Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

May 15, 2008

CHANGE NOTICE NO. 6
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475**
Communication Specialists, Inc. **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz, Buyer**
Contract Compliance Inspector: Steve Motz **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002**	To: **October 1, 2008**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

CONTRACT IS EXTENDED TO LOCAL UNITS OF GOVERNMENT

NATURE OF CHANGE (S):

Effective immediately this contract is hereby EXTENDED to October 1, 2008. All other terms, conditions, specifications, and pricing remain the same.

Overview of Extension

X	**Extension**	**(5/2/08 – 10/1/08)**

AUTHORITY/REASON:

Per DMB Purchasing Operations.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $1,332,979.00

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

November 27, 2007

CHANGE NOTICE NO. 5
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475**
Communication Specialists, Inc. **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz, Buyer**
Contract Compliance Inspector: Steve Motz **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002**	To: **May 1, 2008**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

CONTRACT IS EXTENDED TO LOCAL UNITS OF GOVERNMENT

NATURE OF CHANGE (S):

Effective immediately this contract is hereby EXTENDED to May 1, 2008. All other terms, conditions, specifications, and pricing remain the same.

Overview of Extension

X	**Extension**	**(12/1/07 – 5/1/08)**

In addition the Buyer for this Contract has been changed to Steve Motz.

AUTHORITY/REASON:

Per DMB Purchasing Operations.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $1,332,979.00

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

November 27, 2007

CHANGE NOTICE NO. 5
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475**
Communication Specialists, Inc. **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	VENDOR NUMBER/MAIL CODE **(2) 38-2983324 (006)** BUYER/CA (517) 241-3215 **Steve Motz, Buyer**
Contract Compliance Inspector: Steve Motz **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002** To: **May 1, 2008**	
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

CONTRACT IS EXTENDED TO LOCAL UNITS OF GOVERNMENT

NATURE OF CHANGE (S):

Effective immediately this contract is hereby EXTENDED to May 1, 2008. All other terms, conditions, specifications, and pricing remain the same.

Overview of Extension

X	**Extension**	**(12/1/07 – 5/1/08)**

In addition the Buyer for this Contract has been changed to Steve Motz.

AUTHORITY/REASON:

Per DMB Purchasing Operations.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $1,332,979.00

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

November 21, 2006

CHANGE NOTICE NO. 4
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475**
Communication Specialists, Inc. **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-2005 **Lisa Morrison, Buyer**
Contract Compliance Inspector: Laura Gyorkos **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002**	To: **December 1, 2007**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

CONTRACT IS EXTENDED TO LOCAL UNITS OF GOVERNMENT

NATURE OF CHANGE (S):

Effective immediately this Contract is hereby EXTENDED for one year. The new Contract ending date is December 1, 2007. All other terms, conditions, specifications and pricing remain unchanged. Please note the Buyer has been changed to Lisa Morrison.

AUTHORITY/REASON:

Per vendor email (Arlen Dykema) dated November 1, 2006.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $1,332,979.00

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

May 1, 2006

CHANGE NOTICE NO. 3
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR **Communication Specialists, Inc.** **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 373-1455 **Laura Gyorkos, Buyer**
Contract Compliance Inspector: Laura Gyorkos **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002**	To: **December 1, 2006**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

CONTRACT IS EXTENDED TO LOCAL UNITS OF GOVERNMENT

NATURE OF CHANGE (S):

Effective immediately the attached list of dealers are authorized to participate in this Contract at the same pricing terms and conditions.

AUTHORITY/REASON:

Per vendor email (Arlen Dykema) dated April 25, 2006.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $1,332,979.00

GREAT
LAKES
COMMUNICATIONS SALES, Inc.

Please add these Dealers to the Michigan contract:

Adrian Communications
Adrian, MI

Advanced Wireless
Wixom, MI

Alpena Wireless
Alpena, MI

Comsource
Rochester Hills, MI

Delta Com
Detroit, MI

Digicom
Troy, MI

Gaylord Communications
Gaylord, MI

Grand Traverse Mobile
Traverse City, MI

JS Electronics
Menominee, MI

Midcom Radio
Sandusky, MI

Midcom Service
Muskegon, MI

Midland Radio
Midland, MI

2060 E. Harbor Rd. • Port Clinton, Ohio 43452 • (419) 734-4200 • 1-800-443-6262 • Fax: (419) 734-4274

GREAT
LAKES
COMMUNICATIONS SALES, Inc.

Otec
Elk Rapids, MI

Range Communications
Marquette, MI

HEI Wireless
Benton Harbor, MI

State Systems
Portage, MI

Thumb Radio
Bad Axe, MI

Tri County Communications
St. Clair Shores, MI

Washtenaw Communications
Ann Arbor, MI

Wave Communications
Kalkaska, MI

Hi Tech SMR Communications
Niles, MI

Cynergy Wireless
Troy, MI

Rick Gecsi
Great Lakes Communications Sales, Inc.
2060 E. Harbor Rd.
Port Clinton, OH 43452
800-443-6262
248-943-6660

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

November 29, 2005

CHANGE NOTICE NO. 2
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR **Communication Specialists, Inc.** **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 373-1455 **Laura Gyorkos, Buyer**
Contract Compliance Inspector: Laura Gyorkos **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002**	To: **December 1, 2006**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

CONTRACT IS EXTENDED TO LOCAL UNITS OF GOVERNMENT

NATURE OF CHANGE (S):

Effective immediately this Contract is hereby EXTENDED for one year. The new contract ending date is December 1, 2006. All other terms, conditions, specifications and pricing remain unchanged.

AUTHORITY/REASON:

Per vendor letter (Arlene Dykema) dated 11/17/05.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $1,332,979.00

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

October 19, 2004

CHANGE NOTICE NO. 1
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR **Communication Specialists, Inc.** **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 373-1455 **Laura Gyorkos, Buyer**
Contract Compliance Inspector: Laura Gyorkos **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002**	To: **December 1, 2005**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

NATURE OF CHANGE (S):

Effective 10/18/04, the EF Johnson line of radios and accessories have been added to the contract. Please refer to attached item listing for specific information.

AUTHORITY/REASON:

Per DMB/Acquisition Services.

Total Estimated Contract Value Remains: $1,332,979.00

Effective 10/18/04, Communication Specialists has added the EF Johnson line of radios and accessories to their product offering for this contract. The applied discount to the entire EF Johnson catalog is 15%. Please refer to the attached item listings for specific information. Note: The models listed on the attached item listing are just an example of specific models offered. The 15% discount can be applied to ALL EF Johnson models.

CATEGORY A - BASE STATIONS/REPEATERS

PERCENTAGE DISCOUNT OFF CATEGORY/OPTIONS	15%
PERCENTAGE DISCOUNT OFF ACCESSORIES	15%
BRAND OR MFGR: EF Johnson PRICE LIST NAME, NO. & DATE: 2004	

CATEGORY B - BASE STATIONS/ PROGRAMMABLE DESKTOP

PERCENTAGE DISCOUNT OFF CATEGORY/OPTIONS	15%
PERCENTAGE DISCOUNT OFF ACCESSORIES	15%
BRAND OR MFGR: EF Johnson PRICE LIST NAME, NO. & DATE: 2004	

CATEGORY C –-MOBILES

PERCENTAGE DISCOUNT OFF CATEGORY/OPTIONS	15%
PERCENTAGE DISCOUNT OFF ACCESSORIES	15%
BRAND OR MFGR: EF Johnson PRICE LIST NAME, NO. & DATE: 2004	

CATEGORY D -HANDHELD PORTABLES

PERCENTAGE DISCOUNT OFF CATEGORY/OPTIONS	15%
PERCENTAGE DISCOUNT OFF ACCESSORIES	15%
BRAND OR MFGR: EF Johnson PRICE LIST NAME, NO. & DATE: 2004	

CATEGORY E –SERVICE MANUALS

PERCENTAGE DISCOUNT OFF CATEGORY/OPTIONS	15%
PERCENTAGE DISCOUNT OFF ACCESSORIES	15%
BRAND OR MFGR: EF Johnson PRICE LIST NAME, NO. & DATE: 2004	

STATE OF MICHIGAN	Category	LIST PRICE	State of Michigan Contract Price 15% Discount
PROJECT 25 DIGITAL TRUNKING PORTABLES			
EF JOHNSON 51SL PORTABLE, WITH LIMITED KEYPAD, FRONT MOUNT DISPLAY, 3 WATT, 800MHZ, WHIP ANTENNA, EXTRA HIGH CAPACITY NiMH BATTERY, BLACK HOUSING, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5282-810-23	Category D	$ 2,650.00	$ 2,253.00
EF JOHNSON 51SL PORTABLE, WITH FULL KEYPAD, FRONT MOUNT DISPLAY, 3 WATT, 800MHZ, WHIP ANTENNA, EXTRA HIGH CAPACITY NiMH BATTERY, BLACK HOUSING, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5283-810-23	Category D	$ 2,824.00	$ 2,400.00
PROJECT 25 DIGITAL/ SMARTZONE/ SMARTNET TRUNKING PORTABLES			
EF JOHNSON 5100 PORTABLE, WITH LIMITED KEYPAD, FRONT MOUNT DISPLAY, 3 WATT, 800MHZ, WHIP ANTENNA, EXTRA HIGH CAPACITY NiMH BATTERY, BLACK HOUSING, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), S.T.A.R. (Omnilink), 512 TALKGROUPS. MODEL NUMBER = 5182-810-23	Category D	$ 3,205.00	$ 2,724.00
EF JOHNSON 5100 PORTABLE, WITH FULL KEYPAD, FRONT MOUNT DISPLAY, 3 WATT, 800MHZ, WHIP ANTENNA, EXTRA HIGH CAPACITY NiMH BATTERY, BLACK HOUSING, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), S.T.A.R. (Omnilink), 512 TALKGROUPS. MODEL NUMBER = 5183-810-23	Category D	$ 3,452.00	$ 2,934.00
EF JOHNSON 5100 PORTABLE, WITH LIMITED KEYPAD, FRONT MOUNT DISPLAY, 3 WATT, 800MHZ, WHIP ANTENNA, EXTRA HIGH CAPACITY NiMH BATTERY, BLACK HOUSING, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), S.T.A.R. (Omnilink), 512 TALKGROUPS. FM APPROVED INTRISICALLY SAFE MODEL NUMBER = 5186-860-23	Category D	$ 3,254.00	$ 2,766.00
EF JOHNSON 5100 PORTABLE, WITH FULL KEYPAD, FRONT MOUNT DISPLAY, 3 WATT, 800MHZ, WHIP ANTENNA, EXTRA HIGH CAPACITY NiMH BATTERY, BLACK HOUSING, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), S.T.A.R. (Omnilink), 512 TALKGROUPS. FM APPROVED INTRISICALLY SAFE MODEL NUMBER = 5187-860-23	Category D	$ 3,501.00	$ 2,976.00
PORTABLE OPTIONS			

