TAIT COMMUNICATIONS TRUNKED RADIO PROGRAMMING GUIDE

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- 3. TeamTalk TaitNet T3000 Handportables
- 4. TeamTalk TaitNet 5000 Series and Tait Orca Series
- 5. Summary of TeamTalk TaitNet Parameters
- 6. TeamTalk ActionNet T2000 Mobiles
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Please visit

http://support.taitworld.com/

There is a software matrix that lists the latest versions of programming software and radio firmware that are available.

PLEASE NOTE:

TAIT RECOMMEND THAT EACH TIME YOU READ A RADIO OR LOAD A DATA FILE, ALL PARAMETERS ARE CHECKED BEFORE THE RADIO IS PROGRAMMED.

1. Changes Made Since Last Programming Guide

T2000 Trunked Radios:

1. Reset On Error should always be set to Enabled.

This field needs to be checked every time a radio is programmed that it is enabled.

To access this field in the T203X programming software **Technician** needs to be entered instead of **K1W1** when the programming software is started. This option is in the Unit-Diagnostics page.

2. Auto Register at Power On, this field needs to be Enabled.

This will force the radio to register onto the system every time the radio is switched on. This eliminates the need to hold the PTT in while turning on to force the radio to register onto the system

3. Unit Miscellaneous Controls: Single Press PTT Call Enabled

When this field is disabled a separate press of the PTT button is needed after a call is initiated before the user can begin to talk.

4. Unit Miscellaneous Controls: Join Busy Group Enabled

Some networks send repeat go-to-channel messages. On such networks, a radio can make a call to a group it is not subscribed to and if a group call is already in progress, the radio will be directed to the allocated traffic channel. When the Join Busy Group field is enabled, the radio will be able to join busy groups.

Note that on some trunked radio networks group call amalgamation will occur automatically regardless of what this field is set to.

Tait Orca 5000 Series Radios

1. **Reregister on Power-up** this field needs to be **Enabled**.

This will force the radio to register onto the system every time the radio is switched on. This eliminates the need to hold the PTT in while turning on to force the radio to register onto the system

2. Audio Noise Reduction, this field needs to be Enabled.

When the Audio Noise Reduction field is checked, weak signals such as background noise are reduced when the mute is open and nobody is talking on the channel. This applies to all channels.

2. TeamTalk TaitNet - T2000 Mobiles



The following are settings for the TeamTalk TaitNet network.

Noise Blanker: This should be Disabled in all radios

All UHF T2000 trunk radios operating on the TaitNet system should have the noise blanker disabled. Radios which have had the noise blanker disabled can be identified by checking the radio type number. T20xx-523-Cxx = noise blanker disabled. Refer to TN-609, which describes how to perform this modification. (Remove R133)

Economiser: This should be set to **15 minutes or longer**.

There are certain versions of firmware in radios where the economiser cannot be disabled. The programming software will automatically set this to 10 seconds, and this will cause calls to be dropped when they should not be cleared down.

To stop this from occurring the Economiser should be enabled and set to 15 minutes or longer.

Multiple Registration: This should be set to Disabled

Whenever a radio is read or a datafile is loaded, this setting is always set to enabled by the programming software, when it should be disabled.

Whenever a radio is read or a datafile is loaded, this should be checked before the radio is programmed.

Reset on Error: This should always be set to **Enabled**.

This field needs to be checked every time a radio is programmed that it is enabled.

To access this field in the T203X programming software **TECHNICIAN** needs to be entered instead of **K1W1** when the programming software is started. This option is in the Unit-Diagnostics page.

Call Queuing: This should be set to Unanswered.

The only exception is for radios that are connected to a data despatch package. Call queuing needs to be disabled, otherwise there will be problems with 'Not Homes' occurring when the status queue is full.

Auto Register at Power On: This field needs to be Enabled.

This will force the radio to register onto the system every time the radio is switched on. This eliminates the need to hold the PTT in while turning on to force the radio to register onto the system.

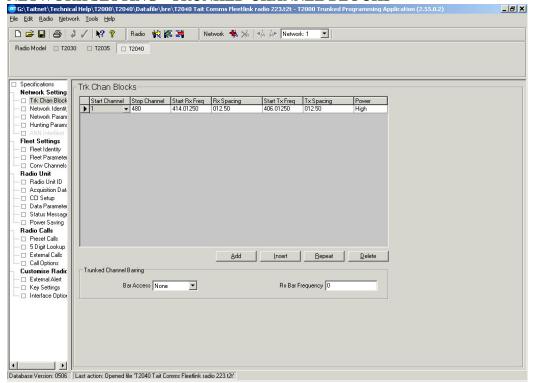
Unit Identity Page:	Control Category	A
Unit Dialing Facilities:	Data Calls	Enabled
Unit Miscellaneous Controls:	Single Press PTT Call Join Busy Group	Enabled Enabled
Own Fleet Parameters:	Dialing Scheme Full Off Air Call Set up Default Call time limit Emergency Call time limit Call timer Count up Ignore TSC Call Time limit	MPT1343 Allowed 180 Secs 780 Secs Disabled Disabled

The table below indicates what radio firmware version supports the features listed. If the radio firmware version is greater than in the table then it supports that feature.

