

DEPARTMENT OF PUBLIC WORKS

Quality, Excellence, Innovation

Raul M. Rojas DIRECTOR

DATE:

January 14, 2015

TO:

MERA Executive Board

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Waste Management

FROM: Praig Tackabery, Operations Officer

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

GEN RADIO SPECIFICATIONS

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

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.

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:

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

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.

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.

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.

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.

_	APX DUAL BAND	•	
	art/Option #	<u>Description</u>	
	197TGD9PW1AN	APX7000 DIGITAL PORTABLE RADIO	2
	QA00569AA	Add 700/800 MHz Primary Band	
	QA00576AA	Add UHF Range 2 Secondary Band / Plund?	
C	QA00579AA	Enable Dual Band Operation	
		Phase II Capability	l
C	QA00577AA	Add Front Display with Full Keypad	
C	Q806BK	Add ASTRO Digital CAI Operation	
ŀ	138BS	Add Smartzone Operation	
		Smartzone Omni-link - Q173 included with Option Q361	i
Jc	Q361AN	Add P25 9600 Baud Trunking	
c	QA01749AB	Add SW Key Supplemental Data	
		DES, DES-XL Encryption Capability	i
		Hi-Cap Battery [NNTN7038 STD battery]	T _i
		GCAI Dustcover	 i
G	GA00232AC	Add 3 Year Service	
		Basic Dual Band Radio, Both Bands Operational:	
i	1869	ENH: MULTIKEY	
C	Q625AW	Enable DES,DES-XL Encryption	
i			- 1
10			
IC.	QA00580AA	Enable Phase II Operation	
		Leather Case with Swivel and Strap [with NNTN7038 size	
P	PMLN5324	Leather Case with Swivel and Strap [with NNTN7038 size battery]	
P F	PMLN5324 H64BC and H499	Leather Case with Swivel and Strap [with NNTN7038 <u>size</u> battery] Waterproof Yellow Housing	
P F	PMLN5324	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing	
P F	PMLN5324 H64BC and H499 H499	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size	
P H	PMLN5324 164BC and H499 1499 PMLN5322	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof]	
P H	PMLN5324 H64BC and H499 H499	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack	
P H H	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone	
P H H	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger	
P H H P P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger	
P H H P P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger	
P H H P P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B NNTN7624	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity	
P H H P P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity Spare belt carrying clip	
P H H P P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B NNTN7624	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity	
P H H P P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B NNTN7624 NNTN7038 HLN6875	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity Spare belt carrying clip Commport earpiece with mic & adaptor Breathing apparatus interface	
P H H P P N N	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B NNTN7624 NNTN7038 HLN6875	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity Spare belt carrying clip Commport earpiece with mic & adaptor	
P H H P P P N N N	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B NNTN7624 NNTN7038 HLN6875 RLN6480	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity Spare belt carrying clip Commport earpiece with mic & adaptor Breathing apparatus interface	
P H H P P R R B P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B NNTN7624 NNTN7038 HLN6875 RLN6480	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity Spare belt carrying clip Commport earpiece with mic & adaptor Breathing apparatus interface Portable radio earpiece jack adaptor	
P H H P P R R B P	PMLN5324 H64BC and H499 H499 PMLN5322 PMMN4069A NNTN7080A NNTN7065B NNTN7624 NNTN7038 HLN6875 RLN6480 BDN6783 PMLN6130A	Leather Case with Swivel and Strap [with NNTN7038 size battery] Waterproof Yellow Housing Waterproof Black Housing Nylon carrying case for waterproof [with NNTN7038 size battery / not waterproof] Remote speaker with mic, coiled cord & ear jack Commander Speaker Microphone Single unit charger Multi-unit (6) heavy duty charger Vehicular charger Spare battery, ultra-high capacity Spare belt carrying clip Commport earpiece with mic & adaptor Breathing apparatus interface Portable radio earpiece jack adaptor Earpiece, beige with jack	

