EAGLE
Model 599
Programmers
Reference
Guide
Revision 1.001



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Introduction

This document describes the physical interface and command protocol required to interface with the Model 599 *EAGLE*. The Ten-Tec *EAGLE* DSP HF transceiver is a product that is defined more by firmware than hardware. As such, it is subject to change based on customer needs. This means that the command protocol will change over time as new features are added, or existing features are modified. Every attempt, where possible, will be made to make changes to the interface compatible with the previous releases. It is advisable to check for a more recent update at the Ten-Tec firmware update site, www.tentec.com.

The command set described in this manual does not include the command set utilized by the *EAGLE* Boot/Loader program for programming/updating firmware in the *EAGLE*. The command set described in this manual only covers the command set that is utilized for radio command and control functions.

Conventions Used in This Manual

Information contained in this document applies to firmware version 1.689 and later.

Numeric Types:

'A' ASCII character code.

Example: ASCII 'A' is hexadecimal 0x41 as seen in the protocol or on the USB bus.

<CR> a byte containing the value of <0x0d> for a carriage return

<LF> a byte containing the value of <0x0a> for a line feed

Interface Description

Physical Interface

The **EAGLE** provides a standard USB 2.0 compliant interface for two purposes:

- 1) Connection to a PC or other USB Hub device for control and/or logging purposes.
- 2) Connection to a PC for firmware updates using the TenTec Flash32 Flash Update Utility. The *EAGLE* requires the use of Flash32 Flash Update Utility version 4.12 or greater.

The physical interface used to connect with the *EAGLE* is a standard USB host to device cable. The standard USB cable will have a type A connector for the computer / Hub and a USB type B connector for the *EAGLE*.

The *EAGLE* utilizes a MicroChip PIC chip as the CPU. The PIC chip contains a built in USB device handler. This USB device is used similar to a UART port and serves as the command interface for computer control/logging programs. The *EAGLE* will enumerate itself as a USB to UART device on the PC. The interface has been tested using various Windows based computers running Windows XP, Windows Vista, and Windows 7, both 32-bit and 64-bit varieties. Support in other operating systems or different Windows versions have not been tested.

Software Interface

The software interface for the *EAGLE* utilizes standard Windows driver supplied with Windows versions XP through Windows 7. An installation program is available for download at the TenTec download webpage for the *EAGLE*. Start at www.tentec.com, and follow the links until you get to the *EAGLE*'s Download page. Look for the latest instructions entitled "USB to UART driver Installation...". Download and follow the instructions.

Generic Port Management

Determine the *EAGLE* **Comm Port Number**

If at any time you need to see what "port" the **EAGLE** is connected to:

- 1) go back into Device Manager
- 2) expand the "Ports (COM & LPT)" selection, and you should see "USB to UART (COMx)".

Note the x in the COMx that is reported by Device Manager. You will use this number when running cat programs, the update.exe program, etc.

Changing the *EAGLE* **Comm Port Number**

At any time, the actual port number being used can be changed to a different number. Even though the Flash32 Flash Update Utility version 4.12 supports comm ports numbered 10 and greater, sometimes some computers will require a port number lower than 10. To do so:

- 1) Follow the instructions shown in the section entitled "Determine the **EAGLE** Comm Port Number" to get to the "USB to UART (COMx)" for this device.
- 2) Double click the "USB to UART (COMx)" text
- 3) Go to port settings
- 4) Select advanced
- 5) Select a different COM Port Number from the pull down box. It may display a warning message, if it does, confirm/ok the change. Windows is trying to inform you that you already have another device using that specific new COM Port Number. You will need to ensure that you don't run both pieces of hardware at the same time using the same COM Port Number. You will have unrepeatable errors on both devices.
- 6) Click OK/Confirm/etc. until all windows are closed.
- 7) Disconnect the **EAGLE**, wait a few seconds
- 8) Reconnect the **EAGLE**, and you should see the new port number in Device Manager.

NOTE: when you plug the USB cable into a different USB port on the PC, it will most likely get a new COMx port number defined. Be aware of this when reconnecting the USB cable to the computer so that you can set it properly in the computer program that you are using to communicate with the **EAGLE**.

