

# PAKISTAN AERONAUTICAL COMPLEX, KAMRA MIRAGE REBUILD FACTORY

## TENDER NOTICE NO MRF/17-18/05 DATED 16 November, 2017.

1. Mirage Rebuild Factory, Pakistan Aeronautical Complex Board Kamra invites sealed bids from the Original manufacturer / authorized distributors / suppliers / contractor registered with Income Tax and Sales Tax Department and PACB registered for supply of following miscellaneous items on F.O.R Basis (Professional Tax certificate, Punjab is mandatory). Details of requirements is as follows:-

“WALKIE TALKIE SET HANDHELD WITH ACCESSORIES, LED TV 43 IN, PORTABLE SINGLE GAS MONITOR, COMPUTER CORE I3 WITH LED & COMPLETE ACCESSORIES, M.E.K, PAINT REMOVER, COMPONENT TEST KIT, UNDERGROUND CABLE 20 PAIR 0.6MM, ARMORED WITH LAYING TERMINATION, UNDERGROUND CABLE 10 PAIR 0.6MM ARMORED WITH LAYING TERMINATION, PANASONIC SET CLI TELEPHONE SET”.

2. List of items can also be downloaded from PPRA website [www.ppra.org.pk](http://www.ppra.org.pk) and as well as PACB website [www.pac.org.pk](http://www.pac.org.pk) free of cost or can be collected from DTE of Log (LP Section) MRF PAC Kamra Distt Attock from 17-11-2017 during working hours (except holidays).

3. The quotations, prepared in accordance with the instruction in the Tender List, must reach at Mirage Rebuild Factory PACB Kamra **before 30-11-2017 at 1000 Hrs. Quotations will be opened on the same day at 1100 Hrs.** The advertisement is also available on PPRA website at [www.ppra.org.pk](http://www.ppra.org.pk) and as well as PACB website [www.pac.org.pk](http://www.pac.org.pk)

**DUE DATE** : 30-11-2017 before 1000 Hrs.  
**TENDER OPENING TIME** : 30-11-2017 at 1100 Hrs.

Please contact **Tele # 051-9099-4294 / 4414, 4417** or **Fax No 057-9317412** for any other information.

**DIRECTOR LOGISTICS  
MRF PACB KAMRA  
DISTT ATTOCK**

**Directorate of Logistics MRF, PAC Kamra  
Contact No. 051-90994294, 4414 & 4417, Fax No. 057-9317412**



**LIST OF OPEN TENDER NO MRF/17-18/05  
DATED 16-11-2017 OPENING DATE 30-11-2017**

SN O	PART NO	NOUN	QTY	U/I	SPECIFICATION
1	PD-788G	WALKIE TALKIE SET HANDHELD WITH ACCESSORIES	AS REQ UIR ED	EA	SPECS STTSCHED AT THE END OF THIS TENDER
2	43LH516	LED TV 43 IN	AS REQ UIR ED	EA	TRIPLE XD ENGINE,SCREEN SIZE:43" (108CM),RESOLUTION :FUL HD 1920X1080,DISPLAY TYPE: FLAT,IPS PANEL:YES, BACK LIGHT MODULE:SLIM YES,ANALOG TV RECEPTION: YES,ENERGY STAR RATING: 5,VIDEO:TRIPLE XD ENGINE : YES, ACTIVE NOISE REDUCTION,YES,DYNAMIC COLOR ENHANCER: YES,PICTURE MODE: 5 MODES (VIVID,STANDARD,CINEMA,CRICKET,GAM E,ASPECT RATIO: 7 MODES (16:9,JUST SCAN,ORIGINAL,FULL WIDE,4:3,14:9, CINEMA ZOOM1),AUDIO,DOLBY DIGITAL DECODER:YES,SPEAKER SYSTEM: 2CH SPEAKER,AUDIO:20 W,BOLLYWOOD MODE: YES,SOUND MODE: 5 MODES (STANDARD,MUSIC,CINEMA,SPORT , GAME)USB,DIVX(SD/HD): DIVX HD,PICTURE: JPEG,AUDIO CODEC: AC3 (DOLBY DIGITAL),AAC,MPEG,PCMSUBTITLE FOR DIVX (LANGUAGE) 10 LANGUAGES(ENGLISH,FRENCH,VIETNANE SE,RUSSIAN,THAI,HEBREW,ARAB,KOREA N,PERSIAN,KUDUR)SPECIAL:MOTION ECO SENSOR: YES,SMART ENERGY SAVING: YES,INPUT LABLING: YES,OSD LANGUAGES,TOTAL 17,INDIAN:5(HINDI,MARATHI,BENGALI,TAM IL,TELGUGU,SUBJECT TO UPDATION REGULARLY),BUILT IN GAMES: YES,TERMINAL REAR:RF IN:1,COMPOSITE IN (CVBS+AUDIO)COMPONENT IN Y,PB,PR+AUDIO,USB,1 COMPOSITE/COMPONENT COMMON,HEADPHONE OUT,1(RCA, ANALOGUE OUT),HDMI:1CABINET DISCRPTION: LOCAL KEY TYPE:



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					JOGSTICK,SUPPLIED ACCESSORIES: CONVENTIONAL REMOTE:YESTPOWER:POWER SUPPLY VOLTAGE,HZ: 100-240 VAC,50- 60HZPOWER CONSUMPTION STANDBY MODE: 0.3 WDIMENSIONAL SET: SET WEIGHT:(W/O STAND)KG,8.1,SET WEIGHT (W/STAND)KG,8.4,SET WEIGHT(IN CARTON)KG:10.6,SET WXHXD (W/STAND)MM:975.5X621X208.7SET WXHXD (W/O STAND)MM: 975.5X583X81.5MIN:(69.5)
3	GX-8000LEL	PORTABLE SINGLE GAS MONITOR	1	EA	MAKE / MODEL: VENTIS MX4 OR EQUIVALENTMULTIGAS MONITOR WITH SLIP ON PUMP AND HOSE TUBING TO DRAW SAMPLE FROM CONFINES SPACES,MULTIGAS MONITOR SENSOR FOR LEL AND COMBUSTIBLE GASES MUST BE COMPATIBLE FOR JP-8 FUMES,PROVIDE A FRESH CALIBRATION CERTIFICATE WITH 01 YEAR VALDITY AND AFTER SALES CALIBRATION SERVICES,OEM WARRANTY CERTIFICATE,DIMENSION: 172X67X66 MM(6.8X2.6X2.6IN) VENTIS WITH PUMP LITHIUM-ION BATTERY VERSION,WEIGHT:380G(13.4 OZ) VENTIS WITH PUMP,LITHIUM-ION BATTERY VERSION,COMBUSTIBLE GASES: 0-100% LEL IN 1% INCREMENT,METHANE (CH <sub>4</sub> ):0-5 % OF VOL IN 0.01% INCREMENT,CALIBRATION CUP(VENTIS),SAMPLE WITH PUMP(VENTIS MX4 REFERENCE GUIDE
4	21B/7010PK0008 503	COMPUTER CORE I3 WITH LED & COMPLETE ACCESSORIES	AS REQ UIR ED	EA	MOTHERBOARD:INTEL H81 CHIPSET (INTEL DH82H81 PCH) OR HIGHER PROCESSOR: INTEL I3-4160 PROCESSOR (3M CACHE, 3.60 GHZ) OR HIGHER RAM: 04 GB DDR-III OR MORE HARD DISK:500 GB SATA RPM OR MORE NETWORK CARD:10/100/1000 MBPS BUILT IN OR MORE KEYBOARD & MOUSE: BRANDED CASING: TOWER BRANDED POWER SUPPLY: BRANDED 450W OR HIGHER WITH BUILT IN 600/70100 VA SURGE PROTECTOR INSTALLED DISPLAY: 18.5 INCH LED MULTIMEDIA



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					BRANDED OR HIGHER WARRANTY: OEM MINIMUM 03 YEARS
5	6850PK2840001 7	M.E.K	1025 5	LTR	PURITY (WT%) MIN:99.5,SPECIFIC GRAVITY@ 2/20C:MIN:0.805,MAX:0.807,SPECIFIC GRAVITY@25/25C MIN: 0.801 MAX:0.803,WATER (WT %) MAX: 0.1,ACIDITY AS ACETIC ACID (WT%): 0.003,COLOR (PT-CO) MAX: 10,DISTILLATION RANGE (DEGREES C) INITIAL BOILING POINT: 79.0,DRY POINT: 80.5,NON-VOLAILE RESIDUE (MG/100ML) MAX:2,APPREANCE : CLEAR AND FREE
6	AVN-500	PAINT REMOVER	8470	LR	ODOUR:MILD ODOUR DENSITY: 1.18+0.03,FLASH POINT: AB OVE 90 DEGREE CENTIGRADE,CORROSION TEST AT 33 DEGREE CENTIGRADE FOR HOURS ON ALUMINIUM PANEL: NO CORROSION,STORAGE STABILITY AT 5-30 °C: MINIMUM 12 MONTRHS WHEN PROPERLY STORED IN ORIGINAL SEALED CONTAINER
7	296249-1/2	COMPONENT TEST KIT	1	EA	TEST KIT 296249-1/-2 SUB ITEMS, COUPLING SHAFT:895349-1,FUEL CONTROL POWER HARNESS:832652-1,RETAINING RING:868495-3,POWER LEVER ARM:295824-1,SPLINED SHAFT: 3070639-1,V BAND CLAMP:234-013-9350,SPACER BLOCK:295826-1
8	UGC20ARM	UNDERGROUND CABLE 20 PAIR 0.6MM, ARMORED WITH LAYING TERMINATION	150	MTR	CONDUCTOR:0.6MM ARMORED,INSULATION:COLOR HIGH MOLECULAR WEIGH SOLID HIGH DENSITY POLYTHYLENE,COLOR CODING: CABLES SHOULD BE FULLY COLOR CODED IN ACCORDANCE WITH PIC EVEN COUNT COLOR CODE,PAIRING: TWO COLRD INSULATED CONDUCTOR SHOULD BE UNIFORMY TWISTED,APPLIED,FILLING COMPOUND: WATER RESISTANT FILLING COMPOUND SHOULD BE APPLIED,CORE COVERING,A NON HYGROSCOPIC AND DIELECTRIC POLYESTER TAPE AND WATER BLOCKING SHOULD BE APPLIED HELICALLY HAVING A SUITABLE OVERTAP.FLOOD COMPOUND: SUFFICIENT FLOODING COMPUND SHOULD BE APPLIED BETWEEN CORE WRAP AND SHIELD,MOISTURE BARRIER