STATE OF MICHIGAN	Category	LIST PRICE		State of Michigan Contract Price 15% Discount
PROJECT 25 DIGITAL TRUNKING PORTABLES				
ADD 1 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 1 YEAR EXTENDED = 2 YEAR WARRANTY). MODEL NUMBER = 299-0045-017	Category D	$ 32.00	No Discount	$ 32.00
ADD 2 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 2 YEAR EXTENDED = 3 YEAR WARRANTY). MODEL NUMBER = 299-0045-013	Category D	$ 50.00	No Discount	$ 50.00
ADD 3 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 3 YEAR EXTENDED = 4 YEAR WARRANTY). MODEL NUMBER = 299-0045-029	Category D	$ 105.00	No Discount	$ 105.00
ADD YELLOW OR ORANGE HOUSING (5100 SERIES ONLY) MODEL NUMBER = 51XX--XX1-XX YELLOW, 51XX-XX2-XX ORANGE	Category D	$ 25.00		$ 21.25
ADD ALKALINE BATTERY CLAMSHELL HOUSING (5100 SERIES ONLY) MODEL NUMBER = 51XX--X2X-XX	Category D	$ 148.00		$ 125.80
ADD DES/ P25 DES-OFB ENCRYPTION. MODEL NUMBER = 06	Category D	$ 550.00		$ 467.50
ADD DES/ P25 DES-OFB/ AES ENCRYPTION. MODEL NUMBER = 08 (5100 SERIES ONLY)	Category D	$ 750.00		$ 637.50
ADD DES/ DES-XL/ DES-OFB ENCRYPTION. MODEL NUMBER 09	Category D	$ 750.00		$ 637.50
ADD DES/ DES-XL/ DES-OFB/ AES ENCRYPTION. MODEL NUMBER 10 (5100 SERIES ONLY)	Category D	$ 950.00		$ 807.50
ADD P25 OTAR (OVER-THE-AIR-REKEYING) CONVENTIONAL. MODEL NUMBER = 11	Category D	$ 703.00		$ 597.55
ADD P25 OTAR (OVER-THE-AIR-REKEYING) TRUNKING. MODEL NUMBER = 12 (5100 SERIES ONLY)	Category D	$ 750.00		$ 637.50
ADD P25 DATA. MODEL NUMBER = 13	Category D	$ 143.00		$ 121.55
PROJECT 25 DIGITAL TRUNKING MOBILES				
EF JOHNSON 53SL DASH MOUNT MOBILE, 35 WATT, 800MHz, MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5487-11-23	Category C	$ 3,324.00		$ 2,825.00
EF JOHNSON 53SL REMOTE MOUNT MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEAD WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5488-01-23	Category C	$ 3,927.00		$ 3,338.00
EF JOHNSON 53SL REMOTE MOUNT DUAL CONTROL HEAD MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEADS WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5488-61-23	Category C	$ 4,448.00		$ 3,781.00
EF JOHNSON 53SL REMOTE MOUNT WITH HANDHELD CONTROLLER MOBILE, 35 WATT, 800MHz, HANDHELD CONTROLLER, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5488-51-23	Category C	$ 3,999.00		$ 3,399.00
REQUIRES SPEAKER - MODEL NUMBER = 250-0151-005	Category C	$ 54.00		$ 45.90
PROJECT 25 DIGITAL/ SMARTZONE/ SMARTNET TRUNKING MOBILES				

STATE OF MICHIGAN	Category	LIST PRICE		State of Michigan Contract Price 15% Discount
PROJECT 25 DIGITAL TRUNKING PORTABLES				
EF JOHNSON 5300 DASH MOUNT MOBILE, 35 WATT, 800MHz, MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5387-11-23	Category C	$ 3,876.00		$ 3,295.00
EF JOHNSON 5300 REMOTE MOUNT MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEAD WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5388-01-23	Category C	$ 4,455.00		$ 3,787.00
EF JOHNSON 5300 REMOTE MOUNT DUAL CONTROL HEAD MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEADS WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5388-61-23	Category C	$ 5,233.00		$ 4,448.00
EF JOHNSON 5300 REMOTE MOUNT WITH HANDHELD CONTROLLER MOBILE, 35 WATT, 800MHz, HANDHELD CONTROLLER, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5388-51-23	Category C	$ 4,676.00		$ 3,975.00
REQUIRES SPEAKER - MODEL NUMBER = 250-0151-005	Category C	$ 54.00		$ 45.90
MOBILE OPTIONS				
ADD 1 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 1 YEAR EXTENDED = 2 YEAR WARRANTY). MODEL NUMBER = 299-0045-016	Category C	$ 30.00	No Discount	$ 30.00
ADD 2 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 2 YEAR EXTENDED = 3 YEAR WARRANTY). MODEL NUMBER = 299-0045-012	Category C	$ 50.00	No Discount	$ 50.00
ADD 3 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 3 YEAR EXTENDED = 4 YEAR WARRANTY). MODEL NUMBER = 299-0045-028	Category C	$ 100.00	No Discount	$ 100.00
ADD DES/ P25 DES-OFB ENCRYPTION. MODEL NUMBER = 05	Category C	$ 550.00		$ 467.50
ADD DES/ P25 DES-OFB/ AES ENCRYPTION. MODEL NUMBER = 07 (5100 SERIES ONLY)	Category C	$ 750.00		$ 637.50
ADD DES/ DES-XL/ DES-OFB ENCRYPTION. MODEL NUMBER 06	Category C	$ 750.00		$ 637.50
ADD DES/ DES-XL/ DES-OFB/ AES ENCRYPTION. MODEL NUMBER 08 (5100 SERIES ONLY)	Category C	$ 950.00		$ 807.50
ADD P25 OTAR (OVER-THE-AIR-REKEYING) CONVENTIONAL. MODEL NUMBER = 11	Category C	$ 750.00		$ 637.50
ADD P25 OTAR (OVER-THE-AIR-REKEYING) TRUNKING. MODEL NUMBER = 12 (5100 SERIES ONLY)	Category C	$ 750.00		$ 637.50
ADD P25 DATA. MODEL NUMBER = 13	Category C	$ 135.00		$ 114.75
ADD P25 DATA TRUNKING. MODEL NUMBER = 14	Category C	$ 135.00		$ 114.75

STATE OF MICHIGAN

PROJECT 25 DIGITAL TRUNKING PORTABLES

	Category	LIST PRICE	State of Michigan Contract Price 15% Discount
PROJECT 25 DIGITAL CONTROL STATIONS			
EF JOHNSON 53SL DASH MOUNT MOBILE, 35 WATT, 800MHz, MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5487-11-23($2,825.00) + DESK MICROPHONE = 589-0012-021 ($97.75)	Category C	$ 3,439.00	$ 2,922.75
EF JOHNSON 53SL REMOTE MOUNT MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEAD WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5488-01-23 ($3,338.00) + DESK MICROPHONE = 589-0012-021 ($97.75)	Category C	$ 4,042.00	$ 3,485.75
EF JOHNSON 53SL REMOTE MOUNT DUAL CONTROL HEAD MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEADS WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5488-61-23 ($3781.00) + 2 DESK MICROPHONE = 589-0012-021 ($195.50)	Category C	$ 4,678.00	$ 3,976.50
EF JOHNSON 53SL REMOTE MOUNT WITH HANDHELD CONTROLLER MOBILE, 35 WATT, 800MHz, HANDHELD CONTROLLER, POWER CABLE, HARDWARE KIT, BRACKET, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS.	Category C	$ 3,999.00	$ 3,399.00
REQUIRES SPEAKER - MODEL NUMBER = 250-0151-005	Category C	$ 54.00	$ 45.90
PROJECT 25 DIGITAL/ SMARTZONE/ SMARTNET TRUNKING CONTROL STATIONS			
EF JOHNSON 5300 DASH MOUNT MOBILE, 35 WATT, 800MHz, MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5387-11-23 ($3,295.00) + DESK MICROPHONE = 589-0012-021 ($97.75)	Category C	$ 3,876.00	$ 3,295.00
EF JOHNSON 5300 REMOTE MOUNT MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEAD WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5388-01-23 ($3,787.00) + DESK MICROPHONE = 589=0012-021 ($97.75)	Category C	$ 4,570.00	$ 3,884.75

STATE OF MICHIGAN	Category	LIST PRICE		State of Michigan Contract Price 15% Discount
PROJECT 25 DIGITAL TRUNKING PORTABLES				
EF JOHNSON 5300 REMOTE MOUNT DUAL CONTROL HEAD MOBILE, 35 WATT, 800MHz, REMOTE CONTROL HEADS WITH MICROPHONE, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5388-61-23 ($4,448.00) + 2 DESK MICROPHONES = 589-0012-021 ($195.50)	Category C	$ 5,463.00		$ 4,643.50
EF JOHNSON 5300 REMOTE MOUNT WITH HANDHELD CONTROLLER MOBILE, 35 WATT, 800MHz, HANDHELD CONTROLLER, POWER CABLE, HARDWARE KIT, BRACKET, MOTOROLA SMARTNET AND SMARTZONE TRUNKING, CONVENTIONAL, P25 TRUNKING & P25 CONVENTIONAL SOFTWARE, PROJECT 25 DIGITAL COMMON AIR INTERFACE (CAI), 512 TALKGROUPS. MODEL NUMBER = 5388-51-23	Category C	$ 4,676.00		$ 3,975.00
REQUIRES SPEAKER - MODEL NUMBER = 250-0151-005	Category C	$ 54.00		$ 45.90
MOBILE & CONTROL STATION OPTIONS				
ADD 1 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 1 YEAR EXTENDED = 2 YEAR WARRANTY). MODEL NUMBER = 299-0045-016	Category C	$ 30.00	No discount	$ 30.00
ADD 2 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 2 YEAR EXTENDED = 3 YEAR WARRANTY). MODEL NUMBER = 299-0045-012	Category C	$ 50.00	No discount	$ 50.00
ADD 3 YEAR EXTENDED WARRANTY (1 YEAR STANDARD + 3 YEAR EXTENDED = 4 YEAR WARRANTY). MODEL NUMBER = 299-0045-028	Category C	$ 100.00	No discount	$ 100.00
ADD DES/ P25 DES-OFB ENCRYPTION. MODEL NUMBER = 05	Category C	$ 550.00		$ 467.50
ADD DES/ P25 DES-OFB/ AES ENCRYPTION. MODEL NUMBER = 07 (5100 SERIES ONLY)	Category C	$ 750.00		$ 637.50
ADD DES/ DES-XL/ DES-OFB ENCRYPTION. MODEL NUMBER 06	Category C	$ 750.00		$ 637.50
ADD DES/ DES-XL/ DES-OFB/ AES ENCRYPTION. MODEL NUMBER 08 (5100 SERIES ONLY)	Category C	$ 950.00		$ 807.50
ADD P25 OTAR (OVER-THE-AIR-REKEYING) CONVENTIONAL. MODEL NUMBER = 11	Category C	$ 750.00		$ 637.50
ADD P25 OTAR (OVER-THE-AIR-REKEYING) TRUNKING. MODEL NUMBER = 12 (5100 SERIES ONLY)	Category C	$ 750.00		$ 637.50
ADD P25 DATA. MODEL NUMBER = 13	Category C	$ 135.00		$ 114.75
ADD P25 DATA TRUNKING. MODEL NUMBER = 14	Category C	$ 135.00		$ 114.75
PORTABLE, MOBILE & CONTROL STATION ACCESSORIES				
CHARGER - WITH POWER SUPPLY. MODEL NUMBER = 250-5100-210	Category D	$ 150.00		$ 127.50
CHARGER - CONDITIONER KIT WITH POWER SUPPLY. MODEL NUMBER = 250-5100-215	Category D	$ 180.00		$ 153.00
PUBLIC SAFETY REMOTE SPEAKER MIC. MODEL NUMBER = 589-0015-058	Category D	$ 265.00		$ 225.25
ANTENNA FOR PUBLIC SAFETY MIC. MODEL NUMBER = 501-0105-012	Category D	$ 30.00		$ 25.50
REMOTE SPEAKER MIC. MODEL NUMBER = 589-0015-057	Category D	$ 130.00		$ 110.50
SPARE BATTERY. MODEL NUMBER = 587-5100-360	Category D	$ 100.00		$ 85.00
SPARE FM APPROVED INTRINSICALLY SAFE BATTERY. MODEL NUMBER 587-5100-361	Category D	$ 123.00		$ 104.55
BATTERY ELIMINATOR. MODEL NUMBER = 587-5100-100	Category D	$ 65.00		$ 55.25
VEHICULAR CHARGER. MODEL NUMBER = 585-5100-260	Category D	$ 120.00		$ 102.00
4 UNIT CHARGER/CONDITIONER KIT. MODEL NUMBER = 250-5100-245	Category D	$ 580.00		$ 493.00
LEATHER CARRY CASE WIH SWIVEL. MODEL NUMBER = 585-5100-122	Category D	$ 70.00		$ 59.50
STANDARD 5300 MICROPHONE. MODEL NUMBER = 250-0740-310	Category C	$ 100.00		$ 85.00
DESKTOP MICROPHONE. MODEL NUMBER 589-0012-021	Category B	$ 115.00		$ 97.75

