



DEPARTMENT OF PUBLIC WORKS

Quality, Excellence, Innovation

Raul M. Rojas
DIRECTOR

DATE: January 14, 2015

TO: MERA Executive Board

FROM: Craig Tackabery, Operations Officer

SUBJECT: AGENDA ITEM C-2: PROPOSED REVISION TO
ADDITIONAL RADIOS POLICY AND PROCEDURES – NEXT
GEN RADIO SPECIFICATIONS

Administration
PO Box 4186
San Rafael, CA 94913-4186
415 473 6528 T
415 473 3799 F
415 473 3232 TTY
CRS Dial 711
www.marincounty.org/pw

Recommended Action: Review the Policy and Approve Amendments to Specify Which Radio Option is Required for Additional Radios

Accounting

Airport

Background: On November 12, 2014, your Board approved amendments to the Additional Radio Policy and Procedures. At that meeting, your Board requested additional information regarding requiring that radios added to the current system, also be able to work on the Next Gen system.

Building Maintenance

Capital Projects

Certified Unified Program
Agency (CUPA)

Attached are the portable and mobile radio ordering specification sheets that were finalized at the March 5, 2014 MERA Operational Issues Working Group meeting. Three options were provided for portable and mobile:

Communications
Maintenance

1. Basic APX dual band, both bands operational
2. Basic APX dual band, one band operational, second upgradable
3. Basic APS single band

County Garage

Disability Access

For portable radios, the Option 1 single band can function on the existing MERA T-Band system. For an extra \$698 plus tax, an Option 2 portable radio can be used on the T-Band system now, and then an upgrade can be purchased later for \$750 plus tax to be used on the 700 MHz system. For an extra \$1,448 plus tax, an Option 3 portable radio can be used on both the T-Band and 700 MHz systems.

Engineering & Survey

The Policy provides that the requesting agency pay for the radios. If Option 2 is selected, it is recommended that your Board determine who pays for the future upgrade cost. Attached is a draft policy providing for Option 3 for your review.

Flood Control &
Water Resources

Land Development

Purchasing

Real Estate

Reprographic Services

On December 3, 2014, the MERA Operational Issues Working Group reviewed these options. It was noted that Option 1 can provide use of the 700 MHz mutual aid channels now, which would be a benefit. The additional upfront cost to purchase a dual band radio is not an operational issue; therefore the Working Group did not deliberate the options.

Road Maintenance

Stormwater Program

Transportation &
Traffic Operations

Waste Management

Attachments:

APX Portable and Mobile Procurement Options

Marin Emergency Radio Authority Additional Radio Policy and Procedures

Marin Emergency Radio Authority

Additional Radios Policy and Procedures

Purpose: To establish operational and administrative requirements for the addition of member and non-member mobile and portable radios for use on the MERA system.

Policy: The Marin Emergency Radio Authority operates a radio system that facilitates essential communications between and among its member agencies and non-member public and private users that serve and support all facets of public safety. The MERA Operations Officer will review all requests for additional radios and make a recommendation to the Executive Board.

Procedures:

1. A member or non-member agency must submit a written request for additional radios to the Operations Officer for his review and recommendation to the Executive Board. Non-member agencies requests must be accompanied by a letter of sponsorship from a MERA member. The Operations Officer will schedule the request for review by the MERA Operational Issues Working Group, which will consider compliance with the policy, and will clarify items such as the talk group to use, training, oversight, and dispatch center role.
2. If a request is deemed urgent by the Operations Officer, he will make his determination and report back to the Executive Board with his decision.
3. Public and private agencies not members of the Authority may use the radio system on a fee basis upon formal request and approval of the Operations Officer and Executive Board. The fee schedule for the use of the system by non-members will be reviewed and approved annually by the Governing Board as part of the annual operating budget.
4. Review of requests for additional radios will take into account the affects on system capacity and radio usage.
5. The requesting agency pays for the additional mobile and portable radios, and all costs associated with programming and alignment. Training is required for all users before the radios are released for use, based on the approved end user curriculum. Training can be provided by the agency if they have an approved trainer on staff, or provided through Marin County from the MERA Trained Trainers list, with all costs borne by the agency.