Comm Port Setup

Even though the *EAGLE*'s physical interface is USB, it utilizes a USB to UART serial driver for applications. This means that computer applications will connect to a virtual "comm port". You will need to setup the "comm port" with specific settings. For the *EAGLE*, this is as follows:

- Baud Rate 57600 Baud
- Data Bits 8
- Parity None
- Stop Bits 1
- Flow Control (xon/xoff or rts or none work on different computers)
 Since this is a virtual comm port, the driver takes care of the actual implementation of the hardware flow control. It is recommended that RTS flow control be utilized in order to maintain flow of commands/queries into the *EAGLE*. This will help prevent the loss of command/query bytes in case the virtual UART in the *EAGLE* gets filled up before it can be emptied. Otherwise, data may get lost when sending streams of commands to the *EAGLE*.

Command Restrictions

The **EAGLE** validates each command and the parameters in commands. This means that invalid commands are rejected, and invalid parameters to commands are rejected. To ensure that a given command was applied, it is recommended that for every command sent, a subsequent query for that same item should be sent to verify that the value was valid. E.g. a command to change main frequency to 4Hz would be ignored. This also serves as a pacing function, keeping the command controller in the PC program in synch with the true operating state of the **EAGLE**.

It is possible however to send multiple commands at once. For this type of command streaming though, in order to maintain proper transmit and receive transition timing, it is recommended to maintain a **200**ms time between such commands that do not have queries following each command individually.

The EAGLE Command Set

Every effort has been made to keep the individual commands as simple as possible. The commands can be entered as standard text with a standard keyboard into a terminal emulator. The queries also return responses that can be viewed as text in a terminal emulator. This permits developers a way to view the exact interface when developing their programs. For the most part, the commands used in the **EAGLE** are the same as the Orion/Orion II protocol.

In general an *EAGLE* instruction is a series of ASCII characters which may be followed by data and then terminated by a carriage return <CR>. Command characters are case sensitive! In general, the query are identical to the set command except the command is prefixed with a '?' character.

The **EAGLE** interface requires that data be in a format compatible with each command. Programmers should ensure that the supplied data is correct. When possible, when a command is unrecognized or data is invalid the **EAGLE** will send back a response consisting of the letter 'Z' followed by a carriage return <CR>.

Because the *EAGLE* is designed so that it could be reprogrammed in-system the command set presented here is subject to change or enhancement. TenTec will make every effort to make the system backward compatible with existing documented commands whenever possible. However, the *EAGLE* is a HF TRASNCEIVER PLATFORM that could host a variety of radio services. Persons or companies developing control software for the *EAGLE* should not assume that the radio is operating original factory firmware but rather should always query the radio firmware revision to ensure compatibility.

There are instances where the *EAGLE* circumvents the Orion protocol slightly. For example, since the ?KV<CR> is the only ?K query, the *EAGLE* will respond to a ?K and a ?KV with the same @KV response. Do not assume that the *EAGLE* will always respond to the "shortcut" commands or queries in this way. If further Orion queries are added that start with ?K, then a single ?K<CR> query will result in an invalid Z returned from the *EAGLE*. So, the recommendation is to follow the protocol as shown, and not assume that things that work now that are shortcuts in the protocol, or that are not documented in this protocol spec, will work as they do now.