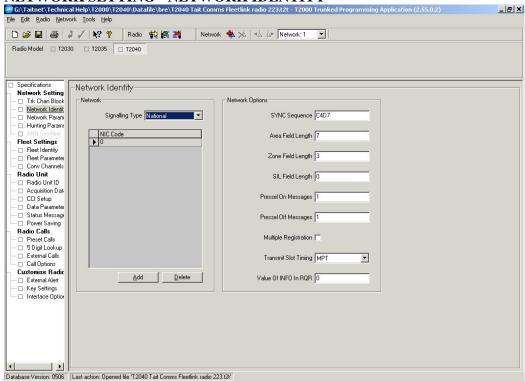
E.G. For the T2040 if the firmware is above V5.20 then it supports the vote now feature.

Background Hunt	$T2030 \ge V3.XX$	$T2035 \ge V3.XX$	$T2040 \ge V5.XX$
Vote Now	$T2030 \ge V3.10$	$T2035 \ge V3.10$	$T2040 \ge V5.20$
NDD preference	$T2030 \ge V3.XX$	$T2035 \ge V3.XX$	$T2040 \ge V4.XX$
Join Busy Group	Not Available	$T2035 \ge V3.53$	$T2040 \ge V5.65$
Auto Register on Power on	$T2030 \ge V3.30$	$T2035 \ge V3.51$	$T2040 \ge V5.63$
Single Press PTT	$T2030 \ge V3.29$	$T2035 \ge V3.51$	$T2040 \ge V5.63$

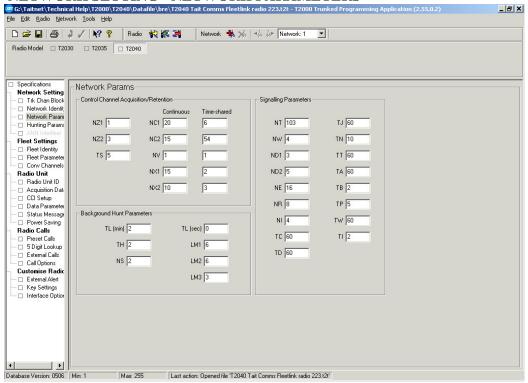
NETWORK SETTING - TRUNKED CHANNEL BLOCKS



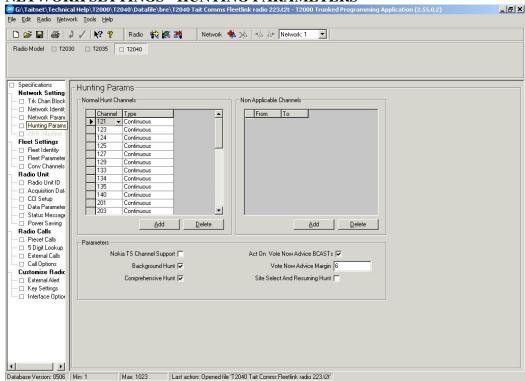
NETWORK SETTING - NETWORK IDENTITY



NETWORK SETTING - NETWORK PARAMETERS



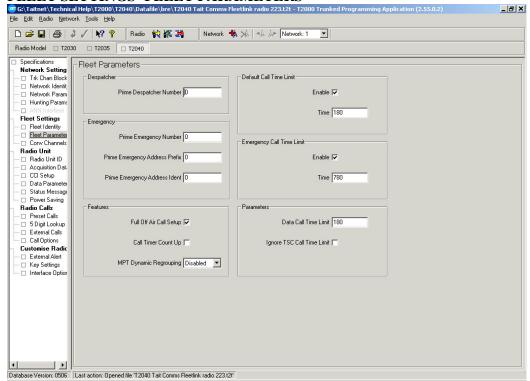
NETWORK SETTINGS - HUNTING PARAMETERS



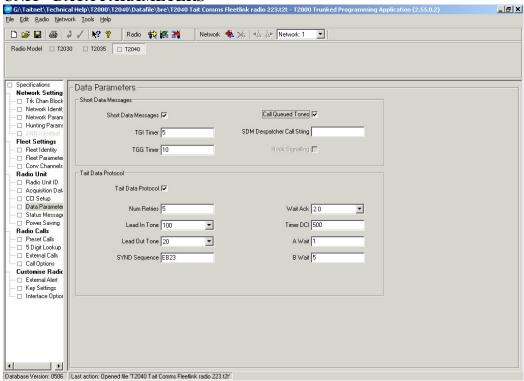
Normal Hunt Channel List:

121, 123, 124, 125, 127, 129, 133, 134, 135, 140, 201, 203, 204, 205, 207, 209, 213, 214, 215, 220, 301, 303, 304, 305, 307, 309, 310, 311, 312, 313, 314, 315

FLEET SETTINGS -FLEET PARAMETERS



UNIT - DATA PARAMETERS



3. TeamTalk TaitNet - T3000 Handportables



Unit Identity Page:

Control Category
Call Queuing

Unanswered

Own Fleet Identity:

Dialing Scheme

MPT1343

Own Fleet Parameters:

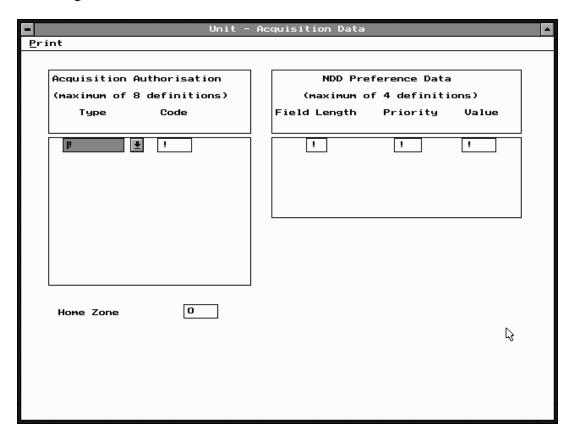
Full Off Air Call Set up
Default Call time limit
180 Secs
Emergency Call time limit
780 Secs