5-6. In anticipation of MERA's upcoming transition to a Next Generation 700 MHz P25 Phase 2 system, and the need for radios to work on the current T-Band frequencies, all Additional Radios added to the MERA system shall be Basic APX dual band, both bands operational.

| I. BASIC APX DUAL BAND PORTABLE, BOTH BANDS OPERATIONAL | | | |
|--|---|--|----------------|
| <u>Part/Option #</u> | <u>Description</u> | | <u>Cost</u> |
| H97TGD9PW1AN | APX7000 DIGITAL PORTABLE RADIO | | 2097.75 |
| QA00569AA | Add 700/800 MHz Primary Band | | 0 |
| QA00576AA | Add UHF Range 2 Secondary Band / <i>Primary?</i> | | 0 |
| QA00579AA | Enable Dual Band Operation | | 750 |
| | Phase II Capability | | included |
| QA00577AA | Add Front Display with Full Keypad | | 375 |
| Q806BK | Add ASTRO Digital CAI Operation | | 386.25 |
| H38BS | Add Smartzone Operation | | 1125 |
| | Smartzone Omni-link - Q173 included with Option Q361 | | included |
| Q361AN | Add P25 9600 Baud Trunking | | 225 |
| QA01749AB | Add SW Key Supplemental Data | | 0 |
| | DES, DES-XL Encryption Capability | | included |
| | Hi-Cap Battery [NNTN7038 STD battery] | | included |
| | GCAI Dustcover | | included |
| GA00232AC | Add 3 Year Service | | 150 |
| | Basic Dual Band Radio, Both Bands Operational: | | <u>5109.00</u> |
| ADDITIONAL OPTIONS | | | |
| <u>Part/Option #</u> | <u>Description</u> | | <u>Cost</u> |
| Q625AW | Enable DES,DES-XL Encryption | | <u>449.25</u> |
| H869 | ENH: MULTIKEY | | <u>247.5</u> |
| QA00580AA | Enable Phase II Operation | | 300 |
| PMLN5324 | Leather Case with Swivel and Strap [with NNTN7038 <u>size</u> battery] | | <u>52</u> |
| H64BC and H499 | Waterproof Yellow Housing | | <u>206.25</u> |
| H499 | Waterproof Black Housing | | <u>187.5</u> |
| PMLN5322 | Nylon carrying case for waterproof [with NNTN7038 <u>size</u> battery / not waterproof] | | 37.6 |
| PMMN4069A | Remote speaker with mic, coiled cord & ear jack | | <u>87.99</u> |
| | Commander Speaker Microphone | | N/A |
| NNTN7080A | Single unit charger | | <u>99.99</u> |
| NNTN7065B | Multi-unit (6) heavy duty charger | | <u>669.8</u> |
| NNTN7624 | Vehicular charger | | <u>331.5</u> |
| NNTN7038 | Spare battery, ultra-high capacity | | <u>112</u> |
| HLN6875 | Spare belt carrying clip | | <u>9.6</u> |
| RLN6480 | Commport earpiece with mic & adaptor | | <u>335.16</u> |
| | Breathing apparatus interface | | N/A |
| BDN6783 | Portable radio earpiece jack adaptor | | <u>58.39</u> |
| PMLN6130A | Earpiece, beige with jack | | <u>97.59</u> |
| NTN8821 | Earpiece Maintenance Kit NTN-8021 | | 36.8 |
| | CVA system | | N/A |
| | Power Amp for CVA | | N/A |