Quick List of Commands/Queries

Item	Query	Returns	(meaning)	Command	(meaning)
Main	?AF <cr></cr>	@AFnnnnnnn		*AF14.1 <cr></cr>	(14.1MHz)
Frequency		(8 characters)		*AF14100000<	` '
Sub	?BF <cr></cr>	@BFnnnnnnn	1 <cr></cr>	*BF14.9 <cr></cr>	(14.9 _{MHz})
Frequency		(8 characters)		*BF01403000<	CR> (1.403Mhz)
VFO	?KV <cr></cr>	@KVAAB <cr></cr>	(in SPLIT)	*KVAAA <cr> (RX/TX on Main</cr>	
Assignment		@KVAAA <cr></cr>	,	,	requency,
		First two char	'		ot split)
		KV are AA, me	eaning RX is	*KVAAB <cr> (F</cr>	. ,
		always VFO A.		· I	Frequency,
		Third Characte	er indicates	-	TX on Sub
		the Transmitte	r selection.	I	Frequency,
		A=VFOA, B=V	FOB	i	.e. in SPLIT)
AGC Rate	?RMA <cr></cr>	@RMAF <cr></cr>	(Fast)	*RMAF <cr></cr>	(AGC Fast)
		@RMAM <cr></cr>	(Med)	*RMAM <cr></cr>	(AGC Med)
		@RMAS <cr></cr>	(Slow)	*RMAS <cr></cr>	(AGC Slow)
PreAmp	?RME <cr></cr>	@RME0 <cr></cr>	(Off)	*RME0 <cr></cr>	(PreAmp Off)
		@RME1 <cr></cr>	(On)	*RME1 <cr></cr>	(PreAmp On)
DSP	?RMF <cr></cr>	@RMFn <cr>> (n</cr>	is the DSP	*RMFn <cr> (n=</cr>	100 to 15000
Bandwidth		BW value in hz	,	in Hz, *RMF30	00 = 3khz
RF Gain	?RMG <cr></cr>	@RMGn <cr></cr>	(0100)	Command no	ot supported,
		RF Gain % in t		always pot driv	
Pass Band	?RMP <cr></cr>	@RMPn <cr></cr>	•	Command no	11 /
Tuning (PBT)		Hz, 0, or n or –		always pot driv	
RX Mode	?RMM <cr></cr>	@RMM0 <cr></cr>	(USB)	*RMM0 <cr></cr>	(USB)
		@RMM1 <cr></cr>	` '	*RMM1 <cr></cr>	(LSB)
		@RMM3 <cr></cr>		*RMM2 <cr></cr>	
		@RMM4 <cr></cr>		*RMM3 <cr></cr>	(CWL)
		@RMM5 <cr></cr>	, ,	*RMM4 <cr></cr>	(AM)
A La Nialaia	ODNANIA	*Supports CWI		*RMM5 <cr></cr>	(FM)
Auto Notch	?RMNA <cr></cr>	@RMNA0 <cr></cr>	\ /	*RMNA0 <cr></cr>	(Turn Off AN)
Naiss	ODMANIAL	@RMNA1 <cr></cr>			(Turn On AN)
Noise	?RMNN <cr></cr>	@RMNNn <cr></cr>	(n=09)	*RMNNn <cr></cr>	(n=09)
Reduction	ODMT	0=off, 19 = O		*DMT0	(T Off Attra)
Attenuator	?RMT <cr></cr>	@RMT0 <cr></cr>	(Off)		(Turn Off Attn)
Transmit	2TD	@RMT1 <cr></cr>	(On)		(Turn On Attn)
Transmit Power	?TP <cr></cr>	@TPn <cr> (0100, 0 *TPn<cr> (0100, 0 provides provides no power output.)</cr></cr>			
	Ouery not				/
Key	Query not	Not Applicable *TK <cr> (Turn on Transmitter until *TU or power reset)</cr>			
Transmitter	Supported	Not Applicable			
Unkey Transmitter	Query not	Not Applicable		*TU <cr>(Turn o</cr>	ıı ı ansınıler)
	supported	FOO Vor vv vanues on Mot Applicable			
Version	?V <cr></cr>	599 Ver xx.yyy <lf><cr> Not Applicable</cr></lf>			

Item	Query	Returns (meaning)	Command (meaning)
Signal Strength / Transmit Power	?S <cr></cr>	Receive=Signal Strength: @SRMn <cr> (n in dbm) Transmit=Transmit Power and Reflected Power *10. @STFnRm<cr> (n,m in watts) n is transmit power 0100 m is reflected power *10.</cr></cr>	Not Applicable
Memory Write	Not Applicable	Not Applicable	*KWAn _{<cr></cr>} (write current settings to memory n, n=1100)
Memory Recall	Not Applicable	Not Applicable	*KRAn <cr>(recall memory n to current settings, n=1100)</cr>
Name / ID	X <cr></cr>	EAGLE START <cr> Note, there are two blanks 0x20 before EAGLE</cr>	Not Applicable

Frequency Tuning

The **EAGLE** supports the ABSOLUTE tuning method of the Orion. The "OFFSET", "BINARY", and "INCREMENTAL" commands are not supported. The absolute tuning mode provides a means to tune the VFO directly to the desired frequency.

The command prefix is *AF for VFOA or *BF for VFOB. The target frequency may be specified in Hz or MHz.

COMMAND: *AFnnn<CR> sets VFOA frequency.

*BFnnn<CR> sets VFOB frequency.

Examples: *AF14.250<CR> tunes VFOA to 14.250

*BF10.113<CR> tunes VFOB to 10.113
*AF10.113<CR> tunes VFOA to 10.113
*AF14000000<CR> tunes VFOA to 14.000

QUERY: ?AF<CR> for ASCII frequency of VFOA.

?BF<CR> for ASCII frequency of VFOB.