STATE OF MICHIGAN

	Category	LIST PRICE	State of Michigan Contract Price 15% Discount
PROJECT 25 DIGITAL TRUNKING PORTABLES			
DTMF 5300 MICROPHONE. MODEL NUMBER 589-0016-028	Category C	$ 199.00	$ 169.15
NOISE CANCELLING MICROPHONE. MODEL NUMBER = 589-0016-592	Category C	$ 145.00	$ 123.25
5" REMOTE SPEAKER. MODEL NUMBER = 250-0151-006	Catagfory C	$ 54.00	$ 45.90
800 MHz ROOF MOUNT ANTENNA. MODEL NUMBER = 585-1155-011	Category C	$ 58.00	$ 49.30
50' REMOTE MOUNTING CABLE. MODEL NUMBER = 597-2002-263	Category C	$ 399.00	$ 339.15
POWER SUPPLY. MODEL NUMBER 585-4001-202	Category B	$ 215.00	$ 182.75

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

NOTICE
TO
CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR **Communication Specialists, Inc.** **4138 South Division Avenue** **Grand Rapids, MI 49548** **adykema@comspecinc.com**	TELEPHONE Arlen Dykema **(616) 534-5862** **Fax (616) 534-1475** VENDOR NUMBER/MAIL CODE BUYER (517) 373-1455 **Laura Gyorkos, Buyer**
Contract Administrator: Laura Gyorkos **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **December 1, 2002**	To: **December 1, 2005**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	

The terms and conditions of this Contract are those of ITB #071I2000123 is Contract Agreement and the vendor's quote dated 04/22/02. In the event of any conflicts between the specifications, terms and conditions indicated by the State and those indicated by the vendor, those of the State take precedence.

Est. Contract Value: $1,332,979.00

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
ACQUISITION SERVICES
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CONTRACT NO. 071B3001104
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF VENDOR **Communication Specialists, Inc.** **4138 South Division Avenue** **Grand Rapids, MI 49548**	TELEPHONE Rich Honholt **(616) 534-5862 Fax (616)534-1475** VENDOR NUMBER/MAIL CODE BUYER (517) 373-1455 **Laura Gyorkos, Buyer**
Contract Administrator: Laura Gyorkos **2 Way Radios - Statewide**	
CONTRACT PERIOD: From: **12/01/02**	To: **12/01/05**
TERMS **NET 30**	SHIPMENT **45 DAYS ARO**
F.O.B. **DESTINATION**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION: **The terms and conditions of this Contract are those of ITB #071I2000123 is Contract Agreement and the vendor's quote dated 04/22/02. In the event of any conflicts between the specifications, terms and conditions indicated by the State and those indicated by the vendor, those of the State take precedence.** **Est. Contract Value: $1,332,979.00**	

THIS IS NOT AN ORDER: This Contract Agreement is awarded on the basis of our inquiry bearing the ITB No. 071I2000123. A Purchase Order Form will be issued only as the requirements of the State Departments are submitted to the Office of Purchasing. Orders for delivery may be issued directly by the State Departments through the issuance of a Purchase Order Form. This is extended to local units of government.

All terms and conditions of the invitation to bid are made a part hereof.

FOR THE VENDOR:	**FOR THE STATE:**
Firm Name	Signature **Anthony Des Chenes, Division Director**
Authorized Agent Signature	Name **Acquisition Services, Strategic Purchasing**

Authorized Agent (Print or Type)	Title
Date	Date

TABLE OF CONTENTS

SECTION I - REQUIREMENTS *3*

I-A INTRODUCTION 3

I-B SPECIFIC REQUIREMENTS 3
1. COMPANY INFORMATION 3
2. PRODUCT QUALITY/SPECIFICATIONS 3
3. DELIVERY 3
4. PRIOR EXPERIENCE 4
5. SERVICE 4
a) Customer Service 4
b) Placing Orders 5
c) Special Purchase Programs 5
6. PRICE 5
7. WARRANTY 6
8. EXTENDED WARRANTY 6
9. MAINTENANCE/SERVICE/EQUIPMENT REPAIR PARTS 8
10. TRAINING 8

SECTION II - GENERAL CONTRACT PROVISIONS *9*

II-A GENERAL 9

II-B CATALOGS 9

II-C SERVICE MANUALS 9

II-D INSPECTION OF PRODUCTS 9

II-E PALLETIZING 10

II-F PACKAGING 10

II-G USAGE REPORTING 10

II-H F.O.B. POINT 10

II-I QUALITY ASSURANCE 10

II-J INVOICING 11

II-K ISSUING OFFICE 11

II-L CONTRACT ADMINISTRATOR 11

II-M CONTRACT TERM 13

II-N ENTIRE AGREEMENT AND ORDER OF PRECEDENCE 13

II-O NO WAIVER OF DEFAULT 13

II-P REVISIONS, CONSENTS, AND APPROVALS 13

II-Q SEVERABILITY 14

II-R SURVIVOR 14

II-S GOVERNING LAW 14

II-T RELATIONSHIP OF THE PARTIES (INDEPENDENT CONTRACTOR) 14

II-U HEADINGS 14

II-V	INCURRING COSTS	14
II-W	NEWS RELEASES	14
II-X	CONTRACTOR RESPONSIBILITIES	15
II-Y	PERFORMANCE REVIEWS	15
II-Z	PROHIBITED PRODUCTS	15
II-AA	AUDIT OF CONTRACT COMPLIANCE	15
II-BB	SAFETY AND ACCIDENT PREVENTION	16
II-CC	ASSIGNMENT	16
II-DD	DELEGATION	16
II-EE	DISCLOSURE	16
II-FF	TAXES	16
II-GG	PRICE	15
II-HH	ADDITIONAL PRODUCTS	17
II-II	RECYCLED CONTAINERS	17
II-JJ	CONTRACTOR'S LIABILITY INSURANCE	18
II-KK	INDEMNIFICATION	19
II-LL	RIGHT TO KNOW ACT (Act 80 of 1986)	20
II-MM	CONTRACT DISTRIBUTION	22
II-NN	ACCOUNTING RECORDS	22
II-OO	NON-DISCRIMINATION CLAUSE	22
II-PP	CANCELLATION	22
II-QQ	NOTICE AND RIGHT TO CURE	25
II-RR	ELECTRONIC FUNDS TRANSFER	25
II-SS	MODIFICATION OF CONTRACT	25
II-TT	UNFAIR LABOR PRACTICES	26
II-UU	MICHIGAN STATE INDUSTRIES	26
II-VV	FORM, FUNCTION, AND UTILITY	26
II-WW	CONTRACT PAYMENT SCHEDULE	26

Attachments:

"Quick Reference" Item Listing/ Pricing Pages
Specifications for Base Stations/Repeaters
Specifications for Base Stations/Programmable Desktop
Specifications for Mobiles
Specifications for Handheld Portables - 30-50 Mhz
Specifications for Handheld Portables – multiple Mhz ranges
State Agency Locations

SECTION I - REQUIREMENTS

I-A INTRODUCTION

This Contract is for Two-Way Radios for the State of Michigan - Statewide. Section I is designed to provide information on requirements associated with this contract.

I-B SPECIFIC REQUIREMENTS

1. COMPANY INFORMATION

Communication Specialists, Inc.
4138 S. Division Ave.
Grand Rapids, MI 49548
Phone: 616-534-5862
Fax: 616-534-1475
rhonholt@comspecinc.com

Contact: Richard W. Honholt, Sale Representative
Arlen J. Dykema, President

2. PRODUCT QUALITY/SPECIFICATIONS

All commodities to be furnished hereunder shall conform to the specifications as noted in the "GENERAL SPECIFICATIONS" section of this document. In the event of award, if a product has been misrepresented, the contractor may be found in default of the contract.

If any contractual item changes during the course of the agreement, the State shall be notified of such change(s) and given the option to accept or reject the change. In the event the change(s) is acceptable, the item shall be supplied at the same percentage discount as specified on the contract. Should the State reject the change(s), the contract, or portion thereof, may be canceled. During the course of the contract period, should a question arise concerning the acceptable performance of any contracted item, the State reserves the right to conduct a pass/fail test at the time. If the product in question fails the test, the contract, or portion thereof, may be canceled.

Alternate Brands - Detailed General Specifications have been indicated for all products to be furnished under this contract. A recommended manufacturer and product number has been indicated for each item. Product numbers referenced represent specifically what the State requires. Alternate products must have the ability to meet the qualifications as specified.

3. DELIVERY

This contract is to provide radios and service throughout the State of Michigan

with delivery no later than 45 days ARO, F.O.B. delivered. Exceptions may be allowed at the State's discretion based on quantity and complexity.

The contractor shall be responsible for contacting the State agencies to arrange delivery schedules. Failure to deliver items according to established delivery schedules may result in cancellation of the contract for default. In the event of cancellation for default, the contractor shall be responsible for all costs associated with the contract cancellation, as outlined in the cancellation term.

Each order shall be accompanied with a packing slip or invoice. The packing slip or invoice shall contain the following information:

Agency name and address
Purchase order number
Stock number and brief description of each item
Unit of issue and quantity issued for each item
Unit price and extended price for each item
Date order was received by Contractor
Total price of order

If order is more than one box, the boxes must be labeled with total number of boxes, individual number of box (i.e. Box 1 of 8), and the purchase order number.

4. PRIOR EXPERIENCE

The Contractor shall demonstrate their ability to handle and service a Contract of this size and scope. The contractor shall have demonstrated ability to supply products in a timely manner to ensure no product shortages.

5. SERVICE

a) Customer Service

Contacts: Mr. Floyd Miltz, Service Manager
4138 S. Division Ave.
Grand Rapids, MI 49548
Phone: (616) 534-5862
Fax: (616) 534-1475

Service Assistant
Teresa Dykema
4138 S. Division Ave.

Grand Rapids, MI 49548
Phone: (616) 534-5862
Fax: (616) 534-1475

The contractor shall have the capability to respond to agency inquiries within one (1) business day of receipt of contact. A Customer Service Representative(s) shall be assigned specifically to the State of Michigan account that shall be prepared to assist the State agencies in any ordering or invoicing problems in a courteous and helpful manner.

b) Placing Orders

All orders shall be handled by the customer service department.

The contractor shall have the capability to receive orders by telephone, e-mail, facsimile and by written order. The contractor may offer electronic ordering capability.

c) Special Purchase Programs

Product Discounts: The State of Michigan reserves the right to negotiate pricing, discounts and/or rebates directly with the manufacturers for large volume purchases. The Contractor shall pass on to the State all price discounts and reductions in which the State of Michigan is entitled to receive from the manufacturers. These discounts and reductions shall include, without limitation, nonprofit allowances, free goods, rebates, quarterly and other discounts and special manufacturer deal prices. The State reserves the right to change to other product brands carried by the Contractor if the cost is beneficial to the State.

If a manufacturer offers rebates directly to an agency, the Contractor shall track purchase information for each agency for the items affected and submit this information to the manufacturer as required by the manufacturer.

6. PRICE

The prices quoted are “net” unit price and an extended amount for each item number on the attached “Item Listing/Price Pages”. Prices shall include delivery and service to Upper and Lower Peninsulas.

The percentage (%) of discount that was applied to the price list to calculate the net prices of items specified on the item listing MUST also be the same percentage of discount that shall apply to ALL items within the applicable category which are NOT indicated in the item listing. Only one percentage of discount from one catalog and/or price list will be

allowed for each category. The respective discount(s) shall apply to any and all items purchased within the applicable category from this contract.