| | | | |
|--------------------------|--------------|--|-----------------|
| | | Disguise Antenna for CVA | <u>N/A</u> |
| QA00782 | | ADD: ENABLE INTERNAL GPS OPERATION | <u>75</u> |
| Q947 | | ADD: RADIO PACKET DATA - IV&D | <u>150</u> |
| QA00583 | | ADD: BLUETOOTH SOFTWARE | <u>112.5</u> |
| RLN6486A | | ACCESSORY KIT, FIREMAN'S RADIO STRAP | <u>29.6</u> |
| RLN6487A | | ACCESSORY KIT, FIREMAN'S RADIO STRAP, XL | <u>32</u> |
| RLN6488A | | ACCESSORY KIT, ANTI-SWAY STRAP | <u>12</u> |
| APX7000XE OPTIONS | | | |
| | H49TGD9PW1AN | APX7000XE DIGITAL PORTABLE RADIO | <u>2550</u> |
| | NNTN8092 | NEW STANDARD BATTERY INCLUDED WITH XE OPTION | <u>included</u> |
| | NNTN8092 | SPARE BATTERY HIGH CAPACITY | <u>112</u> |
| | NNTN8111B | LEATHER CASE WITH SWIVEL AND 2.5 CLIP | <u>52</u> |

| ii. BASIC APX DUAL BAND PORTABLE, ONE BAND OPERATIONAL SECOND UPGRADABLE | | | |
|---|--|----------------|--|
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> | |
| H97TGD9PW1AN | APX7000 DIGITAL PORTABLE RADIO | 2097.75 | |
| QA00569AA | Add 700/800 MHz Primary Band | 0 | |
| QA00576AA | Add UHF Range 2 Secondary Band | 0 | |
| | Phase II Capability | included | |
| QA00577AA | Add Front Display with Full Keypad | 375 | |
| Q806BK | Add ASTRO Digital CAI Operation | 386.25 | |
| H38BS | Add Smartzone Operation | 1125 | |
| | Smartzone Omni-link - included with Option Q361 | included | |
| Q361AN | Add P25 9600 Baud Trunking | 225 | |
| QA01749AB | Add SW Key Supplemental Data | 0 | |
| | DES, DES-XL Encryption Capability | included | |
| | Hi-Cap Battery | included | |
| | GCAI Dustcover | included | |
| GA00232AC | Add 3 Year Service | 150 | |
| | Basic Dual Band Radio, One Band Operational: | 4359.00 | |
| <u>ADDITIONAL OPTIONS</u> | | | |
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> | |
| Q625AW | Enable DES,DES-XL Encryption | <u>449.25</u> | |
| H869 | ENH: MULTIKEY | <u>247.5</u> | |
| QA00579AA | Enable Dual Band Operation | <u>750</u> | |
| QA00580AA | Enable Phase II Operation | <u>300</u> | |
| PMLN5324 | Leather Case with Swivel and Strap [with NNTN7038 size battery] | <u>52</u> | |
| H64BC and H499 | Waterproof Yellow Housing | <u>206.25</u> | |
| H499 | Waterproof Black Housing | <u>187.5</u> | |
| PMLN5322 | Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] | <u>37.6</u> | |
| PMMN4069A | Remote speaker with mic, coiled cord & ear jack | <u>87.99</u> | |
| | Commander Speaker Microphone | N/A | |
| NNTN7080A | Single unit charger | <u>99.99</u> | |
| NNTN7065B | Multi-unit (6) heavy duty charger | <u>669.8</u> | |
| NNTN7624 | Vehicular charger | <u>331.5</u> | |
| NNTN7038 | Spare battery, ultra-high capacity | <u>112</u> | |
| HLN6875 | Spare belt carrying clip | <u>9.6</u> | |
| RLN6480 | Commport earpiece with mic & adaptor | <u>335.16</u> | |
| | Breathing apparatus interface | N/A | |
| BDN6783 | Portable radio earpiece jack adaptor | <u>58.39</u> | |
| PMLN6130A | Earpiece, beige with jack | <u>97.59</u> | |
| NTN8821 | Earpiece Maintenance Kit NTN-8021 | <u>36.8</u> | |
| | CVA system | N/A | |