Examples: PC Query Eagle Response Meaning

Note: The returned frequency value is always 8 digits zero padded in the front.

VFO Assignment

The **EAGLE** provides two placeholders for VFO Frequency Values. These placeholders are referred to as VFO A and VFO B.

Normally, all Receive and Transmit is performed using the frequency in VFO A. However, when it is desired to transmit on a different frequency than receiving (SPLIT), then VFO B can be set up and used as the transmit frequency. VFO A is always the receive frequency. The **EAGLE** does not support cross-band transmit, meaning it cannot receive on one band in the VFO A frequency, and transmit on a different band in the VFO B frequency. The front panel controls lock out such instances, but it is possible to change the frequencies through the serial interface, so care must be taken to avoid these situations.

The protocol is based on the Orion, requiring the same number of parameters, but their use and requirement is different.

The command prefix is *KV and the VFO associations are similar to the Orion protocol, meaning three digits containing either A or B.

COMMAND: *KV[mrx][srx][mtx] <CR>

[mrx] = VFO associated with the main receiver.

'A' for VFOA. (only valid option for the Eagle)

[srx] = VFO associated with the sub receiver.

'A' for VFOA. (only valid option for the Eagle)

[mtx] = VFO associated with the transmitter.

'A' for VFOA.

'B' for VFOB.

'N' is valid for Orion, not for Eagle

Examples: *KVAAA<CR> Set RX and TX to main VFOA

> *KVAAB<CR> Set RX to VFOA, TX to VFOB, SPLIT mode

The [mrx] is ALWAYS A, otherwise command is ignored. It doesn't matter what [srx] is, it is ignored, but required.

The [mtx] is either A or B

QUERY: ?KV<CR>

PC Query Examples: Eagle Response Meaning

@KVAAA<CR> ?KV<CR> RX/TX = VFOA

?KV<CR> @KVAAB<CR> RX = VFOA, TX = VFO B

Note: The current Eagle firmware will respond to all ?K queries with the ?KV response. This may change in future releases though. So, it is recommended that interface programmers utilize the full ?KV guery.

AGC Mode Control / Rate

The **EAGLE** provides a selectable AGC rate.

The command prefix is *RMA.

NOTE: Since there is no physical sub-receiver in the *EAGLE*, the sub receiver AGC rates command of the Orion is not supported by the *EAGLE*.

COMMAND: *RMA<agc_mode><CR>

<agc_mode> = Receiver AGC mode

F = fast M = medium S = slow

Examples: *RMAF<CR> sets AGC operation to FAST.

*RMAS<CR> sets AGC operation to SLOW.

QUERY: ?RMA<CR>

Examples: PC Query Eagle Response Meaning

?RMA<CR> @RMAF<CR> FAST AGC mode ?RMA<CR> @RMAS<CR> SLOW AGC mode

Preamp Control

The **EAGLE** provides Preamp which can be turned on or off.

The command prefix is *RME.

COMMAND: *RME<pre_amp_on_off><cR>

= ON/OFF Selection

0 = Preamp Off 1 = Preamp On

Examples: *RME1<CR> Turns on the Preamp

*RME0<CR> Turns off the Preamp

QUERY: ?RME<CR>

Examples: PC Query Eagle Response Meaning

?RME<CR> @RME1<CR> Preamp on ?RME<CR> @RME0<CR> Preamp off

DSP Bandwidth / Receive Filter

The **EAGLE** does not contain a predefined DSP filter set. When a filter is selected the DSP creates the requested filter on-the-fly. Filters can be programmed between 100 and 15000 Hz to a resolution of 1 Hz.

When this command is received, the *EAGLE* will no longer respond to changes using the BW DSP POT on the front panel of the *EAGLE*.

Upon power cycle the **EAGLE** will default to using the BW DSP POT for the selected DSP Bandwidth.

The command prefix is *RMF.

COMMAND: *RMF<bw><CR>

<bm>=receiver bandwidth 100hz to 15000 hz.

If <bm> = 0, then Eagle will use the BW DSP POT for control

of the DSP Bandwidth.

Examples: *RMF1040<CR> Sets the DSP Bandwidth to 1040Hz

*RMF0<CR> Sets the DSP Bandwidth to the DSP BW POT

QUERY: ?RMF<CR>

Examples: PC Query Eagle Response Meaning

?RMF $_{\text{CR}}$ @RMF1032 $_{\text{CR}}$ DSP BW = 1038Hz ?RMF $_{\text{CR}}$ @RMF15000 $_{\text{CR}}$ DSP BW = 15kHz

Note1: The PC Query ?RMF always works, regardless of whether a- the DSP BW POT is controlling the DSP Bandwidth setting

b- the DSP Bandwidth command *RMF has been used this power cycle

Note2: Changing the DSP Bandwidth Control via the serial interface was made available in the Eagle firmware version 1.736. Prior versions will not accept this command.