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					<p>INNER SHEATH:AN ALUMINUM TAPE WITH CO POLYMER COATING SHOULD BE APPLIED OVER THE CABLE CORE AND SHEATH WITH BLACK POLYTHYLENE COMPOUND,JACKET: BLACK HIGH MOLECULAR WEIGHT LOW DENSITY POLYTHYLENE COMPOUND,IDENTIFICATION: AN IDENTIFICATION TAPE DURABLE MARKED WITHMANUFACTURER NAME SHOULD BE PLACED UNDER THE CORE COVERING TAPE,  CERTIFICATE OF COMPANY MANUFACTURING PROVIDED .SAMPLE MUST BE PROVIDED WITH QUOTATION AND STOCK MANUFACTURING YEAR MENTIONED,  SERVICES: INSTALLATION, TERMINATION,DIGGING 03 FEET DEEP ,KACHA SOIL,PAKKA SOIL,ROAD BOARING WITH GI PIPE , SAND BED (06 INCH) , BRICKS LAYING , WARNING TAPE AND BACK FILLING</p>
9	UGC10ARM	UNDERGROUND CABLE 10 PAIR 0.6MM ARMORED WITH LAYING TERMINATION	100	MTR	<p>CONDUCTOR:0.6MM ARMORED,INSULATION:COLOR HIGH MOLECULAR WEIGH SOLID HIGH DENSITY POLYTHYLENE,COLOR CODING: CABLES SHOULD BE FULLY COLOR CODED IN ACCORDANCE WITH PIC EVEN COUNT COLOR CODE,PAIRING: TWO COLRD INSULATED CONDUCTOR SHOULD BE UNIFORMY TWISTED,APPLIED,FILLING COMPOUND: WATER RESISTANT FILLING COMPOUND SHOULD BE APPLIED,CORE COVERING,A NON HYGROSCOPIC AND DIELECTRIC POLYESTER TAPE AND WATER BLOCKING SHOULD BE APPLIED HELICALLY HAVING A SUITABLE OVERTAP.FLOOD COMPOUND: SUFFICIENT FLOODING COMPUND SHOULD BE APPLIED BETWEEN CORE WRAP AND SHIELD,MOISTURE BARRIER INNER SHEATH:AN ALUMINUM TAPE WITH CO POLYMER COATING SHOULD BE APPLIED OVER THE CABLE CORE AND SHEATH WITH BLACK POLYTHYLENE COMPOUND,JACKET: BLACK HIGH MOLECULAR WEIGHT LOW DENSITY POLYTHYLENE</p>



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					COMPOUND,IDENTIFICATION: AN IDENTIFICATION TAPE DURABLE MARKED WITHMANUFACTURER NAME SHOULD BE PLACED UNDER THE CORE COVERING TAPE, CERTIFICATE OF COMPANY MANUFACTURING PROVIDED .SAMPLE MUST BE PROVIDED WITH QUOTATION AND STOCK MANUFACTURING YEAR MENTIONED, SERVICES: INSTALLATION, TERMINATION,DIGGING 03 FEET DEEP,KACHA SOIL,PAKKA SOIL,ROAD BOARING WITH GI PIPE , SAND BED (06 INCH) , BRICKS LAYING , WARNING TAPE AND BACK FILLING
10	6625/PK0003898	PANASONIC SET CLI TELEPHONE SET	12	EA	