| | | | |
|--------------------------|--------------|--|-----------------|
| | | Power Amp for CVA | <u>N/A</u> |
| | | Disguise Antenna for CVA | <u>N/A</u> |
| | QA00782 | ADD: ENABLE INTERNAL GPS OPERATION | <u>75</u> |
| | Q947 | ADD: RADIO PACKET DATA - IV&D | <u>150</u> |
| | QA00583 | ADD: BLUETOOTH SOFTWARE | <u>112.5</u> |
| | RLN6486A | ACCESSORY KIT,FIREMAN'S RADIO STRAP | <u>29.6</u> |
| | RLN6487A | ACCESSORY KIT,FIREMAN'S RADIO STRAP, XL | <u>32</u> |
| | RLN6488A | ACCESSORY KIT,ANTI-SWAY STRAP | <u>12</u> |
| APX7000XE OPTIONS | | | |
| | H49TGD9PW1AN | APX7000XE DIGITAL PORTABLE RADIO | <u>2550</u> |
| | NNTN8092 | NEW STANDARD BATTERY INCLUDED WITH XE OPTION | <u>included</u> |
| | NNTN8092 | SPARE BATTERY HIGH CAPACITY | <u>112</u> |
| | NNTN8111B | LEATHER CASE WITH SWIVEL AND 2.5 CLIP | <u>52</u> |

| III. BASIC APX SINGLE BAND PORTABLE | | | |
|--|---|----------------|--|
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> | |
| H98SDH9PW7AN | APX6000 UHF R2 MODEL 3.5 PORTABLE | 1950 | |
| | Add UHF Range 2 Band | included | |
| | Phase II Capability | included | |
| | Add Front Display with Full Keypad | included | |
| Q806BK | Add ASTRO Digital CAI Operation | 386.25 | |
| H38BS | Add Smartzone Operation | 900 | |
| | Smartzone Omni-link - included with Optio | included | |
| Q361AN | Add P25 9600 Baud Trunking | 225 | |
| QA01749AB | Add SW Key Supplemental Data | 0 | |
| | DES, DES-XL Encryption Capability | included | |
| QA00894AA | GCAI Dustcover | included | |
| QA01837 | Hi-Cap Battery | 75 | |
| H886 | Add 3 Year Service | 125 | |
| | Basic Single Band Radio: | 3661.25 | |
| ADDITIONAL OPTIONS | | | |
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> | |
| Q625 | Enable DES,DES-XL Encryption | 449.25 | |
| H869 | ENH: MULTIKEY | 247.5 | |
| QA00580AA | Enable Phase II Operation | 300 | |
| PMLN5657B | Leather Case with Swivel [with NNTN7038 size battery] | 52 | |
| NTN5243 | Strap for leather case | 18.4 | |
| H64BC and H499 | Waterproof Yellow Housing | 206.25 | |
| H499 | Waterproof Black Housing | 187.5 | |
| | Nylon carrying case for waterproof | N/A | |
| PMMN4069A | Remote speaker with mic, coiled cord & ea | 87.99 | |
| | Commander Speaker Microphone | N/A | |
| NNTN7080A | Single unit charger | 99.99 | |
| NNTN7065B | Multi-unit (6) heavy duty charger | 669.8 | |
| NNTN7624 | Vehicular charger | 331.5 | |
| NNTN7038 | Spare battery, ultra-high capacity | 112 | |
| HLN6875 | Spare belt carrying clip | 9.6 | |
| RLN6480 | Commport earpiece with mic & adaptor | 335.16 | |
| | Breathing apparatus interface | N/A | |
| BDN6783 | Portable radio earpiece jack adaptor | 58.39 | |
| PMLN6130A | Earpiece, beige with jack | 97.59 | |
| NTN8821 | Earpiece Maintenance Kit NTN-8021 | 36.8 | |
| | CVA system | N/A | |
| | Power Amp for CVA | N/A | |
| | Disguise Antenna for CVA | N/A | |
| QA00782 | ADD: ENABLE INTERNAL GPS OPERATION | 75 | |