Catalogs and price lists shall be pre-printed by the manufacturer for use within the industry. Specially printed catalogs and/or price lists will not be considered. The discount MUST be from the same catalog and price list, used to calculate the UNIT PRICE for items listed in each category of the item listing as well as apply to the same quantity column if column prices based on quantity exist. Multiple percentages of discount (within a category) based on the item(s) or
quantity is not acceptable.

Any new items should be available at the established discount rates of the respective categories.

7. WARRANTY

All materials, equipment, parts and labor shall be guaranteed for a minimum period of two (2) years to begin from the date the equipment is installed and in accordance with the following:

The contractor(s) will, without charge for parts and labor, repair or replace any defective components, materials or parts, if notice of such defect is given to the contractor (s) within the applicable Warranty Period. The State agencies will place the equipment in service within 12 months after receipt or payment whichever is latter.

Maintenance provided under such warranties shall be provided, during the applicable Warranty Period, under the following terms and conditions:

1) The period in which maintenance shall be provided will be 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding legal State designated holidays.
2) The State may report a defect Monday through Friday, excluding legal State designated holidays, by telephone call to the contractor(s).
3) Arrangements shall be made within 2 (two) State working days of defect notice. Repairs shall be effected and equipment returned or replaced within 30 days.
4) Contractor(s) will proceed expeditiously to complete the repair of any defect or failure reported by the State in the shortest practicable time. If any State agency is experiencing an equipment failure rate of greater than 5%, the contractor(s) shall provide immediate repair/replacement of all equipment of the same make and model purchased against the subject contract.

7. EXTENDED WARRANTY

An extended warranty program does not exist through the Kenwood Corporation, however, Communication Specialists will work with any

purchaser on a year service agreement. Such agreements will be worked on an individual basis in one year increments.

9. MAINTENANCE/SERVICE/EQUIPMENT REPAIR PARTS

The contractor will contact and arrange service with the agency within one day contact from the agency.

Service charges are $72.00/hr with one half hour minimum. Service performed under the Warranty is no charge to the agency.

Maintenance/Service/Equipment repair parts shall be made available for a minimum of 7 years for all units once the 90 day warranty has expired.

Equipment manufacturers and suppliers shall inform us about equipment replacement parts. Only new parts will be considered. That information shall include pricing information and applied discounts. Replacement parts shall be made available for a minimum of 7 years for all units/equipment after contract period.

10. TRAINING

User training can and will be available through printed instruction materials that accompany all products, and if necessary through telephone, fax, and/or e-mail correspondence.

Pricing shall be provided on an individual basis depending on the using agency's needs. Prices shall not exceed vendor's usual and customary charges.

SECTION II - GENERAL CONTRACT PROVISIONS

II-A GENERAL

The Contract is for Two-Way Radios for the State of Michigan - Statewide. Exact quantities to be purchased are unknown, however the Contractor will be required to furnish all such materials and services as may be ordered during the contract period. Quantities specified if any, are estimates based on prior purchases, and the State is not obligated to purchase in these or any other quantities. Orders for delivery will be issued directly to the Contractor by various State Agencies on the Purchase Order Contract Release Form and by Acquisition Services on the Purchase Order Form.

This Contract is a unit price contract based on a percentage off list price for an applicable category.

Attached is a listing of State agencies and/or locations who may order from the Contract. The listing shall not limit participation of additional agencies/locations as the need may develop at the same prices, terms and conditions. Orders may also be issued by local units of government.

II-B CATALOGS

Upon request, the Contractor must supply original copies of the manufacturers official public price list as offered on this contract to State Agencies and local units of Government. The catalog should contain a complete description of all available models within each category, manufacturer catalog and product numbers.

II-C SERVICE MANUALS

Every item included in the “Quick Reference Item List” must have a detailed service manual available for purchase. The % discount off indicated for accessories will be applicable to detailed service manuals. Detailed service manuals are to include theory, electronic schematics, and detailed parts lists.

II-D INSPECTION OF PRODUCTS

Product will be inspected by the ordering agency within 48 hours of delivery excluding State holidays and weekends. Products will not be accepted if the products fail to meet specifications either in product quality or packaging or the product is an unauthorized substitute product. The Contractor must arrange the pick up the rejected product within 48 hours of being notified of the rejection by the agency. Defective items must be exchanged or credited by the Contractor at the option of the agency.

II-E PALLETIZING

Shipments shall be palletized whenever possible and shall conform to the following:

- Manufacturers standard 4-way shipping pallets are acceptable.
- Maximum height: 5'6"; including pallet.
- Maximum weight: 3500 pounds; including pallet.
- Pallets are to be securely banded or shrink-wrapped.
- The cost of palletizing must be included in the unit price.

II-F PACKAGING

The pack sizes indicated on the contract represent the sizes currently used by the industry. The contractor is requested to provide packaging that most closely meets these packaging sizes. However, contractors can submit alternates. The state reserves the right of final approval on packaging offered by the contractor.

Packaging and containers, etc., shall be in accordance with supplier's commercial practice and shall meet the requirements of Department of Transportation (D.O.T.) and rail and motor carrier freight classifications in effect at time of shipment, which will permit application of the lowest freight rate.

II-G USAGE REPORTING

The Contractors shall have the capability to report the Contract usage by State agencies and/or local units of government. Such usage shall be reported upon request and by item and to the buyer in Acquisition Services, Department of Management and Budget.

II-H F.O.B. POINT

All orders shall be shipped F.O.B. destination with all shipping pre-paid. Other F.O.B. terms will not be accepted. Responsibility and liability for loss or damage shall remain with the Contractor until final inspection and acceptance when responsibility shall pass to the agency except as to latent defects, fraud, and the Contractor’s warranty obligations, if any.

II-I QUALITY ASSURANCE

The contractor shall have a written quality control program which ensures that all manufacturers and suppliers to the Contractor have effective quality control programs, have standard operating procedures and use good manufacturing practices. The Contractor shall monitor the quality control program of all suppliers and manufacturers.

The State reserves the right to periodically test products which have been received to verify compliance with specifications. If laboratory analysis shows that the product does not meet specifications or fails to perform satisfactorily at any time, the Contractor shall be responsible for:

1. All costs of testing and laboratory analysis.
2. Disposal and/or replacement of all products which fail to meet specifications.
3. All costs of repair and/or replacement of equipment deemed to have been damaged by substandard products as determined by the State.

II-J INVOICING

The contractor will provide a detailed invoice within 30 days for shipment and repairs.

II-K ISSUING OFFICE

The Contract is issued by Acquisition Services, State of Michigan, Department of Management and Budget, hereinafter known as Acquisition Services, where actions are a combination of those of Acquisition Services and the State agencies, the authority will be known as the State.

Acquisition Services is the sole point of contact in the State with regard to all procurement and contractual matters relating to the commodities and/or services described herein. Acquisition Services is the only office authorized to change, modify, amend, alter, clarify, etc., the specifications, terms, and conditions of the Contract. Acquisition Services will remain the SOLE POINT OF CONTACT throughout the procurement process. All communications covering this procurement must be addressed to:

Department of Management and Budget
Office of Purchasing
Attn: Laura Gyorkos
2nd Floor, Mason Building
P.O. Box 30026
Lansing, Michigan 48909
(517) 373-1455
gyorkosl@michigan.gov

II-L CONTRACT ADMINISTRATOR

Upon receipt at Acquisition Services of the properly executed Contract Agreement(s), the person named below will be allowed to administer the Contract on a day-to-day basis during the term of the Contract. However, administration of the Contract implies no authority to change, modify, clarify, amend, or otherwise alter the terms, conditions, and specifications of such Contract(s). That authority is retained by Acquisition Services. The Contract Administrator for this project is:

Department of Management and Budget
Office of Purchasing
Attn: Laura Gyorkos
2nd Floor, Mason Building
P.O. Box 30026
Lansing, Michigan 48909
(517) 373-1455
gyorkosl@michigan.gov

II-M CONTRACT TERM

The term of this contract will be for a three (3) year period and will commence with the issuance of a Contract. This will be approximately December 1, 2002 through December 1, 2005. At the sole option of the State, the Contract may be extended for up to 2 (two) additional years. Contractor performance, quality of products, price, and the Contractor's ability to deliver on time are some of the things that will be used as a basis for any decision by Acquisition Services to extend the Contract.

II-N ENTIRE AGREEMENT AND ORDER OF PRECEDENCE

The following documents constitute the complete and exclusive agreement between the parties. The following order of precedence shall apply (in descending order):

A. Any contract resulting from the State's ITB No. 071i2000123.
B. Any addenda to that ITB.
C. The Contractor's response to that ITB.

The State of Michigan shall not be bound by any part(s) of the bidder's response to the ITB which contains information, options, conditions, terms, or prices neither requested nor required in the ITB. In the event of any conflicts between the specifications, terms and conditions indicated by the State and those indicated by the Contractor, those of the State take precedence. The contract supercedes all proposals or other prior agreements, oral or written, and all other communications between the parties relating to this subject.

II-O NO WAIVER OF DEFAULT

The failure of a party to insist upon strict adherence to any term of the Contract shall not be considered a waiver or deprive the party of the right thereafter to insist upon strict adherence to that term or any other term of the Contract.

II-P REVISIONS, CONSENTS, AND APPROVALS

The Contract may not be modified, amended, extended, or augmented except by a writing executed by the parties hereto, and any breach or default by a party shall not be waived or released other than in writing signed by the other party.

II-Q SEVERABILITY

Each provision of the Contract shall be deemed to be severable from all other provisions of the Contract and, if one or more of the provisions of the Contract shall be declared invalid, the remaining provisions of the Contract shall remain in full force and effect.

II-R SURVIVOR

Any provisions of the Contract that impose continuing obligations on the parties including, but not limited to the Contractor's indemnity and other obligations shall survive the expiration or cancellation of the Contract for any reason.

II-S GOVERNING LAW

The Contract shall in all respects be governed by, and construed in accordance with, the laws of the State of Michigan. Any dispute arising herein shall be resolved in the State of Michigan.

II-T RELATIONSHIP OF THE PARTIES (INDEPENDENT CONTRACTOR)

The relationship between the State and the Contractor is that of client and independent Contractor. No agent, employee, or servant of the Contractor or any of its subcontractors shall be or shall be deemed to be an employee, agent, or servant of the State for any reason. The Contractor will be solely and entirely responsible for its acts and the acts of its agents, employees, servants and subcontractors during the performance of this Contract.

II-U HEADINGS

Captions and headings used in the Contract are for information and organization purposes. Captions and headings, including inaccurate references, do not, in any way, define or limit the requirements or terms and conditions of this Contract.

II-V INCURRING COSTS

The State of Michigan is not liable for any cost incurred by the Contractor prior to signing of the Contract. The State fiscal year is October 1st through September 30th. The Contractor(s) should realize that payments in any given fiscal year are contingent upon enactment of legislative appropriations. Total liability of the State is limited to terms and conditions of the Contract.

II-W NEWS RELEASES

News releases (including promotional literature and commercial advertisements) pertaining to the ITB and Contract or project to which it relates shall not be made without prior written State approval, and then only in accordance with the explicit written instructions from the State. No results of the activities associated with the ITB and Contract are to be released without prior written approval of the State and then only to persons designated.

II-X CONTRACTOR RESPONSIBILITIES

The Contractor will be required to assume responsibility for all contractual activities, whether or not that Contractor performs them. Further, the State will consider the prime Contractor to be the sole point of contact with regard to contractual matters, including payment of any and all charges resulting from the anticipated Contract. If any part of the work is to be subcontracted, the Contract must include a list of subcontractors, including firm name and address, contact person and a complete description of work to be subcontracted. The State reserves the right to approve subcontractors and to require the primary Contractor to replace subcontractors found to be unacceptable. The Contractor is totally responsible for adherence by the subcontractor to all provisions of the Contract. Any change in subcontractors must be approved by the State, in writing, prior to such change.