		Disguise Antenna for CVA	N/A
	QA00782	ADD: ENABLE INTERNAL GPS OPERATION	75
	Q947	ADD: RADIO PACKET DATA - IV&D	150
	QA00583	ADD: BLUETOOTH SOFTWARE	112.5
	RLN6486A	ACCESSORY KIT, FIREMAN'S RADIO STRAP	29.6
	RLN6487A	ACCESSORY KIT, FIREMAN'S RADIO STRAP, XL	32
	RLN6488A	ACCESSORY KIT, ANTI-SWAY STRAP	12
APX70	000XE OPTIONS H49TGD9PW1AN	APX7000XE DIGITAL PORTABLE RADIO	2550
	NNTN8092	NEW STANDARD BATTERY INCLUDED WITH XE OPTION	included
	NNTN8092	SPARE BATTERY HIGH CAPACITY	112
	NNTN8111B	LEATHER CASE WITH SWIVEL AND 2.5 CLIP	52

DAGIONI N DONE DANG	PORTABLE, ONE BAND OPERATIONAL SECOND UPGRADABLE	
Part/Option #	Description	Cost
H97TGD9PW1AN	APX7000 DIGITAL PORTABLE RADIO	2097.7
QA00569AA	Add 700/800 MHz Primary Band	0
QA00576AA	Add UHF Range 2 Secondary Band	0
	Phase II Capability	includ
QA00577AA	Add Front Display with Full Keypad	375
Q806BK	Add ASTRO Digital CAI Operation	386.2
H38BS	Add Smartzone Operation	1125
	Smartzone Omni-link - included with Option Q361	includ
Q361AN	Add P25 9600 Baud Trunking	225
QA01749AB	Add SW Key Supplemental Data	0
	DES, DES-XL Encryption Capability	includ
	Hi-Cap Battery	includ
	GCAI Dustcover	includ
GA00232AC	Add 3 Year Service	150
	Basic Dual Band Radio, One Band Operational:	4359.
Q625AW	Enable DES,DES-XL Encryption	449.2
Part/Option #	Description	Cos
	ENH: MULTIKEY	247.
H869 QA00579AA	Enable Dual Band Operation	750
QA00579AA QA00580AA	Enable Phase II Operation	300
QAUUSBUAA	Leather Case with Swivel and Strap [with NNTN7038	1 300
PMLN5324	size battery]	52
H64BC and H499	Waterproof Yellow Housing	206.2
H499		187.
11133	Waterproof Black Housing Nylon carrying case for waterproof [with NNTN/038]	
PMLN5322	size battery / not waterproof	37.6
PMMN4069A	Remote speaker with mic, coiled cord & ear jack	87.9
	Commander Speaker Microphone	<u>N/A</u>
NNTN7080A	Single unit charger	99.9
NNTN7065B	Multi-unit (6) heavy duty charger	<u>669.</u>
NNTN7624	Vehicular charger	331.
NNTN7038	Spare battery, ultra-high capacity	112
HLN6875	Spare belt carrying clip	9.6
RLN6480	Commport earpiece with mic & adaptor	335.3
	Breathing apparatus interface	<u>N/A</u>
BDN6783	Portable radio earpiece jack adaptor	58.3
PMLN6130A	Earpiece, beige with jack	97.5
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	<u>75</u>
Q947	ADD: RADIO PACKET DATA - IV&D	<u>150</u>
QA00583	ADD: BLUETOOTH SOFTWARE	112.5
RLN6486A	ACCESSORY KIT, FIREMAN'S RADIO STRAP	29.6
RLN6487A	ACCESSORY KIT, FIREMAN'S RADIO STRAP, XL	<u>32</u>
RLN6488A	ACCESSORY KIT,ANTI-SWAY STRAP	12
APX7000XE OPTIONS		
H49TGD9PW1AN	APX7000XE DIGITAL PORTABLE RADIO	<u>2550</u>
NNTN8092	NEW STANDARD BATTERY INCLUDED WITH XE OPTION	included
NNTN8092	SPARE BATTERY HIGH CAPACITY	<u>112</u>
NNTN8111B	LEATHER CASE WITH SWIVEL AND 2.5 CLIP	52

