



# 2014 Public Safety Radio Brief

Billings Police Department

Billings Fire Department

Billings Airport Rescue Firefighting

# Current Radio Subscriber

- Current Subscriber Capabilities
  - EF Johnson design and build
    - The EF Johnson 5100 Portable is similar in design to the Motorola XTS5000
    - The EF Johnson 5300 Mobile is a proprietary design

# Current & Future Requirements

- P25 CAI (Common Air Interface)
  - Many manufacturers claim to have P25 but deploy a proprietary version
    - Resulting in communication issues
    - Loss of purchased capability options
  - The radio must be reliable in extreme circumstances
    - Changes in temperature
    - Survive drops from various heights
    - Immersible in water
    - Many manufactures charge extra for these options
- Transmission Clarity
  - In all types of environments
- Warranties and replacement parts accessibility

# Selection Criteria

- **Response & Approach of vendor**
  - Did vendor reply to BPD and set up test units or demonstrations
  - Did vendor assist in developing a solution with BPD
  - Is vendor interested in a long term relationship or is this a quick sale
- **Financial Responsibility**
  - Does the solution meet the business requirements of the BPD
  - Is the solution economically viable for the long term, ROI
- **User Interaction**
  - Do the testing officers and personnel recommend the product
  - Is there a noticeable difference in reliability and quality of the product when compared to others

# Tait Solution

- Benefits of Tait Solution
  - Extended Warranty (10 years with replacement batteries at years 3, 6, 9 and the option for replacement of the entire radio and accessories between years 5 and 8)
  - Reliability (drop tested, immersed in water, exposed to high and low temperatures)
    - BPD conducted these tests on site and the radios passed
    - Tait provided 5 portables (3X TP9100 & 2X TP9400) and for testing
    - Tait then provided 4 mobile radios (TM9100)
    - Radios were well received and liked by the testing officers
  - Compatibility (Meets or exceeds P25 CAI open standard)
  - Scalability (Can be put into service very quickly and will react to service disruptions using built in software features)
  - The recommended portable radio is the TP9400 which has several options (GPS, encryption, P25 Phase 2 Capabilities and Bluetooth) that will ensure the future proofing of the radio
  - Added benefit of the ability to design and select subscriber units that have been tested and meet the needs of public safety, instead of a radio that meets general needs

# Final Cost Comparison

Motorola			EF Johnson			Tait		
XTL 5000	XTS 5000	APX7500	APX7000	5300 ES	Viking VP600	TM9455	TP9455	
Mobile	Portable	Mobile	Portable	Mobile	Portable	Mobile	Portable	
\$3,753.09	\$3,721.69	\$4,024.20	\$3,885.12	\$3,624.00	\$2,220.00	\$2,149	\$2,344	
Base price	Base price	Base price	Base price	Base price	Base price	Base price	Base price	
w/o encryption	w/o encryption	w/o encryption	w/o encryption	w/o encryption	w/o encryption	w/o encryption	w/o encryption	

After negotiations Tait offered several additional options and the "buy back" of the EF Johnson products. The resulting cost is below.

Tait (After Negotiations)		
TM9455	TP9455	
Mobile	Portable	
<b>\$1,465.00 Base price</b>	<b>\$1,294.00 Base price</b>	