II-Y PERFORMANCE REVIEWS

Acquisition Services in conjunction with the involved agencies may review with the Contractor their performance under the Contract. Performance reviews shall be conducted quarterly, semi-annually or annually depending on Contractor's past performance with the State. Performance reviews shall include, but not limited to, quality of products being delivered, timeliness of delivery, percentage of completion of orders, the amount of back orders, status of such orders, accuracy of billings, customer service, completion and submission of required paperwork, the number of substitutions and the reasons for substitutions, and other requirements of the Contract.

Upon a finding of poor performance, which has been documented by Acquisition Services, the Contractor shall be given an opportunity to respond and take corrective action. If corrective action is not taken in a reasonable amount of time as determined by Acquisition Services, the Contract may be canceled for default. Acquisition Services reserves the right to cancel the Contract immediately at any time for default, if the Office documents that unsafe and/or adulterated or off-condition products are being delivered to any State agency by the Contractor.

II-Z PROHIBITED PRODUCTS

The State will not accept salvage, distressed, outdated or discontinued merchandise. Shipping of such merchandise to any State agency, as a result of an order placed against the Contract, shall be considered default by the Contractor of the terms and conditions of the Contract and may result in cancellation of the Contract by the State. The brand and product number offered for all items shall remain consistent for the term of the Contract, unless Acquisition Services has approved a change.

II-AA AUDIT OF CONTRACT COMPLIANCE

The Contractor agrees that the State may, upon 24-hour notice, perform an audit at Contractor's location(s) to determine if the Contractor is complying with the requirements of the Contract. The Contractor agrees to cooperate with the State

during the audit and produce all records and documentation that verifies compliance with the Contract requirements.

II-BB SAFETY AND ACCIDENT PREVENTION

In performing work under this Contract on State premises, the Contractor shall conform to any specific safety requirements contained in the Contract or as required by law or regulation. The Contractor shall take any additional precautions as the State may reasonably require for safety and accident prevention purposes. Any violation of such safety requirements, rules, laws or regulations shall be a material breach of the Contract and shall be grounds for cancellation of the Contract in accordance with the Cancellation provisions contained herein.

II-CC ASSIGNMENT

The Contractor shall not have the right to assign the Contract or to assign or delegate any of its duties or obligations under the Contract to any other party (whether by operation of law or otherwise), without the prior written consent of the State. Any purported assignment in violation of this Section shall be null and void. Further, the Contractor may not assign the right to receive money due under the Contract without the prior written consent of the State Purchasing Director.

II-DD DELEGATION

The Contractor shall not delegate any duties or obligations under the Contract to a subcontractor other than a subcontractor named and approved in the bid unless the State Purchasing Director has given written consent to the delegation.

II-EE DISCLOSURE

All information in a contractor's proposal and the Contract is subject to the provisions of the Freedom of Information Act. 1976 Public Act No. 442, as amended, MCL 15.231, et seq.

II-FF TAXES

A. Sales Tax: For purchases made directly by the State of Michigan, the State is exempt from State and Local Sales Tax. Prices shall not include such taxes. Exemption Certificates for State Sales Tax will be furnished upon request.

B. Federal Excise Tax: The State of Michigan may be exempt for Federal Excise Tax, or such taxes may be reimbursable, if articles purchased under this Contract are used for the State's exclusive use. Certificates exclusive use for the purposes of substantiating a tax-free, or tax-reimbursable sale will be sent to the Contractor upon request. If a sale is tax exempt or tax reimbursable under the Internal Revenue Code, prices shall not include the Federal Excise Tax.

C. Contractors are expected to collect and pay all applicable federal, state, and local employment taxes for all persons involved in the resulting Contract. Also, contractors shall maintain appropriate payroll information on a system that can produce any reports that may be needed by Acquisition Services.

II-GG PRICE

Prices quoted are the maximum for a period of 365 days from the date the Contract becomes effective.

Prices are subject to change at the end of each 365 day period. Such changes shall be based on changes in actual costs incurred. Documentation of such changes must be provided with the request for price change in order to substantiate any requested change. Acquisition Services reserves the right to consider various pertinent information sources to evaluate price increase requests (such as the CPI and PPI, US City Average, as published by the US Department of Labor, Bureau of Labor Statistics). Acquisition Services also reserves the right to consider other information related to special economic and/or industry circumstances, when evaluating a price change request. Changes may be either increases or decreases, and may be requested by either party. Approved changes shall be firm for the remainder of the contract period unless further revised at the end of the next 365 day period.

Requests for price changes shall be RECEIVED IN WRITING AT LEAST TEN DAYS PRIOR TO THEIR EFFECTIVE DATE, and are subject to written acceptance before becoming effective. In the event new prices are not acceptable, the CONTRACT may be cancelled. The continued payment of any charges due after September 30th of any fiscal year will be subject to the availability of an appropriation for this purpose.

II-HH ADDITIONAL PRODUCTS

The State reserves the right to add an item(s) that is not described on the item listing and is available from the Contract vendor. The item(s) may be included on the Contract, only if prior written approval has been granted by Acquisition Services.

II-II RECYCLED CONTAINERS

The Contractors are encouraged to offer products packaged in containers using recovered materials suitable for the intended use. 'Recovered material' is defined as post-consumer waste (any products generated by a business or consumer which have served their intended end use, and which have been separated or diverted from solid waste for the purpose of collection, recycling, and disposition) and 'secondary waste' (industrial by-products and wastes generated after completion of a manufacturing process that would normally not be reused).

II-JJ CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's operations under the Contract (Direct Purchase Order), whether such operations be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

A. Claims under workers' compensation, disability benefit and other similar employee benefit act. A non-resident Contractor shall have insurance for benefits payable

under Michigan's Workers' Compensation Law for any employee resident of and hired in Michigan; and as respects any other employee protected by workers' compensation laws of any other state the Contractor shall have insurance or participate in a mandatory state fund to cover the benefits payable to any such employee.

B. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees.

C. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees, subject to limits of liability of not less than $300,000 each occurrence and, when applicable $300,000 annual aggregate, for non-automobile hazards and as required by law for automobile hazards.

D. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom, subject to a limit of liability of not less than $50,000 each occurrence for non-automobile hazards and as required by law for automobile hazards.

E. Insurance for Subparagraphs (3) and (4) non-automobile hazards on a combined single limit of liability basis shall not be less than $300,000 each occurrence and when applicable, $300,000 annual aggregate.

The insurance shall be written for not less than any limits of liability herein specified or required by law, whichever is greater, and shall include Contractual liability insurance as applicable to the Contractor's obligations under the Indemnification clause of the Contract (Direct Purchase Order).

BEFORE THE CONTRACT IS EXECUTED BY ACQUISITION SERVICES, THE CONTRACTOR MUST FURNISH TO ACQUISITION SERVICES, CERTIFICATE(S) OF INSURANCE VERIFYING LIABILITY COVERAGE. THE CONTRACT OR DIRECT PURCHASE ORDER NO. MUST BE SHOWN ON THE CERTIFICATE OF INSURANCE TO ASSURE CORRECT FILING. These Certificates shall contain a provision that coverage afforded under the policies will not be cancelled until at least fifteen days prior written notice bearing the Contract No. or Direct Purchase Order No. has been given to the Director of Purchasing.

II-KK INDEMNIFICATION

A. General Indemnification

The Contractor shall indemnify, defend and hold harmless the State, its departments, divisions, agencies, sections, commissions, officers, employees and agents, from and against all losses, liabilities, penalties, fines, damages and claims (including taxes), and all related costs and expenses (including reasonable attorneys' fees and disbursements and costs of investigation, litigation, settlement, judgments, interest and penalties), arising from or in connection with any of the following:

1. any claim, demand, action, citation or legal proceeding against the State, its employees and agents arising out of or resulting from (1) the product provided

   or (2) performance of the work, duties, responsibilities, actions or omissions of the Contractor or any of its subcontractors under this Contract.

2. any claim, demand, action, citation or legal proceeding against the State, its employees and agents arising out of or resulting from a breach by the Contractor of any representation or warranty made by the Contractor in the Contract;

3. any claim, demand, action, citation or legal proceeding against the State, its employees and agents arising out of or related to occurrences that the Contractor is required to insure against as provided for in this Contract;

4. any claim, demand, action, citation or legal proceeding against the State, its employees and agents arising out of or resulting from the death or bodily injury of any person, or the damage, loss or destruction of any real or tangible personal property, in connection with the performance of services by the Contractor, by any of its subcontractors, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable; provided, however, that this indemnification obligation shall not apply to the extent, if any, that such death, bodily injury or property damage is caused solely by the negligence or reckless or intentional wrongful conduct of the State;

5. any claim, demand, action, citation or legal proceeding against the State, its employees and agents which results from an act or omission of the Contractor or any of its subcontractors in its or their capacity as an employer of a person.

B. Patent/Copyright Infringement Indemnification

The Contractor shall indemnify, defend and hold harmless the State, its employees and agents from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and disbursements and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Contractor or its subcontractors, or the operation of such equipment, software, commodity or service, or the use or reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States or foreign patent, copyright, trade secret or other proprietary right of any person or entity, which right is enforceable under the laws of the United States. In addition, should the equipment, software, commodity, or service, or the operation thereof, become or in the Contractor's opinion be likely to become the subject of a claim of infringement, the Contractor shall at the Contractor's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Contractor, (ii) replace or modify the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Contractor, (iii) accept its return by the State with appropriate credits to the State against the Contractor's charges and reimburse the

State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

C. Indemnification Obligation Not Limited

In any and all claims against the State of Michigan, or any of its agents or employees, by any employee of the Contractor or any of its subcontractors, the indemnification obligation under the Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Contractor or any of its subcontractors under worker's disability compensation acts, disability benefits acts, or other employee benefits acts. This indemnification clause is intended to be comprehensive. Any overlap in subclauses, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other subclause.

D. Continuation of Indemnification Obligation

The duty to indemnify will continue in full force and affect not withstanding the expiration or early termination of the Contract with respect to any claims based on facts or conditions, which occurred prior to termination.

II-LL RIGHT TO KNOW ACT (Act 80 of 1986)

The "Right to Know Act" is intended to provide protection and information to employees who encounter hazardous substances in the workplace. To comply with this act, it is necessary that you fulfill the following:

Labels on all incoming containers of hazardous chemicals must (1) clearly State the identity of the contents, (2) display appropriate hazard warning(s), (3) include first aid information, and (4) list the name and address of the chemical manufacturer, importer, or other responsible party.

Material Safety Data Sheets must be included with shipment of chemical or hazardous material to the receiving State agency. It is necessary to send this document only on the first shipment for each chemical formulation or hazardous material ordered by a specific agency except when there has been a change in the formulation of the specified chemical or hazardous material, in which case, a revised material safety data sheet shall accompany the first shipment of the changed formulation. It is the responsibility of the shipping vendor to maintain this record. The receiving agency will not accept first shipment unless the above is complied with. It is recommended that OSHA Material Safety Data Sheet No. 174 be used.

II-MM CONTRACT DISTRIBUTION

Acquisition Services shall retain the sole right of Contract distribution to all State agencies and local units of government unless other arrangements are authorized by the purchasing office.

II-NN ACCOUNTING RECORDS

The Contractor and all subcontractors shall maintain all pertinent financial and accounting records and evidence pertaining to the Contract in accordance with generally accepted principles of accounting and other procedures specified by the State of Michigan. Financial and accounting records shall be made available, upon request, to the State of Michigan, its designees, or the Michigan Auditor General at any time during the Contract period and any extension thereof, and for three years from expiration date and final payment on the Contract or extension thereof.