| | | | |
|--------------------------|----------|---|-----------------|
| | Q947 | ADD: RADIO PACKET DATA - IV&D | <u>150</u> |
| | QA00583 | ADD: BLUETOOTH SOFTWARE | <u>112.5</u> |
| | RLN6486A | ACCESSORY KIT, FIREMAN'S RADIO STRAP | <u>29.6</u> |
| | RLN6487A | ACCESSORY KIT, FIREMAN'S RADIO STRAP, > | <u>32</u> |
| | RLN6488A | ACCESSORY KIT, ANTI-SWAY STRAP | <u>12</u> |
| APX6000XE OPTIONS | | | |
| | QA02006 | ENH: APX6000XE RUGGED RADIO - ORDERE | <u>600</u> |
| | NNTN8092 | NEW STANDARD BATTERY INCLUDED WITH | <u>included</u> |
| | NNTN8092 | SPARE BATTERY HIGH CAPACITY | <u>112</u> |
| | PMLN5875 | LEATHER CASE WITH SWIVEL AND 2.75 CLI | <u>52</u> |

| IV. BASIC APX DUAL BAND MOBILE, BOTH BANDS OPERATIONAL | | | |
|---|---|-----------------|----------------|
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> | |
| M30TSS9PW1AN | APX7500 MOBILE | <u>1704</u> | |
| GA00244A | Add 700/800 MHz Primary Band | <u>0</u> | |
| GA00346AA | Add UHF Range 2 Secondary Band | <u>300</u> | |
| GA00579A | Enable Dual Band Operation | <u>450</u> | |
| | Phase II Capability | <u>included</u> | |
| G806BE | Add ASTRO Digital CAI Operation | <u>386.25</u> | |
| G51AT | Add Smartzone Operation | <u>1125</u> | |
| | Smartzone Omni-link - included with Option Q361 | <u>included</u> | |
| Q361AN | Add P25 9600 Baud Trunking | <u>225</u> | |
| | DES, DES-XL Encryption Capability | <u>included</u> | |
| G442AJ | APX O5 Control Head | <u>324</u> | |
| G444AE | Control Head Software | <u>0</u> | |
| QA01749A | Advanced System Key Software | <u>0</u> | |
| G77AN | Add 1 Year Service | <u>83</u> | |
| | 25 Watt Output | <u>included</u> | |
| G490 | ADD: ANT 1/4 WAVE 470-512 MHZ | <u>10.5</u> | |
| W484 | ALT: ANT 3DB GAIN 762-870MHZ | <u>28.5</u> | |
| W22BA | Palm Microphone | <u>54</u> | |
| B18CR | Aux Speaker | <u>45</u> | |
| G66AM | Dash mount | <u>93.75</u> | |
| Basic Dual Band Mobile, Both Bands Operational: | | | <u>4829.00</u> |
| ADDITIONAL OPTIONS | | | |
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> | |
| G625 | Enable DES, DES-XL Encryption | <u>449.25</u> | |
| W969 | ADD: MULTIPLE KEY ENCRYPTION OPERATION | <u>247.5</u> | |
| QA00580AA | Enable Phase II Operation | <u>300</u> | |
| G67 | Remote Mount Kit-17' cable | <u>222.75</u> | |
| | Remote mount kit-22' cable | <u>N/A</u> | |
| G67 & G610 | Remote mount kit-30' cable | <u>241.5</u> | |
| G138 & W15 | Motorcycle Kit | <u>675</u> | |
| W432 | 13 Watt Speaker | <u>53.62</u> | |
| W599 | ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY | <u>135</u> | |
| W591 | Auxiliary switch relay control panel | <u>123.75</u> | |
| TT2592 & TT05707AA & TT05708AA & TDN6253 | Siren, 100 Watt - INCLUDED UNDERHOOD BULL HORN | <u>525</u> | |
| TT2592 & TT05707AA & tt05708AA & TDN6253 & GA00814 (DEK) | Siren, 100 Watt with DEK | <u>603.75</u> | |
| | Siren lightbar integration | <u>N/A</u> | |