Default Call time limit
Emergency Call time limit
Call time limit
780 Secs
Call timer Count up
Disabled
Ignore TSC Call Time limit
Disabled

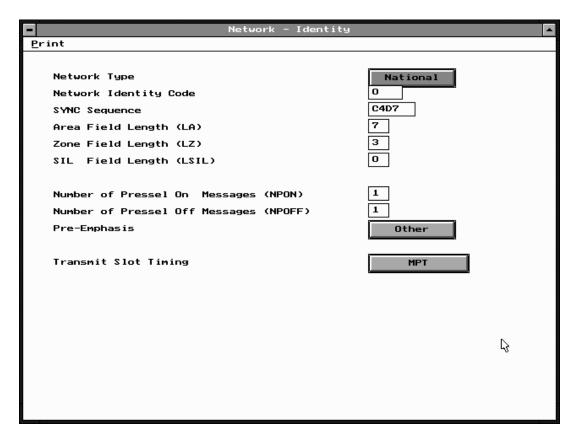
The table below indicates what radio firmware version supports the features listed. If the radio firmware version is greater than in the table then it supports that feature. E.G. For the T3040 if the firmware is above V2.21 then it supports the vote now feature.

Background Hunt	$T3030 \ge V2.XX$	$T3035 \ge V2.XX$	$T3040 \ge V2.XX$
Vote Now	$T3030 \ge V2.11$	$T3035 \ge V2.12$	$T3040 \ge V2.21$
NDD preference	$T3030 \ge V2.XX$	$T3035 \ge V2.XX$	$T3040 \ge V2.XX$

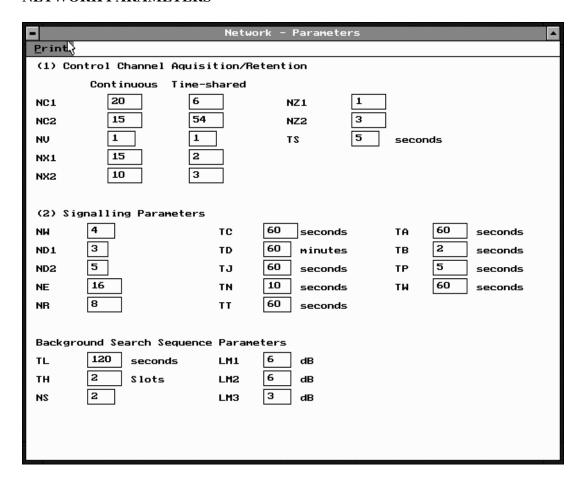
UNIT AQUISITION DATA



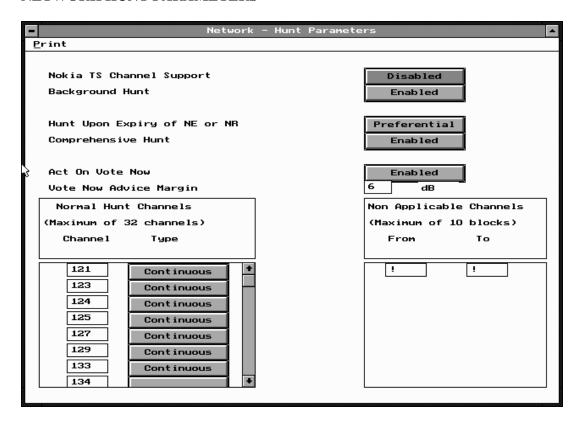
NETWORK IDENITY



NETWORK PARAMETERS



NETWORK HUNT PARAMETERS



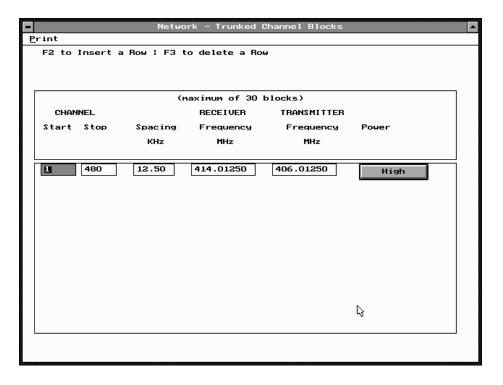
Normal Hunt Channel List: 121, 123, 124, 125, 127, 129, 133, 134, 135, 140, 201, 203, 204, 205, 207, 209, 213, 214, 215, 220, 301, 303, 304, 305, 307, 309, 310, 311, 312, 313, 314, 315

Vote now advice Margin 6 dB

T3000 Trunked radios with following version of firmware have a known problem where they vote incorrectly if set to 6 dB. Please ensure these radios have the vote now margin set to 5 dB for this parameter.

T3035 radios with V2.12 firmware should be set to 5 dB T3040 radios with V2.21 firmware should be set to 5 dB

NETWORK TRUNKED CHANNEL BLOCKS



4. TeamTalk TaitNet - 5000 Series and Tait Orca Series



Dynamic Power: This feature should be **Disabled.**

Dynamic Power needs to be removed from the user menu, function key menu, and also the dynamic power, initial setting needs to be disabled as this can reduce the overall performance of the radio by reducing the radio coverage.

Low Power: This feature should be Disabled.

Low Power needs to be removed from the user menu, function key menu, and also the low power initial setting needs to be disabled as this can reduce the overall performance of the radio by reducing the radio coverage.