II-OO NON-DISCRIMINATION CLAUSE

In the performance of a Contract or purchase order, the contractors agrees not to discriminate against any employee or applicant for employment, with respect to their hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, national origin, ancestry, age, sex, height, weight, marital status, physical or mental handicap or disability. The contractor further agrees that every subcontract entered into for the performance of any Contract or purchase order resulting herefrom will contain a provision requiring non-discrimination in employment, as herein specified, binding upon each subcontractor. This covenant is required pursuant to the Elliot Larsen Civil Rights Act, 1976 Public Act 453, as amended, MCL 37.2201, et seq, and the Michigan Handicapper's Civil Rights Act, 1976 Public Act 220, as amended, MCL 37.1101, et seq, and any breach thereof may be regarded as a material breach of the Contract or purchase order.

II-PP CANCELLATION

A. Material Breach by the Contractor. In the event that the Contractor breaches any of its material duties or obligations under the Contract, which are either not capable of or subject to being cured, or are not cured within the time period specified in the written notice of breach provided by the State, or pose a serious and imminent threat to the health and safety of any person, or the imminent loss, damage or destruction of any real or tangible personal property, the State may, having provided written notice of cancellation to the Contractor, cancel this Contract in whole or in part, for cause, as of the date specified in the notice of cancellation.

In the event that this Contract is cancelled for cause, in addition to any legal remedies otherwise available to the State by law or equity, the Contractor shall be responsible for all costs incurred by the State in canceling the Contract, including but not limited to, State administrative costs, attorneys

fees and court costs, and any additional costs the State may incur to procure the services required by this Contract

from other sources. All excess re-procurement costs and damages shall not be considered by the parties to be consequential, indirect or incidental, and shall not be excluded by any other terms otherwise included in the Contract.

In the event the State chooses to partially cancel this Contract for cause charges payable under this Contract will be equitably adjusted to reflect those services that are cancelled.

In the event this Contract is cancelled for cause pursuant to this section, and it is therefore determined, for any reason, that the Contractor was not in breach of contract pursuant to the provisions of this section, that cancellation for cause shall be deemed to have been a cancellation for convenience, effective as of the same date, and the rights and obligations of the parties shall be limited to that otherwise provided in the Contract for a cancellation for convenience.

B. Cancellation For Convenience By the State. The State may cancel this Contract for its convenience, in whole or part, if the State determines that such a cancellation is in the State's best interest. Reasons for such cancellation shall be left to the sole discretion of the State and may include, but not necessarily be limited to (a) the State no longer needs the services or products specified in the Contract, (b) relocation of office, program changes, changes in laws, rules, or regulations make implementation of the Contract services no longer practical or feasible, and (c) unacceptable prices for additional services requested by the State. The State may cancel the Contract for its convenience, in whole or in part, by giving the Contractor written notice 30 days prior to the date of cancellation. If the State chooses to cancel this Contract in part, the charges payable under this Contract shall be equitably adjusted to reflect those services that are cancelled.

C. In the event that funds to enable the State to effect continued payment under this Contract are not appropriated or otherwise made available. The Contractor acknowledges that, if this Contract extends for several fiscal years, continuation of this Contract is subject to appropriation or availability of funds for this project. If funds are not appropriated or otherwise made available, the State shall have the right to cancel this Contract at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of cancellation to the Contractor. The State shall give the Contractor written notice of such non-appropriation or unavailability within 30 days after it receives notice of such non-appropriation or unavailability.

D. In the event the Contractor, an officer of the Contractor, or an owner of a 25% or greater share of the Contractor, is convicted of a criminal offense incident to the application for or performance of a State, public or private Contract or subcontract; or convicted of a criminal offense including but not limited to any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to breach the ethical conduct standards for State of Michigan employees; convicted under State or federal antitrust

statutes; or convicted of any other criminal offense which in the sole discretion of the State, reflects upon the Contractor's business integrity.

E. In the event any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services pursuant to Constitution 1963, Article 11, section 5, and Civil Service Rule 4-6. Cancellation may be in whole or in part and may be immediate as of the date of the written notice to the Contractor or may be effective as of the date stated in such written notice.

II-QQ NOTICE AND RIGHT TO CURE

In the event of a curable breach by the Contractor, the State shall provide the Contractor written notice of the breach and a time period to cure said breach described in the notice. This section requiring notice and an opportunity to cure shall not be applicable in the event of successive or repeated breaches of the same nature or if the State determines in its sole discretion that the breach poses a serious and imminent threat to the health or safety of any person or the imminent loss, damage or destruction of any real or tangible personal property.

II-RR ELECTRONIC FUNDS TRANSFER

Electronic transfer of funds is available to State contractors. Vendors are encouraged to register with the State of Michigan Office of Financial Management so the State can make payments related to this Contract electronically.

II-SS MODIFICATION OF CONTRACT

Acquisition Services reserves the right to modify this contract at any time during the contract term. Such modification may include changing the locations to be serviced, additional locations to be serviced, method or manner of performance of the work, number of days service is to be performed, addition or deletion of tasks to be performed, addition or deletion of items, and/or any other modifications deemed necessary. Any changes in pricing proposed by the Contractor resulting from the proposed changes are subject to acceptance by the State. Changes may be increases or decreases. IN THE EVENT PRICES ARE NOT ACCEPTABLE TO THE STATE, THE CONTRACT SHALL BE SUBJECT TO COMPETITIVE BIDDING BASED UPON THE NEW SPECIFICATION.

II-TT UNFAIR LABOR PRACTICES

Pursuant to 1980 Public Act 278, as amended, MCL 423.231, et seq, the State shall not award a Contract or subcontract to an employer whose name appears in the current register of employers failing to correct an unfair labor practice compiled pursuant to Section 2 of the Act. A Contractor of the State, in relation to the Contract, shall not enter into a Contract with a subcontractor, manufacturer, or supplier whose name appears in this register. Pursuant to Section 4 of 1980 Public Act 278, MCL 423.324, the State may void any Contract if, subsequent to award of the Contract, the name of the Contractor as an employer, or the name of the subcontractor, manufacturer or supplier of the Contractor appears in the register.

II-UU MICHIGAN STATE INDUSTRIES

Michigan State Industries (MSI) provides valuable training opportunities for inmates at State correctional facilities. State agencies are exempt from utilizing the resulting Contract if they would instead prefer to purchase similar items from MSI.

II-VV FORM, FUNCTION, AND UTILITY

If the Contract is for use of more than one State agency and if the good or service provided under this Contract do not the meet the form, function, and utility required by a State agency, that agency may, subject to State purchasing policies, procure the good or service from another source.

II-WW CONTRACT PAYMENT SCHEDULE

The specific payment schedule for the Contract(s) will be mutually agreed upon by the State and the Contractor(s). The schedule should show payment amount and should reflect actual work done by the payment dates, less any penalty cost charges accrued by those dates. As a general policy statements shall be forwarded to the designated representative by the 15th day of the following month.

"QUICK REFERENCE ITEMS"

The following items serve as a quick reference for calculated prices based on the discounts listed on the "ITEM LISTING/PRICE PAGE". The percentage discounts off list do not change but individual prices of items may change based on periodic catalogs published by the manufacturer.

The prices quoted are "net" unit price and an extended amount for each item. Prices shall include delivery and service to Upper and Lower Peninsulas. The percentage (%) of discount that was applied to the price list to calculate the net prices of items specified below MUST also be the same percentage of discount that shall apply to ALL items within the applicable category which are NOT indicated in the item listing. Only one percentage of discount from one catalog and/or price list will be allowed for each category. The respective discount(s) shall apply to any and all items purchased within the applicable category from this contract. Any new items should be available at the established discount rates of the respective categories.

Item	Unit	Description	Net Unit Price with Options
1.	EA	Category A Base Stations/Repeaters 136-174 Mhz Brand: Kenwood Model: TKR-750 and options with 20% discount reflected in the price. TKR-750K2 (136-150 Mhz) TKR-750K (146-174 Mhz)	$1,160.00
2.	EA	Category A Base Stations/Repeaters 403-470 Mhz Brand: Kenwood Model: TKR-850 and options with 20% discount reflected in the price. TKR-850K3 (400-430 Mhz) TKR-850K (450-480 Mhz)	$1,200.00
3.	EA	Category A Base Stations/Repeaters 450-512 Mhz Brand: Kenwood Model: TKR-850 and options with 20% discount reflected in the price. TKR-850K (450-480 Mhz) TKR-850K2 (480-572 Mhz)	$1,200.00

"QUICK REFERENCE ITEMS"
Page 2 of 7

Item	Unit	Description	Net Unit Price with Options
4.	EA	Category A Base Stations/Repeaters 806-870 Mhz Conventional Must have wireline control board Brand: Kenwood Model: TKR-9300S –IC80C2MC and options with 20% discount reflected in the price.	$8,010.30
5.	EA	Category B Base Stations/Programmable Desktop 136-174 Mhz Brand: Kenwood Model: TK-780 and options with 20% discount reflected in the price. TK-780K2 (136-162 Mhz) TK-780K (146-174 Mhz)	$440.00
6.	EA	Category B Base Stations/Programmable Desktop 136-174 Mhz Brand: Kenwood Model: TK-760 and options with 20% discount reflected in the price. TK-760GK2 (136-162 Mhz) ($377.60) + KMC-9 ($65.60) TK-760GK (146-174 Mhz) ($377.60) + KMC-9 ($65.60)	$443.20
7.	EA	Category B Base Stations/Programmable Desktop 403-470 Mhz Brand: Kenwood Model: TK-880 and options with 20% discount reflected in the price. TK-880HK3 (400-430 Mhz) TK-880HK (450-490 Mhz)	$520.00

"QUICK REFERENCE ITEMS"
Page 3 of 7

Item	Unit	Description	Net Unit Price with Options
8.	EA	Category B Base Stations/Programmable Desktop 403-470 Mhz Brand: Kenwood Model: TK-860 and options with 20% discount reflected in the price. TK-860GK3 (400-430 Mhz) ($401.60) + KMC-9 ($65.60)	$467.20
9.	EA	Category B Base Stations/Programmable Desktop 403-470 Mhz Brand: Kenwood Model: TK-860 and options with 20% discount reflected in the price. TK-860HGK (450-490 Mhz) ($478.40) + KMC-9 ($65.60)	$544.00
10.	EA	Category B Base Stations/Programmable Desktop 450-512 Mhz Brand: Kenwood Model: TK-880 with 20% discount reflected in the price. TK-880HK (450-490 Mhz) TK-880HK2 (485-512 Mhz)	$520.00
11.	EA	Category B Base Stations/Programmable Desktop 450-512 Mhz Brand: Kenwood Model: TK-860 with 20% discount reflected in the price. TK-860GK2 (485-512 Mhz) + ($401.60) + KMC-9 ($65.60)	$467.20
12.	EA	Category B Base Stations/Programmable Desktop 806-870 Mhz Conventional Brand: Kenwood Model: TK-980 with 20% discount reflected in the price.	$400.00

"QUICK REFERENCE ITEMS"
Page 4 of 7

Item	Unit	Description	Net Unit Price with Options
13.	EA	Category B Base Stations/Programmable Desktop 806-870 Mhz Conventional Brand: Kenwood Model: TK-860HK2 and options with 20% discount reflected in the price. TK-860HK2 (485-512 Mhz) ($478.40) + KMC-9 ($65.60)	$544.00
14.	EA	Category C Mobiles 136-174 Mhz Brand: Kenwood Model: TK-790BK and options with 20% discount reflected in prices below: TK-790BK29 (136-156 Mhz) ($584) + FMSH1 ($516) TK-790BK9 (148-174 Mhz) ($584) + FMSH1 ($516)	$1,100.00
15.	EA	Category C Mobiles 403-470 Mhz Brand: Kenwood Model: TK-890BK and options with 20% discount reflected in prices below: TK-890BK39 (403-430 Mhz) ($624) + FMSH1 ($516) TK-890BK29 (450-490 Mhz) ($624) + FMSH1 ($516)	$1,140.00
16.	EA	Category C Mobiles 450-512 Mhz Brand: Kenwood Model: TK-890BK and options with 20% discount reflected in prices below: TK-890BK9 (450- 490 Mhz) ($624) + FMSH1 ($516) TK-890BK29 (480-512 Mhz) ($624) + FMSH1 ($516)	$1,140.00