| | | | |
|--|-------------------|--|--------|
| | | PA system interface | N/A |
| | | Headset intercom interface | N/A |
| | W81 | Key Lock mounting | 24.75 |
| | | Disguise antenna | TBD |
| | G174 | ADD: ANT 3DB LOW-PROFILE 762-870 | 32.25 |
| | G510 | ADD: ANT LOW PROFILE 450-512 MHZ | 37.5 |
| | GA00229 | ADD: GPS ACTIVATION - need IV&D and GPS antenna | 75 |
| | W947 | ADD: RS232 PACKET DATA INTERFACE (IV&D) | 150 |
| | GA00226 | ADD: GPS ANTENNA | 56.25 |
| | GA00269 | ADD: GPS ANTENNA Motorcycle | 56.25 |
| | G72 & G90 | ADD:03 CONTROL HEAD & No additional microphone | 709.5 |
| | GA00806 | ADD:CH SIREN & LIGHTS KEYPAD WITH "03" CONTROL H | 37.5 |
| | GA00245 | ADD: 09 CONTROL HEAD - MUST ORDER REMOTE MOUN | 900 |
| | GA00259 & GA00260 | FULL LIGHTS AND CONTROL OPERATION WITH "09" CON | 198.75 |
| | GA00092 | ADD: "05" DUAL-CONTRL HD HARDWARE - REQUIRES RE | 427.5 |
| | G628 & W22 & B18 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 110.25 |
| | G610 & W22 & B18 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 117.75 |
| | G628 & W22 & W432 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 118.87 |
| | G610 & W22 & W432 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 126.37 |

| V. BASIC APX DUAL BAND MOBILE, ONE BAND OPERATIONAL, SECOND UPGRADABLE | | | |
|---|--|--|-----------------|
| <u>Part/Option #</u> | <u>Description</u> | | <u>Cost</u> |
| M30TSS9PW1AN | APX7500 MOBILE | | <u>1704</u> |
| GA00244A | Add 700/800 MHz Primary Band/ Secondary GA00215 | | <u>0</u> |
| GA00346AA | Add UHF Range 2 Secondary Band/ PLMNR GA00345 | | <u>300</u> |
| | Phase II Capability | | <u>included</u> |
| G806BE | Add ASTRO Digital CAI Operation | | <u>386.25</u> |
| G51AT | Add Smartzone Operation | | <u>1125</u> |
| | Smartzone Omni-link - included with Option Q361 | | <u>included</u> |
| Q361AN | Add P25 9600 Baud Trunking | | <u>225</u> |
| | DES, DES-XL Encryption Capability | | <u>included</u> |
| G442AJ | APX O5 Control Head | | <u>324</u> |
| G444AE | Control Head Software | | <u>0</u> |
| QA01749A | Advanced System Key Software | | <u>0</u> |
| G77AN | Add 1 Year Service | | <u>83</u> |
| | 25 Watt Output | | <u>included</u> |
| G490 | ADD: ANT 1/4 WAVE 470-512 MHZ | | <u>10.5</u> |
| W484 | ALT: ANT 3DB GAIN 762-870MHZ | | <u>28.5</u> |
| W22BA | Palm Microphone | | <u>54</u> |
| B18CR | Aux Speaker | | <u>45</u> |
| G66AM | Dash mount | | <u>93.75</u> |
| | Basic Dual Band Mobile, One Band Operational: | | <u>4379</u> |
| ADDITIONAL OPTIONS | | | |
| <u>Part/Option #</u> | <u>Description</u> | | <u>Cost</u> |
| GA00579A | Enable Dual Band Operation | | <u>450</u> |
| G625 | Enable DES, DES-XL Encryption | | <u>449.25</u> |
| W969 | ADD: MULTIPLE KEY ENCRYPTION OPERATION | | <u>247.5</u> |
| QA00580AA | Enable Phase II Operation | | <u>300</u> |
| G67 | Remote Mount Kit-17' cable | | <u>222.75</u> |
| | Remote mount kit-22' cable | | <u>N/A</u> |
| G67 & G610 | Remote mount kit-30' cable | | <u>241.5</u> |
| G138 & W15 | Motorcycle Kit | | <u>675</u> |
| W432 | 13 Watt Speaker | | <u>53.62</u> |
| W599 | ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY | | <u>135</u> |
| W591 | Auxiliary switch relay control panel | | <u>123.75</u> |
| TT2592 & TT05707AA & TT05708AA & TDN6253 | Siren, 100 Watt - INCLUDED UNDERHOOD BULL HORN | | <u>525</u> |
| TT2592 & TT05707AA & tt05708AA & TDN6253 & GA00814 (DEK) | Siren, 100 Watt with DEK | | <u>603.75</u> |
| | Siren lightbar integration | | <u>N/A</u> |