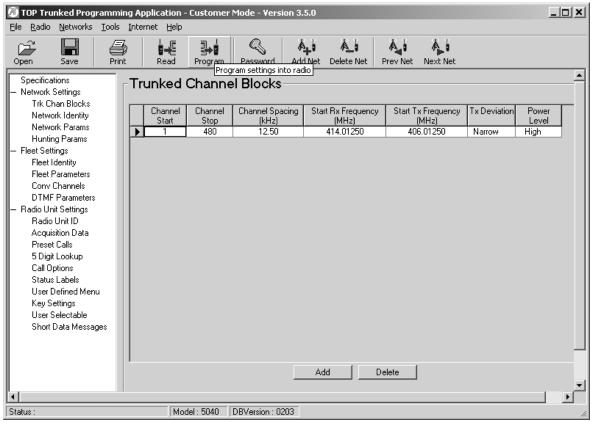
Fleet Identity:	Dialing Scheme	MPT1343
Fleet Parameters:	Full Call Off Air Setup	Enabled
	Default Call time limit	180 Secs
	Default Emergency Call time limit	780 Secs
	Call Timer Count up	Disabled
	Ignore TSC Call timer limit	Disabled
Call Options:	Call Queuing	Unanswered
	Unanswered Call Timer	10 Seconds
	Join Busy Group	Enabled
User Defined Menu:	User Setting Dyn Power Option	Disabled
	User Setting Low power Option	Disabled
User Selectable:	Initial Dynamic Power Setting	Disabled
	Initial Low power Transmit Setting	Disabled
	Auto Noise Reduction	Enabled
	Register On Power Up	Enabled

The table below indicates what radio firmware version supports the features listed. If the radio firmware version is greater than in the table then it supports that feature.

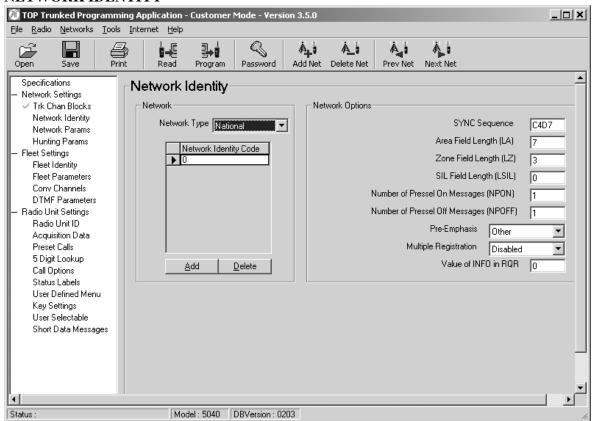
E.G. For the Excel if the firmware is above V3.XX then it supports the vote now feature.

Background Hunt $Elan \geq V2.00$ Excel $\geq V3.XX$ $50XX \geq V4.XX$ Vote Now $Elan \geq V2.00$ Excel $\geq V3.XX$ $50XX \geq V4.XX$ NDD preference $Elan \geq V2.00$ Excel $\geq V3.XX$ $50XX \geq V4.XX$

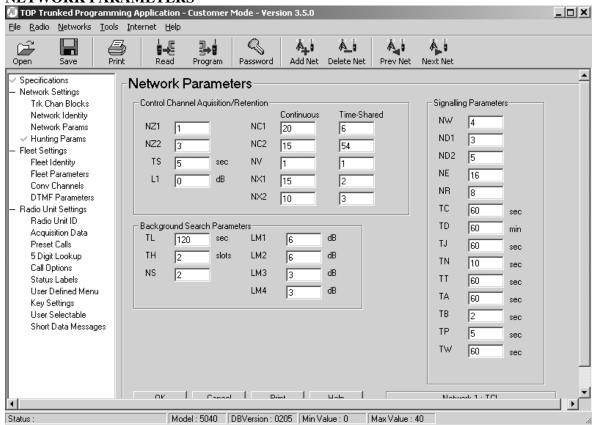
TRUNKED CHANNEL BLOCKS



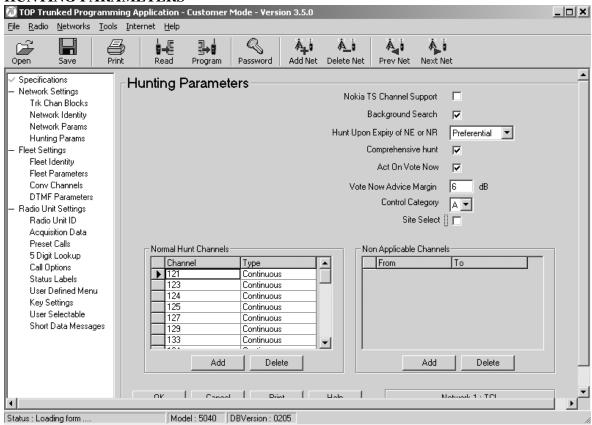
NETWORK IDENTITY



NETWORK PARAMETERS

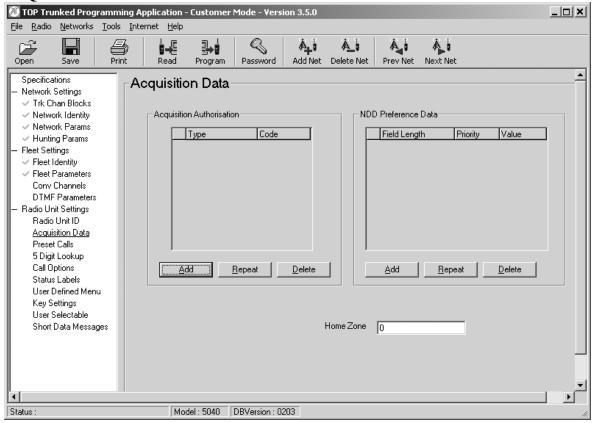


HUNTING PARAMETERS



Hunt Channel List: 121, 123, 124, 125, 127, 129, 133, 134, 135, 140, 201, 203, 204, 205, 207, 209, 213, 214, 215, 220, 301, 303, 304, 305, 307, 309, 310, 311, 312, 313, 314, 315