"QUICK REFERENCE ITEMS"
Page 5 of 7

Item	Unit	Description	Net Unit Price with Options
17.	EA	Category C Mobile 806-870 Mhz Conventional Brand: Kenwood Model: TK-930HD and options with 20% discount reflected in the price.	$705.00
18.	EA	Category C Mobiles 806-870 Mhz LTR Comp Brand: Kenwood Model: TK-930HD and options with 20% discount reflected in the price. (Not able to be MDE-1200 capable)	$705.60
19.	EA	Category C Mobiles 806-870 Mhz LTR Comp Brand: Kenwood Model: TK-980 and options with 20% discount reflected in the price. (MDC-1200 capable, 15 watt)	$400.00
19.	EA	Category D Handheld Portables 30-50 Mhz Brand: Kenwood Model: TK-190 (5 Watt) and options with 20% discount reflected in the price. TK-190 ($513.60) + KNB-17A ($64.00)+ KRA-21 ($32.00)	$609.60
20.	EA	Category D Handheld Mobiles 136-174 Mhz Brand: Kenwood Model: TK-290 (5 Watt) and options with 20% discount reflected in the price. TK-290 ($600.00) + KNB-17A ($64.00)+ KRA-14M3 ($13.60)	$677.60

"QUICK REFERENCE ITEMS"
Page 6 of 7

Item	Unit	Description	Net Unit Price with Options
21.	EA	Category D Handheld Portables 403-470 Mhz Brand: Kenwood Model: TK-890BK and options with 20% discount reflected in prices below: TK-390K3 (403-430 Mhz) TK-390K (450-490 Mhz) TK-390 ($640.00) + KNB-17A ($64.00)+ KRA-14M3 ($13.60)	$717.60
22.	EA	Category D Handheld Portables 470-512 Mhz Brand: Kenwood Model: TK-390K2 and options with 20% discount reflected in the price. TK-390K2 ($640.00) + KNB-17A ($64.00)+ KRA-14M3 ($13.60)	$717.60
23.	EA	Category D Handheld Portables 806-870 Mhz Conventional Brand: Kenwood Model: TK-480SK and options with 20% discount reflected in the price. TK-480SK ($433.60) + KNB-17A ($64.00)+ KRA-14M3 ($13.60)	$511.20

"QUICK REFERENCE ITEMS"
Page 7 of 7

Item	Unit	Description	Net Unit Price with Options
24.	EA	Category D Handheld Portables 806-870 Mhz Conventional Brand: Kenwood Model: TK-380 and options with 20% discount reflected in the price. TK-380 ($400.00) + KNB-16A ($52.00)+ KRA-14M($13.60)	$465.60

CATEGORY A - BASE STATIONS/REPEATERS

PERCENTAGE DISCOUNT OFF CATEGORY/OPTIONS	20%
PERCENTAGE DISCOUNT OFF ACCESSORIES	20%
BRAND OR MFGR: Kenwood PRICE LIST NAME, NO. & DATE: April 2002	

CATEGORY B - BASE STATIONS/ PROGRAMMABLE DESKTOP

PERCENTAGE DISCOUNT OFF CATEGORY	20%
PERCENTAGE DISCOUNT OFF ACCESSORIES/OPTIONS	20%
BRAND OR MFGR: Kenwood PRICE LIST NAME, NO. & DATE: April 2002	

CATEGORY C –-MOBILES

PERCENTAGE DISCOUNT OFF CATEGORY	20%
PERCENTAGE DISCOUNT OFF ACCESSORIES/OPTIONS	20%
BRAND OR MFGR: Kenwood PRICE LIST NAME, NO. & DATE: April 2002	

CATEGORY D -HANDHELD PORTABLES

PERCENTAGE DISCOUNT OFF CATEGORY	20%
PERCENTAGE DISCOUNT OFF ACCESSORIES/OPTIONS	20%
BRAND OR MFGR: Kenwood PRICE LIST NAME, NO. & DATE: April 2002	

CATEGORY E –SERVICE MANUALS

PERCENTAGE DISCOUNT OFF CATEGORY	20%
BRAND OR MFGR: Kenwood PRICE LIST NAME, NO. & DATE: April 2002	

- Please Note: State agencies will have the authority to buy Accessories off contract if it is in the agency's best interest to do so.

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
OFFICE OF PURCHASING

SPECIFICATIONS
FOR
BASE STATIONS/REPEATERS

1. DESCRIPTION

These units shall be all solid state switchable/programmable 12.5/25Khz narrow band FM base stations including continuous duty transmitter, receiver, power supply, remote control panel and cabinet. This equipment shall meet or exceed the latest applicable standards of the EIA and all current FCC regulations for Part 90 of the rules. Basic unit shall be one frequency transmitter and one frequency receiver with carrier squelch. Programming software must be Windows 95 or higher compatible.

2. HOUSING

A cabinet of sufficient size to house the requested hardware shall be supplied unless a special option cabinet is requested. Optional 19” racks must be available.

3. CONTROL

Unit shall be locally controlled. All units shall be furnished with a local mobile type microphone in the cabinet for testing. Tone or DC control will be requested as an option.

4. SURGE PROTECTION

AC line surge protection shall be supplied and all power supplies shall be protected against primary line surges. Control line circuits shall be surge protected.

5. POWER SUPPLIES

Units shall be equipped with minimum 110 VAC/12 VDC power supply with fuse protection on primary and secondary.

6. METERING FACILITIES

All points essential to testing and alignment of the transmitter and receiver shall be properly connected to a centralized metering socket or available through programming software.

7. SERVICE MANUALS

Manuals shall include schematic diagrams, theory of operation, printed circuit board layouts and complete parts list. Manual shall cover the basic radio and all options ordered. Manual on CD ROM is acceptable. Manuals shall be considered as an option, but must be available for purchase.

8. OPERATING FREQUENCIES

Final channelization will be coordinated with each individual department at the time an order is placed.

9. RECEIVERS

All receivers shall mute when the transmitter is keyed, all receivers shall be equipped for local monitoring of the audio output, and all receivers shall be equipped with CTCSS filters.

10. PERFORMANCE DATA

TRANSMITTER

Frequency Band in Mhz	136-174	403-470	806-870
	450-512		
Power Output	Minimum adjustable from 0 to 30 watts.		
Frequency Stability	Must be FCC type accepted.		
-30 degrees C to +60 degrees C			
Spurious & Harmonic	-85 db	-85 db	-85 db
FM Noise	All to be minimum –45 db		
Modulation	All + 5 KHz for conventional with 25Khz channels		
	All + or – 2.5Khz for 12.5 Khz narrow band digital.		
Audio Response	All +1 to –3 db or 6 db per octave pre-		

emphasis @ 300-3000Hz

Operating Temperatures	All –30 degrees C to +60 degrees C

RECEIVER

Frequency Band in Mhz	136-174	403-470 450-512	806-870
Selectivity in db	All must meet minimum of –80db		
Stability	All must meet minimum FCC type acceptance.		
Temperature of Operation	All –30 degrees C to +60 degrees C		
Sensitivity 12 db SINAD .	.35 uv	.35 uv	.35 uv
Intermodulation	- -80 db	-80 db	-80 db
Spurious & Image Rejection	Must meet –80db minimum		
Audio Output & 1000Hz Distortion	All minimum 5 watts, less than 3% distortion at		

BASE STATION OPTIONS

1. 100 watt transmitter output – for 136-174 MHz with 100 watt option

2. 100 watt transmitter – for 806-870 MHz

3. 75 watt transmitter output – for 403-470 and 450-512 MHz

4. 6 channel programmable at 0 to 30 watt adjustable.

5. Additional complete service manuals, quantities to be specified with order.

6. Tone Remote Control, capable of 2 or 4 wire operation. Transmitter shall be by tone from the remote console and all appropriate tone decoders and filters shall be supplied. Consoles shall be compatible with existing industry standard tone scheme (existing GW, Motorola, etc., base stations). Circuits shall be supplied for the following operations:

   A. 1 Channel Transmit
      1 Channel Receive

   B. 2 Channel Transmit
      1 Channel Receive

   C. 2 Channel Transmit
      2 Channel Receive

D. 3 Channel Transmit
2 Channel Receive

E. 4 Channel Transmit
2 Channel Receive

F. Auxiliary Function 4T/4R

7. Extended Local Control with 50 ft. cable.

8. Intercom unit for remote panel to allow communication with the remote control console from the base station.

9. Weatherproof Cabinet: An outdoor cabinet suitable for pole or wall mounting, weatherproof.

10. Receiver Preamp as an option.

11. Time Out Timer: An adjustable time out timer on the base station transmitter to disable the transmitter in case of malfunction.

12. Mobile Relay: This option shall include all necessary circuitry wired into the station to make it a mobile relay station. This shall include continuous duty power supply, time out timer, repeater control circuit, duplexer and tone remote control for wire line control. Duplexer for VHF, UHF and 800Mhz to be rack mountable.

    a. 136-174 MHz
    b. 403-470 MHz
       450-512 MHz
    c. 806-870 MHz

13. Multi-Coupler: An active multi-coupler for coupling at least 3 base station receivers to the base antenna.

14. Additional Base Station Receiver for 2R and 3R operation. Unit shall include power supply and all necessary cabling and be mounted in the associated base station. Audio output shall be either 600 ohms for separate remote line feed or wired into the control panel with main receiver. Preference shall be note at time of order.

15. Transmitter Channel Capability:

    A. 1 frequency transmit – active
    B. 2 frequency transmit – active

    C. 3 frequency transmit – active
    D. 4 frequency transmit – active

16. Warranty: Standard

17. Warranty: Extended 12-month warranty on parts ad labor.

18. Tone Squelch: To be programmable CTCSS and DCS capable.

19. Remote Control Console: Solid state desk top remote control console with microphone and manual. Unit to be tone control, single or multiple frequency transmit with the following options available:

    A. VU Meter
    B. 12 hour clock
    C. Parallel Operation
    D. Automatic gain control (tone only model)
    E. Automatic level control (tone only model)
    F. Transmit Indicator
    G. Manual Intercom Switch
    H. 120 VAC operation
    I. Surge protection for AC line and control lines
    J. Transmit switch
    K. Alternate line control
    L. Line compensation
    M. On/Off volume control
    N. Partial mute
    O. Tone squelch disable
    P. 2/4 wire operation
    Q. Headset operation
    R. MDC1200 compatible signalling

20. Same as #19 but tone control with 2 frequency transmit.

21. Windows 95 or higher PC compatible software and interface cable for programming of all programmable equipment purchased under this contract.

22. Auto ID, Morse Code, Programmable

23. Service manual - Detailed or Depot manual

24. Training

25. Emergency battery back up power system.

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
OFFICE OF PURCHASING

SPECIFICATIONS
for
BASE STATIONS/ PROGRAMMABLE DESKTOP

1. Description: This specification covers 16 frequency desktop switchable/programmable 12.5/25Khz narrow band synthesized/IBM PC programmable FM base station with options. Software must be Windows 95 or higher compatible.

2. Housing: A cabinet of sufficient size to house all standard components shall be furnished.

3. Control: Unit shall be locally controlled. Remote options are listed under options.

4. Surge Protection: AC line surge protection shall be supplied to protect against primary line surges.

5. Power Supplies: Units shall be supplied with a well filtered 117 VAC power supply with fuse protection on primary and secondary. A 12 VDC option is listed under options.

6. Manuals: Manuals shall include schematic diagrams, theory of operations, printed circuit board layouts and complete parts list. Agency to specify quantity required with order.

7. Operating Frequencies: Final channelization will be coordinated with each individual department at the time an order is placed.