II.	BASIC APX SINGLE BAI		C
	Part/Option #	Description	Cost
	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
ADDI	TIONAL OPTIONS		
	Part/Option #	<u>Description</u>	<u>Cost</u>
	Q625	Enable DES,DES-XL Encryption	<u>449.25</u>
	H869	ENH: MULTIKEY	<u>247.5</u>
	QA00580AA	Enable Phase II Operation	<u>300</u>
		Leather Case with Swivel [with NNTN7038	
	PMLN5657B	size battery]	<u>52</u>
	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	
		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
		· · · · · · · · · · · · · · · · · · ·	N/A
	1	IPOWER AMD TOT LVA	[13/ <i>F</i> 4
		Power Amp for CVA Disguise Antenna for CVA	N/A

	Q947	ADD: RADIO PACKET DATA - IV&D	<u>150</u>
	QA00583	ADD: BLUETOOTH SOFTWARE	112.5
	RLN6486A	ACCESSORY KIT, FIREMAN'S RADIO STRAP	<u> 29.6</u>
	RLN6487A	ACCESSORY KIT, FIREMAN'S RADIO STRAP, X	<u>32</u>
	RLN6488A	ACCESSORY KIT, ANTI-SWAY STRAP	<u>12</u>
АРХ60	000XE OPTIONS		
L	QA02006	ENH: APX6000XE RUGGED RADIO - ORDERE	600
	NNTN8092	NEW STANDARD BATTERY INCLUDED WITH	
	NNTN8092 NNTN8092	NEW STANDARD BATTERY INCLUDED WITH SPARE BATTERY HIGH CAPACITY	

Part/Option #	<u>Description</u>	<u>C</u>
M30TSS9PW1AN	APX7500 MOBILE	17
GA00244A	Add 700/800 MHz Primary Band	
GA00346AA	Add UHF Range 2 Secondary Band	3
GA00579A	Enable Dual Band Operation	4
	Phase II Capability	incl
G806BE	Add ASTRO Digital CAI Operation	38
G51AT	Add Smartzone Operation	11
	Smartzone Omni-link - included with Option Q361	incl
Q361AN	Add P25 9600 Baud Trunking	2
	DES, DES-XL Encryption Capability	incl
G442AJ	APX O5 Control Head	3
G444AE	Control Head Software	
QA01749A	Advanced System Key Software	
G77AN	Add 1 Year Service	1 8
	25 Watt Output	incl
G490	ADD: ANT 1/4 WAVE 470-512 MHZ	1
W484	ALT: ANT 3DB GAIN 762-870MHZ	2
W22BA	Palm Microphone	
B18CR	Aux Speaker	7
G66AM	Dash mount	93
	Basic Dual Band Mobile, Both Bands Operational:	482
ONAL OPTIONS Part (Option #		ha iii
Part/Option #	<u>Description</u>	<u>c</u>
Part/Option # G625	Description Enable DES, DES-XL Encryption	<u>C</u>
Part/Option # G625 W969	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION	<u>C</u> 44 24
Part/Option # G625 W969 QA00580AA	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation	<u>C</u> 44 24 3
Part/Option # G625 W969	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable	C 44 24 3 22
Part/Option # G625 W969 QA00580AA G67	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable	C 44 24 3 22 N
Part/Option # G625 W969 QA00580AA G67 G67 & G610	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable	C 444 24 3 22 N 24
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit	C 44 22 3 22 N 24
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker	C 44 24 3 22 22 24 6 53
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY	C 44 24 3 22 N 24 6 53
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker	C 44 22 3 22 N 24
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	C 44 24 3 22 N 6 53 12
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599 W591	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	C 44 24 3 22 N 6 53 1 12
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	C 44 24 3 22 N 6 53 1 12
Part/Option # G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253	Description Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Operation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	C 44 24 3 22 N 24 6 53

	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>
G174	ADD: ANT 3DB LOW-PROFILE 762-870	<u>32.25</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>
GA00269	ADD: GPS ANTENNA Motorcycle	<u>56.25</u>
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 MOU	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