| | | | |
|--|-------------------|---|--------|
| | | PA system interface | N/A |
| | | Headset intercom interface | N/A |
| | W81 | Key Lock mounting | 24.75 |
| | | Disguise antenna | TBD |
| | G174 | ADD: ANT 3DB LOW-PROFILE 762-870 | 32.25 |
| | G510 | ADD: ANT LOW PROFILE 450-512 MHZ | 37.5 |
| | GA00229 | ADD: GPS ACTIVATION - need IV&D and GPS antenna | 75 |
| | W947 | ADD: RS232 PACKET DATA INTERFACE (IV&D) | 150 |
| | GA00226 | ADD: GPS ANTENNA | 56.25 |
| | GA00269 | ADD: GPS ANTENNA Motorcycle | 56.25 |
| | G72 & G90 | ADD:03 CONTROL HEAD & No additional microphone | 709.5 |
| | GA00806 | ADD:CH SIREN & LIGHTS KEYPAD WITH "03" CONTROL | 37.5 |
| | GA00245 | ADD: 09 CONTROL HEAD - MUST ORDER REMOTE MO | 900 |
| | GA00259 & GA00260 | FULL LIGHTS AND CONTROL OPERATION WITH "09" CO | 198.75 |
| | GA00092 | ADD: "05" DUAL-CONTRL HD HARDWARE - REQUIRES | 427.5 |
| | G628 & W22 & B18 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FC | 110.25 |
| | G610 & W22 & B18 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FC | 117.75 |
| | G628 & W22 & W432 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FC | 118.87 |
| | G610 & W22 & W432 | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FC | 126.37 |

| VI. BASIC APX SINGLE BAND MOBILE | | | |
|---|--|---|----------------|
| | <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> |
| | M25SSS9PW1AN | APX6500 MOBILE | <u>1424.25</u> |
| | | UHF Range 2 Operation | included |
| | | Phase II Capability | included |
| | G806BE | Add ASTRO Digital CAI Operation | 386.25 |
| | G51AT | Add Smartzone Operation | 900 |
| | | Smartzone Omni-link - included with Option Q361 | included |
| | Q361AN | Add P25 9600 Baud Trunking | 225 |
| | G625 | DES, DES-XL Encryption Capability | included |
| | G442AJ | APX O5 Control Head | 324 |
| | G444AE | Control Head Software | 0 |
| | QA01749A | Advanced System Key Software | 0 |
| | G400AY | Add 1 Year Service | 64 |
| | | 25 Watt Output | included |
| | G490 | ADD: ANT 1/4 WAVE 470-512 MHZ | <u>10.5</u> |
| | W22BA | Palm Microphone | 54 |
| | B18CR | Aux Speaker | 45 |
| | G66AM | Dash mount | 93.75 |
| | | Basic Single Band Mobile Radio: | <u>3526.75</u> |
| ADDITIONAL OPTIONS | | | |
| | <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> |
| | G625 | Enable DES, DES-XL Encryption | <u>449.25</u> |
| | W969 | ADD: MULTIPLE KEY ENCRYPTION OPERATION | <u>247.5</u> |
| | QA00580AA | Enable Phase II Operation | <u>300</u> |
| | G67 | Remote Mount Kit-17' cable | <u>222.75</u> |
| | | Remote mount kit-22' cable | <u>N/A</u> |
| | G67 & G610 | Remote mount kit-30' cable | <u>241.5</u> |
| | | Motorcycle Kit | <u>N/A</u> |
| | W432 | 13 Watt Speaker | <u>53.62</u> |
| | W599 | ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY | <u>135</u> |
| | W591 | Auxiliary switch relay control panel | <u>123.75</u> |
| | TT2592 & TT05707AA & TT05708AA & TDN6253 | Siren, 100 Watt - INCLUDED UNDERHOOD BULL HORN | <u>525</u> |
| | TT2592 & TT05707AA & tt05708AA & TDN6253 & GA00814 (DEK) | Siren, 100 Watt with DEK | <u>603.75</u> |
| | | Siren lightbar integration | <u>N/A</u> |
| | | PA system interface | <u>N/A</u> |
| | | Headset intercom interface | <u>N/A</u> |
| | W81 | Key Lock mounting | <u>24.75</u> |