ACQUISITION DATA



5. Summary of TeamTalk TaitNet Parameters

For Tait Radios			1			
Variable Name		Mobile	Portable			
NC1	CONTIN	20	20		Lowest Chan	1
NC2	CONTIN	15	15		Highest Chan	480
NX1	CONTIN	15	15			
NX2	CONTIN	10	10			
NZ1		1	1	Comprehensive hunt		On
NZ2		3	3	Background Hunt		On
ND1		3	3			
ND2		5	5	Network type		National
NE		16	16	Network ID		0
NI		4	4	Dialing Scheme		MPT1343
NR		8	8	Control category		Α
NT		103	103	Full off air call set up		Yes
NW		4	4	Default call time limit		180 sec
TA		60	60	Emg call time limit		780 sec
ТВ		2	2	Data call time limit		180 sec
TC		60	60	Call timer count up		No
TD		60	60	Ignore TSC call time limit		No
TI		2	2	Nokia TS support		No
TJ		60	60	Act on vote now		Yes
TN		10	10			
TP		5	5	Freq Range start channel	1	
TS		5	5	Freq Range stop channel	480	
TT		60	60			
TW		60	60			
TL		2 m	120 secs	RX	414.01250	
TH		2	2	тх	406.01250	
NS		2	2	-	1001011100	
NV		1	1			
LM1		6	6			
LM2		6	6			
LM3		3	3			
NPON		1	1			
NPOFF		1	1			
LA		7	7			
LZ		3	3			
LSIL		0	0			
VOTE NOW LEVEL		6	6			
HOME ZONE		0	0			
N VOTE		1	1			
14 401L		1	•			
T VOTE		10	10			

Channels (Control)

121,123,124,125,127,129,133,134,135,140,201,203,204,205,207 209,213,214,215,220,301,303,304,305,307,309,310,311,312,313,314,315

6. TeamTalk ActionNet - T2000 Mobiles



The following are settings for the TeamTalk ActionNet network.

Noise Blanker: This should be Disabled in all radios

All UHF T2000 trunk radios operating on the TaitNet system should have the noise blanker disabled. Radios which have had the noise blanker disabled can be identified by checking the radio type number. T20xx-523-Cxx = noise blanker disabled. Refer to TN-609 which describes how to perform this modification. (Remove R133)

Economiser: This should be set to **15 minutes or longer.**

There are certain versions of firmware in radios where the economiser cannot be disabled. The programming software will automatically set this to 10 seconds, and this will cause calls to be dropped when they should not be cleared down.

To stop this from occurring the Economiser should be enabled and set to 15 minutes or longer.

Multiple Registration: This should be set to Disabled

Whenever a radio is read or a datafile is loaded, this setting is always set to enabled by the programming software, when it should be disabled.

Whenever a radio is read or a datafile is loaded, this should be checked before the radio is programmed.

Reset on Error: This should always be set to Enabled.

This field needs to be checked every time a radio is programmed that it is enabled.

To access this field in the T203X programming software **TECHNICIAN** needs to be entered instead of **K1W1** when the programming software is started. This option is in the Unit-Diagnostics page.

Call Queuing: This should be set to Unanswered.

The only exception is for radios that are connected to a data despatch package. Call queuing needs to be disabled; otherwise there will be problems with 'Not Homes' occurring when the status queue is full

Auto Register at Power On: This field needs to be Enabled.

This will force the radio to register onto the system every time the radio is switched on. This eliminates the need to hold the PTT in while turning on to force the radio to register onto the system

Unit Identity Page: Control Category A

Unit Preset Calls: TeamTalk Helpdesk 202,2001,200 Number 9

Unit Dialing Facilities: Data Calls Enabled

ALLI calls
Network Operator Service Calls
Technician Calls
Disabled
Disabled

Unit Miscellaneous Controls: Single Press PTT Call Enabled

Join Busy Group Enabled

Own Fleet Parameters: Dialing Scheme MPT1343

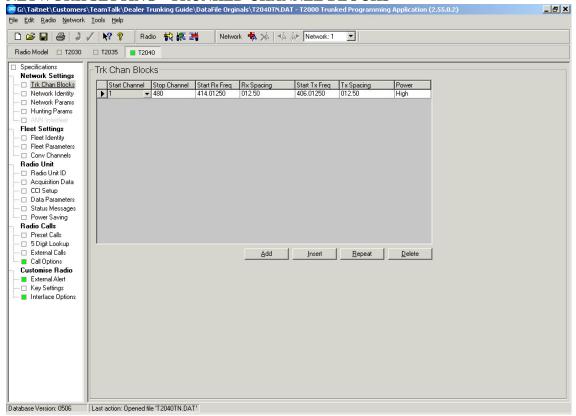
Full Off Air Call Set up
Default Call time limit
0 Secs
Default Emergency Call time limit
0 Secs
Default Data Call time limit
180 Secs
Call timer Count up
Enabled
Ignore TSC Call Time limit
Disabled

The table below indicates what radio firmware version supports the features listed. If the radio firmware version is greater than in the table then it supports that feature.