RF Gain (readonly)

The relative RF gain can be controlled via a POT on the front panel of the **EAGLE**. The current setting can be read via the serial interface. It cannot be changed via the serial interface.

A setting of 0 represents full RF gain whereas a setting of 100 represents the maximum RF gain level.

QUERY: ?RMG<CR>

Examples: PC Query Eagle Response Meaning

?RMG<CR> @RMG100<CR> RF Gain at maximum value ?RMG<CR> @RMG0<CR> RF Gain at minimum value

Pass Band Tuning (readonly)

The relative location of the Pass Band can be controlled via a POT on the front panel of the *EAGLE*. The current setting can be read via the serial interface. It cannot be changed via the serial interface.

The valid range is -2160 to 2140Hz

QUERY: ?RMP<CR>

Examples: PC Query Eagle Response Meaning

?RMP<CR> @RMP100<CR> Pass Band shift 100 Hz ?RMP<CR> @RMP0<CR> Pass Band at 0 Hz

?RMP<CR> @RMP-200<CR> Pass Band shift negative 200 Hz

Receiver Modes

The **EAGLE** supports AM, FM, LSB, USB and CW modes. At the time of this document, the CW mode supported is UCW. If the **EAGLE** receives a command to go to LCW mode, it will interpret it and force UCW mode.

The command prefix is *RMM.

COMMAND: *RMM<mode code><CR>

<mode code>=receiver mode

0 for USB mode 1 for LSB mode

2 for CW mode (UCW)

3 for CW mode (normally LCW, translated to UCW)

4 for AM mode 5 for FM mode

Examples: *RMM0<CR> Sets the receiver to USB mode

*RMM2<CR> Sets the receiver to CW mode (UCW)

*RMM3<CR> Sets the receiver to CW mode (defaults to UCW)

QUERY: ?RMM<CR>

Examples: PC Query Eagle Response Meaning

?RMM<CR> @RMM4<CR> Currently in AM mode

?RMM<CR> @RMM2<CR> Currently in CW mode (UCW)

Automatic Notch

The **EAGLE** provides an Automatic Notch (an) which can be turned on or off.

The command prefix is *RMNA.

COMMAND: *RMNA<auto notch on off><cr>

< auto_notch_on_off > = ON/OFF Selection

0 = Auto Notch Off 1 = Auto Notch On

Examples: *RMNA1<CR> Turns on the Auto Notch

*RMNA0<CB> Turns off the Auto Notch

QUERY: ?RMNA<CR>

Examples: PC Query Eagle Response Meaning

?RMNA<CR> @RMNA1<CR> Auto Notch on ?RMNA<CR> @RMNAO<CR> Auto Notch off

Rev 1.001 *EAGLE* Programmer's Reference Guide Mar. 4, 2011 *EAGLE* Firmware Updates at www.tentec.com

Noise Reduction

The **EAGLE** provides a Noise Reduction (nr) feature which can be turned on or off, and is also level selectable

The command prefix is *RMNN.

COMMAND: *RMNN<noise reduction value><CR>

< noise reduction value > = ON/OFF Selection / level

0 = Noise Reduction Off

1..9 = Noise Reduction ON and at the specified level

Examples: *RMNN1<CR> Turns on the Noise Reduction at level 1

*RMNN0<CR> Turns off the Noise Reduction

QUERY: ?RMNN<CR>

Examples: PC Query Eagle Response Meaning

?RMNN<CR> @RMNA7<CR> Noise Reduction on level 7

?RMNN<CR> @RMNA0<CR> Noise Reduction off

Attenuator

The **EAGLE** provides an Attenuator (attn) which can be turned on or off.

The command prefix is *RMT.

COMMAND: *RMT<attenuator on off><cr>

< attenuator on off > = ON/OFF Selection

0 = Attenuator Off 1 = Attenuator On

Examples: *RMT1<CR> Turns on the Attenuator

*RMT0<CR> Turns off the Attenuator

QUERY: ?RMT<CR>

Examples: PC Query Eagle Response Meaning

?RMT<CR> @RMT1<CR> Attenuator on ?RMT<CR> @RMT0<CR> Attenuator off

Transmit Power

The transmit power of the **EAGLE** can be adjusted from 1 to 100 watts via the serial interface. It can also be set to a power level of 0, which permits CW ode to be used as a practice tool without generating RF output.

