaho 911 system is exceeding expectations.

The users are real happy.
Not only was the Tait QuasiSync system less expensive to
buy, it will also cost less
to maintain."

Joe Blaschka, Emergency Services' Consultant Adcom Engineering



Tait North America, in conjunction with dealer Teton Communications, installed a four-channel system with a total of 20 sites for the emergency services in Southern Idaho:

- One Police data channel (five sites)
- One Fire voice despatch channel (six sites)
- ▶ One Police voice despatch channel northern area (five sites)
- ▶ One Police voice despatch channel southern area (four sites)
- ▶ The network uses 45 Tait base stations/repeaters across the four counties

#### **OUTCOME**

The new system delivers high audio quality to areas not previously covered. Digital signal processing-based Line Equalizer Modules that route audio to each transmitter, analyze the characteristics of the neighboring transmitter and automatically adapt their own signal to match.

#### **MORE INFORMATION**

For news, product specifications, comprehensive technical information and contact details of your nearest Tait service facility, please visit www.taitradio.com

### **CUSTOMER PROFILE**

Emergency services in Southern Idaho.

## **APPLICATIONS**

► Tait Quasi-Sync system

# **BUSINESS BENEFITS**

- ▶ High audio quality
- ▶ Reliable communications
- Reduced spectrum costs
- Advanced computer technology greatly reducing servicing
- ▶ Reduced maintenance costs

#### **PRODUCTS USED**

- ► TaitNet Quasi-Sync
- ▶ 45 base stations/repeaters

Tait is a global leader in designing, delivering and managing innovative communication solutions that help utilities and public safety organizations to keep the lights on and communities safe.

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