David / Ombian #	SECOND UPGRADABLE	
Part/Option #	Description	Cost
M30TSS9PW1AN	APX7500 MOBILE	<u>1704</u>
GA00244A	Add 700/800 MHz Primary Band Second of GA 00315	<u>o</u>
GA00346AA	Add UHF Range 2 Secondary Band/Plyman, GA 0035	
	Phase II Capability	includ
G806BE	Add ASTRO Digital CAI Operation	<u>386.2</u>
G51AT	Add Smartzone Operation	1125
	Smartzone Omni-link - included with Option Q361	includ
Q361AN	Add P25 9600 Baud Trunking	<u>225</u>
	DES, DES-XL Encryption Capability	includ
G442AJ	APX O5 Control Head	324
G444AE	Control Head Software	0
QA01749A	Advanced System Key Software	0
G77AN	Add 1 Year Service	83
	25 Watt Output	includ
G490	ADD: ANT 1/4 WAVE 470-512 MHZ	10.5
W484	ALT: ANT 3DB GAIN 762-870MHZ	28.5
W22BA	Palm Microphone	54
B18CR	Aux Speaker	45
G66AM	Dash mount	93.7
	Basic Dual Band Mobile, One Band Operational:	4379
DNAL OPTIONS Part/Option #		
Part/Option #	<u>Description</u>	Cost
Part/Option # GA00579A	Description Enable Dual Band Operation	<u>Cost</u> 450
Part/Option # GA00579A G625	Description Enable Dual Band Operation Enable DES, DES-XL Encryption	<u>Cost</u> 450 449.2
Part/Option # GA00579A G625 W969	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION	Cost 450 449.2 247.
Part/Option # GA00579A G625 W969 QA00580AA	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation	Cost 450 449.2 247.
Part/Option # GA00579A G625 W969	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable	Cost 450 449.2 247.3 300 222.7
Part/Option # GA00579A G625 W969 QA00580AA G67	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable	Cost 450 449.2 247.5 300 222.7 N/A
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable	Cost 450 449.2 247. 300 222.7 N/A 241.
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit	Cost 450 449.2 247.3 300 222.7 N/A 241.3
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker	Cost 450 449.2 247. 300 222.7 N/A 241. 675 53.6
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY	Cost 450 449.2 247. 300 222.7 N/A 241. 675 53.6 135
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker	Cost 450 449.2 247. 300 222.7 N/A 241. 675 53.6 135
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599 W591	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY	Cost 450 449.2 247. 300 222.7 N/A 241. 675 53.6 135
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599 W591 TT2592 & TT05707AA &	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	Cost 450 449.2 247. 300 222.7 N/A 241. 675 53.6 135 123.7
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253 TT2592 & TT05707AA &	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY	Cost 450 449.2 247. 300 222.7 N/A 241. 675 53.6 135 123.7
Part/Option # GA00579A G625 W969 QA00580AA G67 G67 & G610 G138 & W15 W432 W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253	Description Enable Dual Band Operation Enable DES, DES-XL Encryption ADD: MULTIPLE KEY ENCRYPTION OPERATION Enable Phase II Oparation Remote Mount Kit-17' cable Remote mount kit-22' cable Remote mount kit-30' cable Motorcycle Kit 13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	Cost 450 449.2 247. 300 222.7 N/A 241. 675 53.6 135 123.7

	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>
G174	ADD: ANT 3DB LOW-PROFILE 762-870	32.25
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	56.25
GA00269	ADD: GPS ANTENNA Motorcycle	<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
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 FO	110.25
G610 & W22 & B18	DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FO	117.75
G628 & W22 & W432	DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FO	118.87
G610 & W22 & W432	DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FO	126.37