### TERMS & CONDITIONS:-

- (i) GST may be indicated separately. The envelopes must be marked with "Item's name and Commercial / Technical offer". Literature / brochures of equipment must be attached with technical offer.
- (ii) Quotations must be submitted in two copies for single line item i.e. one copy with technical details without price and one copy as commercial offer in one envelopes (no quotation will be accepted if it contains more than 01 item in a single quotation)
- (iii) Validity period should not be less than 90 days.
- (iv) Complete technical specifications, MSDS, OEM & Conformance Certificate, Calibration certificate, Fitness report where applicable are required. Sample of chemicals may be asked for test.
- (v) Quotation received after due date / time will not be entertained. The CFA reserves the right to accept / reject the part or whole tender.
- (vii) Professional Tax certificate, Punjab is mandatory.
- (vii) Quantity can be increased / decreased at the time of order as per our requirement.

**Directorate of Logistics MRF, PAC Kamra**  
**Contact No. 051-90994294 & 4414, Fax No. 057-9317412**



S No	Features	Range
1	Frequency Range	VHF
2	No of Channels	>99
3	Channel Spacing	12.5/20/25 KHz
4	Operating Temperature	-20 °C to + 55 °C
5	Storage Temperature	-40 °C to + 85 °C
6	Battery	Battery having enhanced life with at least 9 hours operation i analogue and 13 hours in digital mode at 5/5/90 duty cycle
7	RF Power Output	1W and <5W user selectable
8	Frequency Stability (-20 °C to +55 °C)	± 1.5 ppm
9	Hum and Noise	40 dB @ 12.5 KHz 45 dB @ 20/25 KHz
10	Modulation Limiting	± 2.5 KHz @ 12.5 KHz ± 4.0 KHz @ 20 KHz ± 5.0 KHz @ 25 KHz
11	Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz
12	Adjacent Channel Power	60 dB @ 12.5 KHz 70 dB @ 20/25 KHz
13	Digital Vocoder Type	AMBE ++ or SELP
14	Digital Protocol	ETSI-TS 102 361-1, 2 & 3
15	Sensitivity Analogue	3.5 µV (12 db SINAD), 0.22 µV (typical) (12 db SINAD)
	Digital	0.4 µV (20 db SINAD)
16	Intermediation	5% BER : 0.3 µV
17	Adjacent Channel Selectivity	65dB
18	Spurious Rejection	60dB @ 12.5 KHz 70 dB @ 20/25 KHz
19	Rated Audio	70 dB
20	Audio Distortion	500 mW
21	Audio Response	@ Rated Audio 3% (typical)
22	Conducted Spurious Emission	+ 1 ~-3 dB
23	Mode	< - 57 dBm
24	Scan	Dual mode (analogue + Digital), should be compatible with Motorola GP2000
25	Encryption	Allows to monitor multiple channels and receive calls Enhance built-in voice and data encryption with key management. Atleast RC41 and preferably user customizable 256 bits AES
26	Data Communication	Integrated data port compatible with PC along with requisite software / drivers
27	Interface	Flexible, menu-driven interface with user-friendly icons and at least two lines of text for ease of reading text messages
28	Indicator	Tri-colour LED indicator for clear, visible feedback of calling, scanning and monitoring



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S No	Features	Range
29	Display	Large size TFT colour LCD Display
30	Buttons	* Large, easy to use navigation buttons allows easy access to intuitive menu-driven interfaces * Programmable buttons for easy access to required features such as one-touch calling * Large, textured push-to-talk button. Provides good tactile response and easy access, even when wearing gloves.
31	Speaker	Powerful, front projecting speaker
32	Antenna	Single Antenna with integrated GPS Monopole
33	Sealing	Rated IP57. Protected against Harm from dust or water spray
<b>Optional Features</b>		
34	GPS	Integrated GPS (with GPS location tracking) GPS performance: -TTFF (Time To First Fix) Cold Start < 1 minute -TTFF (Time To First Fix) Hot Start < 10 seconds - Horizontal Accuracy < 10 meters
35	IP	Multi site IP Connection
36	SMS	Atleast 256 characters
37	Emergency Button	To alert supervisor or dispatcher in an emergency situation
<b>Accessories / Manual</b>		
38	Operating Manual	
39	Service Manual	
40	Rapid Charger	
41	Multi Charger	Optional
42	Battery Optimizing System	Optional
43	Headphone	Optional
44	Bluetooth remote speaker microphone	Optional
45	Leather Cover	Optional
46	Software & Cable (PC to Radio)	Optional
47	Clone Cable	Optional
<b>Misc</b>		
48	Warranty minimum 02 years	
49	Spare & Maintenance Support atleast for 10 years	
50	Military Standards : MIL-STD-810 C, D, E, F and G standards for temperature, shock, vibration, rain salt fog, dust and sand, humidity and solar	



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