The command prefix is *TP.

COMMAND: *TP<transmit power value><CR>

< transmit power value > = 0..100 0 = do not generate RF output upon key

1..100 =selected wattage.

Note, the **EAGLE** is rated for 5..100 watts.

Selecting 1..4 may not generate the expected power level.

*TP0<CR> Turns off output RF generation on key Examples:

> Sets Transmit Power Level to 50 watts *TP50<CR>

QUERY: ?TP<CR>

PC Query Eagle Response Examples: Meaning

> ?TP<CB> @TP7<CR> Transmit Power set to 7 watts

Key / Unkey Transmitter

The **EAGLE** can be placed into a solid transmit, and also unkeyed via the serial port. Once the key command is sent, the will stay in transmit regardless of the state of the other methods that can invoke and/or release transmit. Note: the temperature monitor is always active and can remove transmit until safe to do so again.

The command prefix is *T.

COMMAND: *T<<u>K</u>ey/<u>U</u>nkey><CR>

Examples: *TK<CR> **Engage Transmit**

> *TU<CR> Disengage Transmit

QUERY: not applicable.

Version Query

The firmware version of the **EAGLE** can be queried. This should be used when interfaces can change, and the PC program wants to maintain backwards compatibility, and limiting features to versions that support the added features of newer versions of firmware.

The command prefix is ?V.

COMMAND: not applicable

QUERY: ?V<CR>

Returns a text string delimited by a carriage return line feed.

599 Ver xx.yyy<LF><CR>

PC Query Eagle Response Meaning Examples:

> 599 Ver 01.736<LF><CR> Version 1 build 736 ?V<CR>

Signal Strength / Transmit Forward/Reflected Power Query

The **EAGLE** provides a way to guery the signal strength of the receiver, and also the forward power and reflected power measurement when in transmit.

The command prefix is ?S.

COMMAND: not applicable

QUERY: ?S<CR>

@SRM<main S value><CR> if the radio is in receive

@STF<fwd watts>R<ref watts*10><CR>

Examples: PC Query Eagle Response Meaning

> ?S<CR> @SRM16<CR> Indicates 16 dbm @STF99R10<cr> ?S<CR> 99 watts forward. 1.0 watt reflected

Memory Write

The **EAGLE** contains 100 memory locations. These memory locations can be written to serially. When a memory write command is received, the **EAGLE** will take the current contents of the following items, and write them to the specified memory location:

- VFOA Frequency
- VFOB Frequency
- Receiver Mode
- Split state
- Tuning rate
- CTCSS Tone

The command prefix is *KWA.

COMMAND: *KWA<memory location> <CR>

<memory location> = 1..100

Examples: *KWA20<CR> Store into memory location 20 the current values

*KWA5<CR> Store into memory location 5 the current values

QUERY: not applicable.

Memory Recall

Similar to the Memory Write function, the current contents of a given memory can be recalled as well.

The command prefix is *KRA.

COMMAND: *KRA<memory_location> <CR>

<memory location> = 1..100

Examples: *KRA20<CR> Recall from memory location 20 to the current values

> *KRA5<CR> Recall from memory location 5 to the current values

QUERY: not applicable.

Name

For updating and other purposes, the **EAGLE** provides its model name upon request. This command is also provided so that a PC program can ensure it is communicating with an *EAGLE* before proceeding with commands that could end up causing issues with the wrong transceiver. Used in conjunction with the Version Query, the appropriate commands supported by this version of the **EAGLE** can be quickly determined.

The command prefix is X.

COMMAND: not applicable

QUERY: X<CR>

Returns a text string delimited by a carriage return line feed.

599 Ver xx.yyy<LF><CR>

Examples: PC Query Eagle Response Meaning

> EAGLE START<CR> X<CR> The Eagle

Note: There are two blank spaces (0x20) before the EAGLE text.

e.g. "<0x20><0x20>EAGLE<0x20>START<CR>"

Document Revision History

Date:	Revision:	Modifications	
Dec. 8, 2010	1.000	Initial Version.	
Mar. 4, 2011	1.001	 Removed Instructions on installing the USB to UART Drivers. Now refer to download site for latest instructions. 	