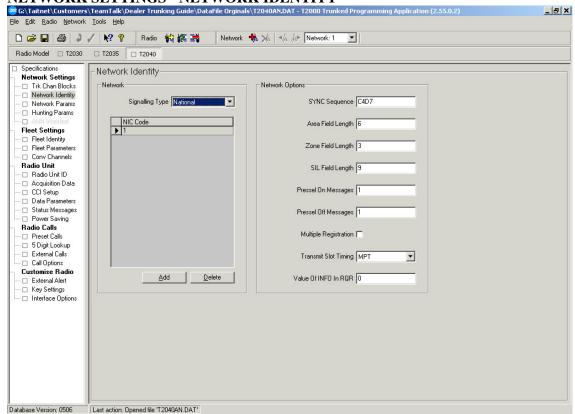
E.G. For the T2040 if the firmware is above V5.20 then it supports the vote now feature.

Background Hunt	$T2030 \ge V3.XX$	$T2035 \ge V3.XX$	$T2040 \ge V5.XX$
Vote Now	$T2030 \ge V3.10$	$T2035 \ge V3.10$	$T2040 \ge V5.20$
NDD preference	$T2030 \ge V3.XX$	$T2035 \ge V3.XX$	$T2040 \ge V4.XX$
Join Busy Group	Not Available	$T2035 \ge V3.53$	$T2040 \ge V5.65$
Auto Register on Power on	$T2030 \ge V3.30$	$T2035 \ge V3.51$	$T2040 \ge V5.63$
Single Press PTT	$T2030 \ge V3.29$	$T2035 \ge V3.51$	$T2040 \ge V5.63$

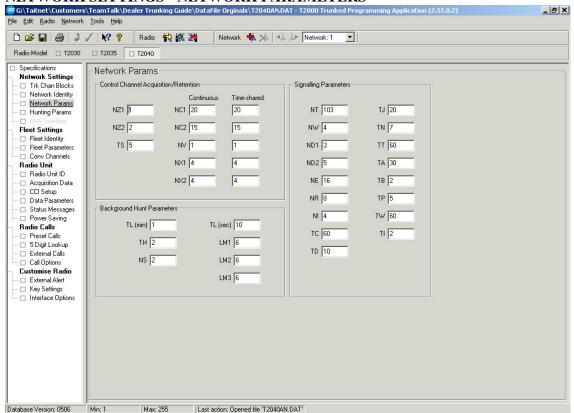
NETWORK SETTING - TRUNKED CHANNEL BLOCKS



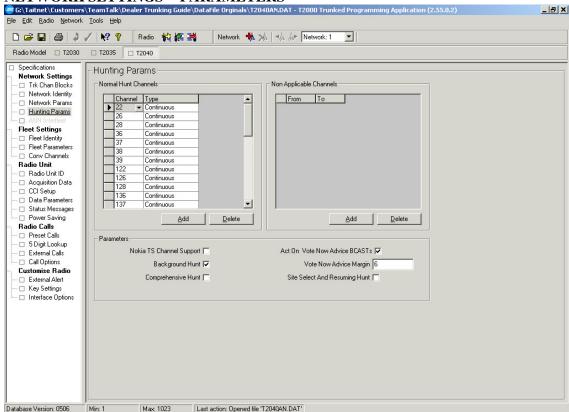
NETWORK SETTINGS - NETWORK IDENTITY



NETWORK SETTINGS - NETWORK PARAMETERS

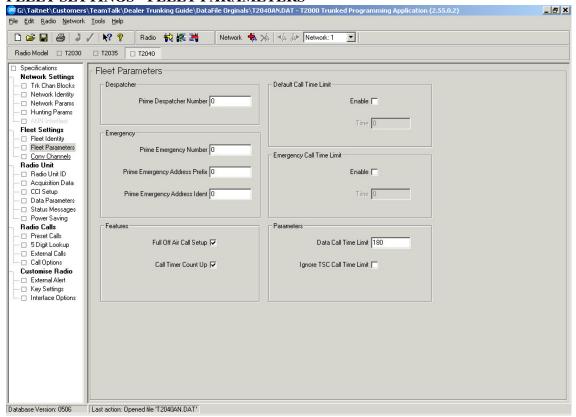


NETWORK SETTINGS - PARAMETERS

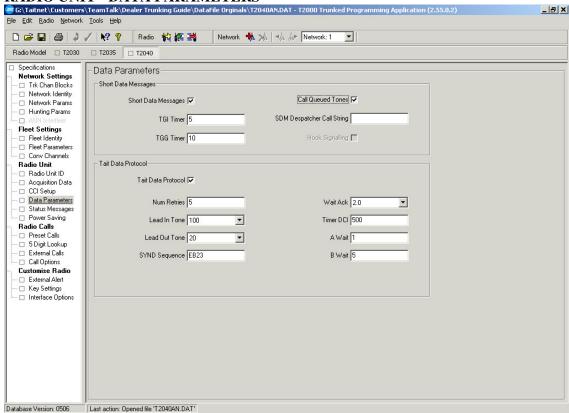


Normal Hunt Channel List: 22, 26, 28, 36, 37, 38, 39, 122, 126, 128, 136, 137, 138, 139, 202, 206, 208, 216, 217, 218, 219, 302, 306, 308, 316, 317, 318, 319, 321, 361, 453, 478