VI.	BASIC APX SINGLE BAND MO	BILE	
	Part/Option #	Description	<u>Cost</u>
	M25SSS9PW1AN	APX6500 MOBILE	1424.25
		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	include
	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	10.5
	W22BA	Palm Microphone	54
	B18CR	Aux Speaker	45
	G66AM	Dash mount	93.75
., .,		Basic Single Band Mobile Radio:	3526.75
	G625	Enable DES, DES-XL Encryption	<u>449.25</u>
	Part/Option # G625	<u>Description</u> Enable DES, DES-XL Encryption	<u>Cost</u> 449.25
	W969	ADD: MULTIPLE KEY ENCRYPTION OPERATION	<u>247.5</u>
	QA00580AA	Enable Phase II Oparation	<u>300</u>
	∠ G67	Remote Mount Kit-17' cable	222,75
		Remote mount kit-22' cable	<u>N/A</u>
	G67 & G610	Remote mount kit-30' cable	244 5
		Motorcycle Kit	<u>241.5</u>
		Motorcycle Kit	241.5 <u>N/A</u>
	W432	13 Watt Speaker	
	W432 W599	<u> </u>	<u>N/A</u> 53.62
		13 Watt Speaker	<u>N/A</u> 53.62 <u>135</u>
	W599	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY	<u>N/A</u> 53.62 135
	W599 W591	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY	<u>N/A</u> 53.62 135
	W599 W591 TT2592 & TT05707AA &	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	N/A 53.62 135 123.75
	W599 W591	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY	N/A 53.62 135 123.75
	W599 W591 TT2592 & TT05707AA &	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	N/A 53.62 135 123.75
-	W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	N/A 53.62 135 123.75
	W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253 TT2592 & TT05707AA &	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel	N/A 53.62 135 123.75 525
	W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253 TT2592 & TT05707AA & tt05708AA & TDN6253	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel Siren, 100 Watt - INCLUDED UNDERHOOD BULL HORN	N/A 53.62 135 123.75 525
	W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253 TT2592 & TT05707AA & tt05708AA & TDN6253	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel Siren, 100 Watt - INCLUDED UNDERHOOD BULL HORN Siren, 100 Watt with DEK	N/A 53.62 135 123.75 525 603.75
	W599 W591 TT2592 & TT05707AA & TT05708AA & TDN6253 TT2592 & TT05707AA & tt05708AA & TDN6253	13 Watt Speaker ADD: 8 MODE DIRECT ENTRY - REMOTE MOUNT ONLY Auxiliary switch relay control panel Siren, 100 Watt - INCLUDED UNDERHOOD BULL HORN Siren, 100 Watt with DEK Siren lightbar integration	N/A 53.62 135 123.75 525 603.75 N/A

	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" CONTRO	37.5
GA00092	ADD: "05" DUAL-CONTRL HD HARDWARE - REQUIRES	427.5
G628 & W22 & B18	DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS F	110.25
G610 & W22 & B18	DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS FO	117.75
G628 & W22 & W432	DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS F	118.87
G610 & W22 & W432	DUAL-CONTRL HEAD REQUIRES ADDITIONAL ITEMS F	126.37

VII.	BASIC APX SINGLE	BAND COSOLETTE,	
		SECOND UPGRADABLE	
	Part/Option #	Description	Cost
	L30SSS9PW1 N	APX7500 SINGLE BAND UHF R2 MID POWER	2985
	GA00225	ADD: 7/800MHZ SECONDARY BAND CAPABILTY	300
		Phase II Capability	included
	G806	Add ASTRO Digital CAI Operation	386.25
	G51	Add Smartzone Operation	1125
		Smartzone Omni-link - included with Option Q361	included
	Q361	Add P25 9600 Baud Trunking	225
		DES, DES-XL Encryption Capability	included
	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:	5104.25
ADDITI	ONAL OPTIONS		
AUUIII	ONAL OPTIONS Part/Option #	Description	Cost
	GA00579A	Enable Dual Band Operation	450
	G625	Enable DES, DES-XL Encryption	449.25
	W969	ADD: MULTIPLE KEY ENCRYPTION OPERATION	247.5
	QA00580AA	Enable Phase II Oparation	300
	W382	ADD: CONTROL STATION DESK GCAI MIC	126.75
	L998	ADD: LIMITED FRONT PANEL W/CLOCK/VU	360
	L999	ADD: FULL FP W/05/KEYPAD/CLOCK/VU	591.75
	HKN6233C	APX CONSOLETTE RACK MOUNT KIT	150
L	HKN6243A	APX CONSOLETTE WALL MOUNT BRACKET KIT	45