TRANSMITTER

Frequency in MHz	136-174	403-470 450-512	806-870
Power Output	All adjustable minimum 0 to 30 watts		
Load Impedance	50 ohms	50 ohms	50ohms
Frequency Stability -30°C to +60°C	All must meet FCC type acceptance		

Modulation Deviation channels	All plus or minus 5 KHz for 25 Khz All plus or minus 2.5 Khz for 12.5 Khz digital channels
Audio Distortion	All less than 3% @ 1000 Hz
Audio Response emphasis	All within +1 and =3 db of 6 db/octave pre- @ 300–3000 per EIA
FM Noise Spurious Harmonic	All better than – -63 db

RECEIVER

Frequency Band in Mhz	136-174	403-470 450-470	806-870
Selectivity	-75db @ 25Khz -63db @ 12.5Khz	-75db @ 25Khz	-75db @ 25Khz
Input Impedance	All 50 ohms		
Sensitivity EIA 12 Sinad	.35 uv	.35 uv	.35 uv
Frequency Stability -30°C to 60°C	All per FCC type acceptance		
Selectivity @ 24 KHz	All better than –75db		
Spurios & Image Rejection	All better than –65db		
Audio Response emphasis	All within +1 and –3 db of 6 db/octave pre- @ 300-3000 per EIA		
Audio Output	5 watts at less than 5% distortion @ 1000 Hz		

<u>Options</u>

1. Tone Control Operation

2. VU Meter

3. Clock

4. Desk Top Mike
5. Tone Remote
6. 12 Volt DC Standby
7. Tone Squelch – To be programmable CTCSS and DCS capable
8. Multiple Tone Squelch
9. Multiple Frequency Scan With Priority
10. Control Point/Supervisory Operation
11. Receiver Preamp
12. Carrier Control Timer
13. Service Manual – Detailed or Depot Manual
14. Extended 12 month warranty
15. Training
16. MDC 1200 compatible signaling

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
OFFICE OF PURCHASING

SPECIFICATIONS
For
MOBILES

1. Description: Programmable/switchable 12.5/25Khz Narrow band IBM compatible FM mobile radio transmitter-receiver units. Trunk mounted with remote control head, speaker and all interconnecting cables. The equipment shall meet or exceed the latest applicable standards of the EIA and all current regulation for Part 90 of the FCC rules. Radio to be capable of remote trunk mount or dash mount.

2. Housing: The radio set housing shall be designed and constructed to contain and protect the transmitter, receiver and power supply. The front panel shall include a key lock./ The housing shall be designed to protect the internal components against dust, dirt, foreign object, splashing water, and moisture condensation. There shall be no holes or louvers in the housing.

3. Interconnecting cables: All cables and wires shall be furnished to interconnect the mobile unit with it's accessories and the vehicle's electrical system. Cables shall be well insulated, waterproofed and equipped with appropriate connectors. Connectors shall have a fastener to mechanically secure the connections.. Cable length to be approximately 20 feet. All cable connections to the radio unit shall be made to exterior "front" panel receptacles.

4. Control Unit: The control unit shall be functional, attractive and include all facilities for operating the mobile unit. Controls shall include on-off switch, volume control, an indicator for power ON, a red light indicator for transmitter operating and channel selector switch. All the connections to the control unit shall be made by quick disconnect plugs and mating receptacle. Mounting shall meet federal safety requirements for automobile accessories.

5. Loud-Speaker: Enclosure shall be durable and attractive, designed to mount under the dash of vehicle. The loud-speaker shall be acoustically tailored to optimum frequency reproduction for 300 to 3000 Hz and capable of handling the maximum audio output of the mobile unit.

6. Squelch: The receiver shall have noise compensated carrier squelch control. (Tone squelch is listed as an option).

7. Power Supply: The power supply shall be designed to operate from a normal 12-volt negative ground automotive electrical system. Voltage regulator, transmitter and receiver shall be adequately protected by replaceable type fuses or circuit breakers and have reverse polarity protection.

8. Microphone: A military palm-style microphone shall be supplied as part of the equipment.. It shall include a convenient push-to-talk button for transmitter control. The microphone cord shall be of the retractable, flexible, durable rubber covered type with a plug in connection.

9. Service Manual: Manuals shall include schematic diagrams, theory of operation, printed circuit board layouts and complete parts list. Manual shall cover the basic radio and all options ordered. Agency to specify quantity to be supplied with order.

10. Operating Frequencies: All channels shall be active. Final channelization will be coordinated with each individual department at the time an order is placed.

TRANSMITTER

Frequency Band in Mhz	136-174 403-470 806-870 450-512
Power	All to be minimum adjustable from 0 to 30 watts
Frequency Stability -30 degrees C to +60 degrees C	All must meet FCC type acceptance
Spurious Emissions	All to be minimum –70db
FM Noise	All to be minimum –40db
Modulation	±5.0 KHz ±5.0 KHz ±5.0 KHz All to be + or – 2.5 Khz digital
Distortion (Less than) 2%@2/3 dev	2%@2/3 dev 2%@2/3 dev
Audio Response pre-emphasis	All +1 to –3 db or 6 db per octave
Temp Operation C	All –30 degrees C to +60 degrees

RECEIVER

Frequency in Mhz	136-175 403-470 806-870

Frequency Stability All –30 degrees C to +60 degrees C	All must meet FCC type acceptance		
Sensitivity 12 db SINAD	.35 uv	.35 uv	.35 uv
Spurious Response	-70 db	-70 db	-70 db
Intermodulation Response	-70 db	-70 db	-70 db
Audio Out	All are 5 W @ 3% distortion 300-3000 Hz		
Audio Response	All are 6 db/octave de-emphasis		
Temp of Operation	All are –30° C to + 60°C		

Mobile Radio Contract Options

Power Output

1. 100 watt transmitter

Channel Capability

2. 4 channel transmit and receiver with multi-channel selector switch.

3. 8 channel transmit and receiver with multi-channel selector switch.

4. 16 channel transmit and receiver with multi-channel selector switch.

5. Programmable 1 to 128 channels

Scan Function

6. Multiple scan function: The radio shall have scanning devices that must scan and select signal form a minimum of four channels. The scanner must include a programmable priority channel selector that will allow re-sampling of a designated channel while locked onto another receiving channel. Channel scan control head will incorporate an indicating device that will indicate the channel being monitored. Scan or non-scan squelch adjustment shall be made with a control accessible to the operator.

7. Ignition sense

8. Weather proof head

<u>Warranty</u>

9. Warranty: Extended 12 month warranty on parts and labor.

Manuals

10. Service manual.

11. 10 watt audio

Microphone

12. Noise canceling mobile microphone.

13. Programmable CTCSS/DCS squelch system per channel

14. Electronic Siren Module: A 100 watt electronic siren/PA system that has the control function
incorporated in the mobile radio control head.

15. An additional installation kit to include control head, microphone, speaker, radio mounting plate and all associated cables.

16. Windows 95 or higher PC compatible software and interface cables for programming of programmable equipment purchased under this contract.

17. Training.

18. MDC 1200 compatible signaling.

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
OFFICE OF PURCHASING

SPECIFICATIONS
For
HANDHELD PORTABLES 30-50 Mhz

Description: 30-50 MHz Band, personal portable radio, using the latest technology in the industry. The portable unit is to be fully synthesized by electronically erasable PROM technology for frequency and tone squelch programming. This equipment shall meet or exceed the latest applicable standards of the EIA:

CONSTRUCTION AND DESIGN

These units are to be all solid state and meet all current FCC regulations for Part 90 of the FCC rules. Radio shall have jacks to allow plugging in external antenna and remote speaker microphone.

1. TECHNICAL SPECIFICATIONS

All hand held portable transceivers shall meet the following minimum specifications:

TRANSMITTER

Power Output	5 watts
Modulation Deviation	± 5 KHz
Audio Distortion	Less than 3%
Frequency Stability	To meet FCC type acceptance @ -30° C to + 60° C

RECEIVER

Sensitivity	0.35 uv for 12 db Sinad
Selectivity	-70 db
Intermodulation	-60 db
Spurious Response	-60 db
Frequency Stability	To meet FCC type acceptance @ -30° C to +60° C
Audio Output	minimum 300mw

2. BATTERY

Each unit shall be furnished with a rapid charge battery that will last for 8 hours with a 90-5-5 duty cycle.

OPTIONS

1. DTMF touch tone encode keypad on face of portable.
2. Minimum 6 Channel operation.
3. Multi-position 110 VAC dual rate charger
4. A 110 VAC dual rate single unit
5. Flexible rubber covered antenna.
6. External speaker microphone.
7. Programming Software and interface.
8. Leather carrying case with belt loop.
9. Service manual. A comprehensive service manual shall be supplied which shall have the theory of operation, schematics, PC board print, parts layout and parts list. Agency to specify quantity to be supplied with order.
10. Tone squelch – Programmable CTCSS or DCS
11. Additional rapid charge battery.
12. Shoulder straps for carrying case.
13. Extended 12 Month Warranty.
14. Training.
15. VOX capability
16. Nicad battery
17. Lithium battery
18. Nickel/metal hydride battery
19. Belt clip
20. User programmable priority scan
21. Intrinsically safe

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
OFFICE OF PURCHASING

SPECIFICATIONS
For
HANDHELD PORTABLES 136-870 Mhz

This specification covers a microprocessor based field programmable portable transceiver in the 136 to 174, 403-470, 450 to 512 or 806 to 870 MHz bands. Units shall have programmable radio frequency and tone squelch.

CONSTRUCTION and DESIGN

These units are to be all solid state and meet all current FCC regulations for Part 90 of the FCC Rules. Radio shall have external connection for remote antenna and speaker/microphone. Unit shall be carrier squelch with optional tone squelch.

TECHNICAL SPECIFICATIONS

Programmable wide band width portable transceivers shall meet the following minimum specifications. All shall be capable of programmable CTCSS, DCS and carrier squelch operation. All shall be capable of switchable/programmable 12.5/25Khz channel spacing.

General

Frequency Range in Mhz	136-174	403-470	806-870
		450-512	
Operating Temp	-30 C to +60 C		
Battery Life	8 hours with 90-5-5 Duty Cycle		

TRANSMITTER

Output power adjustable 0 watts	Adjustable 0 to 5 watts	Adj. 0 to 5 watts	Min to 3
Spurious & Harmonics	All at minimum -60 dB		
Hum & Noise	–40Db	-40 dB	-40 dB
Auto Distortion	All at 5%		

RECEIVER

Sensitivity
12db Sinad All bands at .35 uv

Selectivity
All at minimum –60db

Spurious & Image Response All at minimum –60db

Audio Output All at minimum 500 MW @ 5% distortion

Battery – Each unit will be furnished with a rapid charge battery that will last for 8 hours with a 90-5-5 duty cycle.

OPTIONS

1. Rapid Charger.
2. Trickle Charger.
3. Multiple Unit Charger.
4. Speaker/Microphone.
5. Speaker microphone with antenna.
6. Mobile charger/amplifier.
7. Leather carrying case.
8. Service manuals. Comprehensive Service Manual shall be supplied which shall have the theory of operation, schematics, PC board print, parts, layout, and parts list. Agency to specify quantity to be supplied with order.
9. DTMF Pad Encoder.
10. Low power/high power switch to meet vehicular repeater operational requirements.
11. Vehicle amplifier at 150 MHz.
12. Vehicle amplifier at 800 MHz.
13. Extended 12 month warranty.
14. Training.
15. Nicad battery
16. Lithium battery
17. Nicket/metal hydride battery
18. Belt clip
19. Service contract bid
20. Alkaline battery pack
21. Channel availability 1 – 16
22. Channel availability 1 – 128
23. Channel availability 1 – 256
24. User programmable priority scan
25. Intrinsically safe
26. VOX capability
27. MDC 1200 compatible signaling