FLEET SETTINGS - FLEET PARAMETERS



RADIO UNIT - DATA PARAMETERS



7. TeamTalk ActionNet - T3000 Handportables



Unit Identity Page: Control Category A

Call Queuing Unanswered

Unit Preset Calls TeamTalk Help Desk 2022001200 Number 9

Unit Dialing Facilities ALLI Calls Disabled

Network Operator Service Calls
Technician Calls
Disabled
Disabled

Own Fleet Identity: Dialing Scheme MPT1343

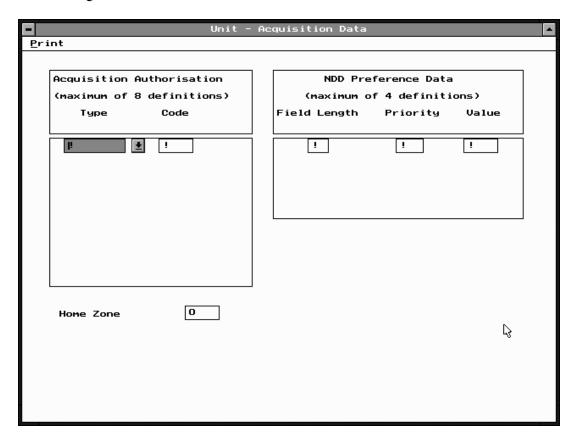
Own Fleet Parameters: Full Off Air Call Set up Allowed

Default Call time limit 0 Secs
Emergency Call time limit 0 Secs
Call timer Count up Enabled
Ignore TSC Call Time limit Disabled

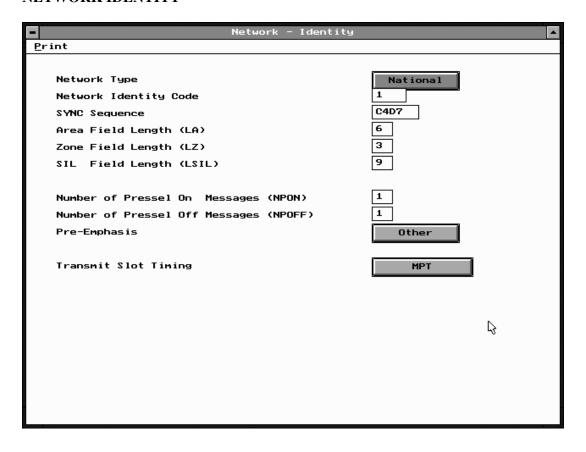
The table below indicates what radio firmware version supports the features listed. If the radio firmware version is greater than in the table then it supports that feature. E.G For the T3040 if the firmware is above V2.21 then it supports the vote now feature.

Background Hunt	$T3030 \ge V2.XX$	$T3035 \ge V2.XX$	$T3040 \ge V2.XX$
Vote Now	$T3030 \ge V2.11$	$T3035 \ge V2.12$	$T3040 \ge V2.21$
NDD preference	$T3030 \ge V2.XX$	$T3035 \ge V2.XX$	$T3040 \ge V2.XX$

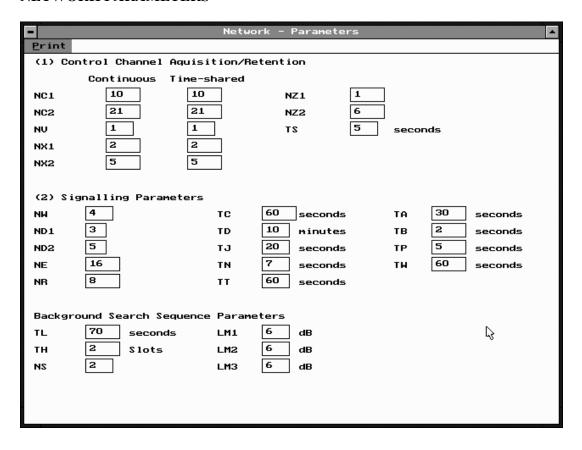
UNIT ACQUISITION DATA



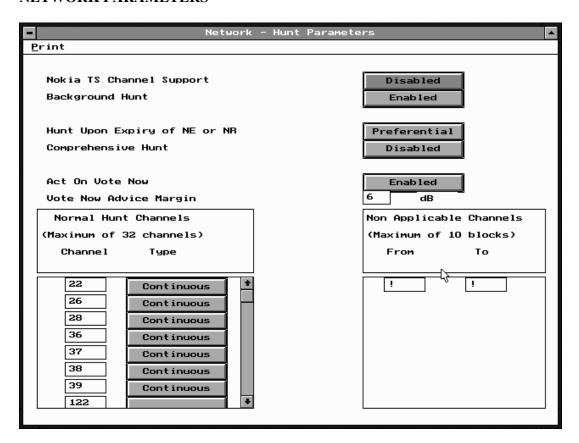
NETWORK IDENTITY



NETWORK PARAMETERS



NETWORK PARAMETERS



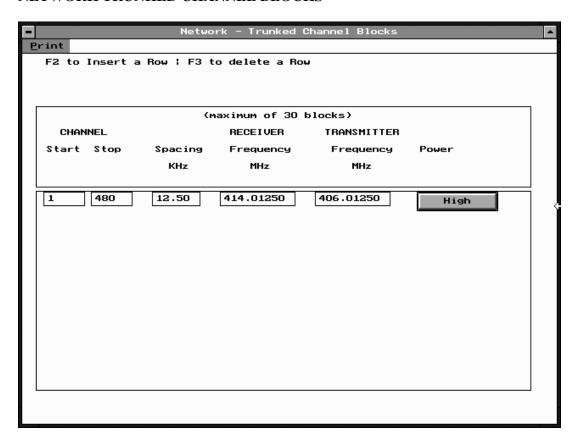
Normal Hunt Channel List: 22, 26, 28, 36, 37, 38, 39, 122, 126, 128, 136, 137, 138, 139, 202, 206, 208, 216, 217, 218, 219, 302, 306, 308, 316, 317, 318, 319, 321, 361, 453, 478

Vote now advice Margin 6 dB

T3000 Trunked radios with following version of firmware have a known problem where they vote incorrectly if set to 6 dB. Please ensure these radios have the vote now margin set to 5 dB for this parameter.