| | | | |
|-------------------|--|---|--------------|
| | | Disguise antenna | <u>TBD</u> |
| G510 | | ADD: ANT LOW PROFILE 450-512 MHZ | <u>37.5</u> |
| GA00229 | | ADD: GPS ACTIVATION - need IV&D and GPS antenna | <u>75</u> |
| W947 | | ADD: RS232 PACKET DATA INTERFACE (IV&D) | <u>150</u> |
| GA00226 | | ADD: GPS ANTENNA | <u>56.25</u> |
| G72 & G90 | | ADD:03 CONTROL HEAD & No additional microphone | 709.5 |
| GA00806 | | ADD:CH SIREN & LIGHTS KEYPAD WITH "03" CONTROL | 37.5 |
| GA00092 | | ADD: "05" DUAL-CONTRL HD HARDWARE - REQUIRES | 427.5 |
| G628 & W22 & B18 | | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 110.25 |
| G610 & W22 & B18 | | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 117.75 |
| G628 & W22 & W432 | | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 118.87 |
| G610 & W22 & W432 | | DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FOR | 126.37 |

| VII. BASIC APX SINGLE BAND COSOLETTE, | | |
|--|--|-----------------|
| SECOND UPGRADABLE | | |
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> |
| L30SSS9PW1 N | APX7500 SINGLE BAND UHF R2 MID POWER | <u>2985</u> |
| GA00225 | ADD: 7/800MHZ SECONDARY BAND CAPABILITY | <u>300</u> |
| | Phase II Capability | <u>included</u> |
| G806 | Add ASTRO Digital CAI Operation | <u>386.25</u> |
| G51 | Add Smartzone Operation | <u>1125</u> |
| | Smartzone Omni-link - included with Option Q361 | <u>included</u> |
| Q361 | Add P25 9600 Baud Trunking | <u>225</u> |
| | DES, DES-XL Encryption Capability | <u>included</u> |
| QA01749A | Advanced System Key Software | <u>0</u> |
| G77 | Add 1 Year Service | <u>83</u> |
| G90 | ADD: NO MICROPHONE NEEDED | <u>0</u> |
| CA01598 | ADD: AC LINE CORD US | <u>0</u> |
| | Basic Dual Band Mobile, One Band Operational: | <u>5104.25</u> |
| ADDITIONAL OPTIONS | | |
| <u>Part/Option #</u> | <u>Description</u> | <u>Cost</u> |
| GA00579A | Enable Dual Band Operation | <u>450</u> |
| G625 | Enable DES, DES-XL Encryption | <u>449.25</u> |
| W969 | ADD: MULTIPLE KEY ENCRYPTION OPERATION | <u>247.5</u> |
| QA00580AA | Enable Phase II Operation | <u>300</u> |
| W382 | ADD: CONTROL STATION DESK GCAI MIC | <u>126.75</u> |
| L998 | ADD: LIMITED FRONT PANEL W/CLOCK/VU | <u>360</u> |
| L999 | ADD: FULL FP W/05/KEYPAD/CLOCK/VU | <u>591.75</u> |
| HKN6233C | APX CONSOLETTA RACK MOUNT KIT | <u>150</u> |
| HKN6243A | APX CONSOLETTA WALL MOUNT BRACKET KIT | <u>45</u> |