T3035 radios with V2.12 firmware should be set to 5 dB T3040 radios with V2.21 firmware should be set to 5 dB

NETWORK TRUNKED CHANNEL BLOCKS



8. TeamTalk ActionNet - 5000 Series and Tait Orca Series



Dynamic Power: This feature should be Disabled.

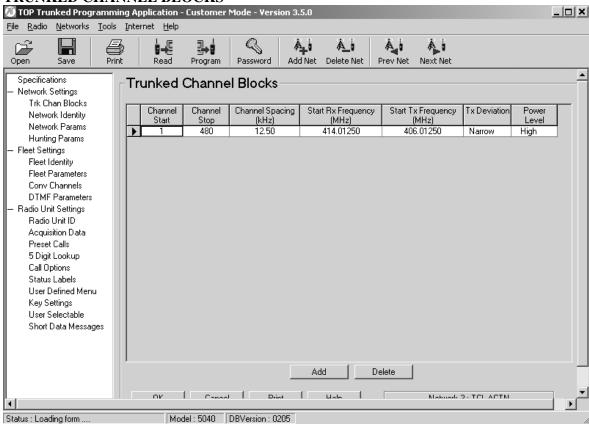
Dynamic Power needs to be removed from the user menu, function key menu, and also the initial setting of the dynamic power needs to be disabled as this can reduce the overall performance of the radio

Low Power: This feature should be Disabled.

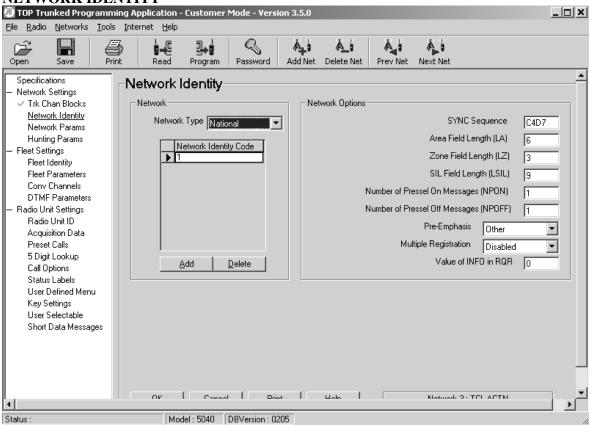
Low Power needs to be removed from the user menu, function key menu, and also the initial setting of the low power needs to be disabled as this can reduce the overall performance of the radio

Fleet Identity:	Dialing Scheme	MPT1343
Fleet Parameters:	Full Call Off Air Setup	Allowed
	Default Call time limit	0 Secs
	Default Emergency Call time limit	0 Secs
	Call Timer Count up	Enabled
	Ignore TSC Call timer limit	Disabled
Call Options:	ALLI Calls	Disabled
	Network Operator Service Calls	Disabled
	Technician Calls	Disabled
	Call Queuing	Unanswered
	Unanswered Call Timer	20 Seconds
	Join Busy Group	Enabled
User Defined Menu:	User Setting Dyn Power Option	Disabled
	User Setting Low power Option	Disabled
User Selectable:	Initial Dynamic Power Setting	Disabled
	Initial Low power Transmit Setting	Disabled
	Auto Noise Reduction	Enabled
	Register On Power Up	Enabled
Preset Calls:	TeamTalk Helpdesk 202,2001,200	Number 9

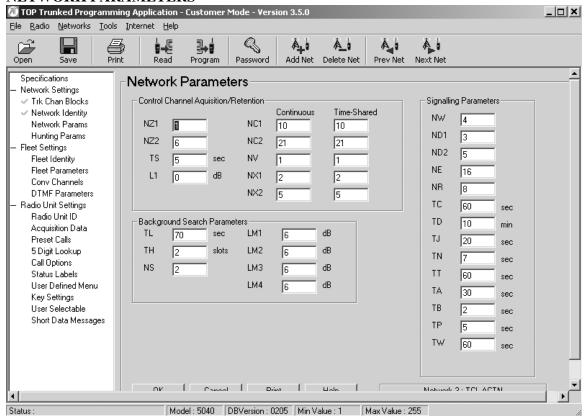
TRUNKED CHANNEL BLOCKS



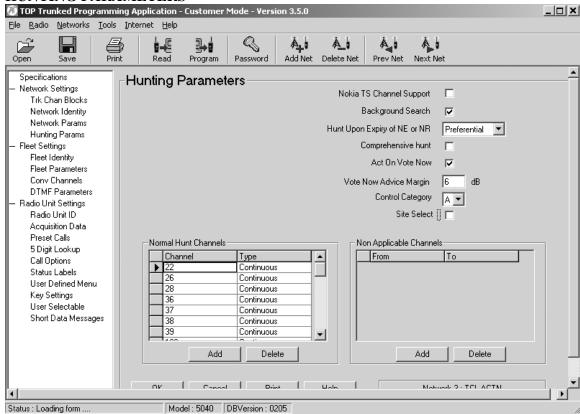
NETWORK IDENTITY



NETWORK PARAMETERS

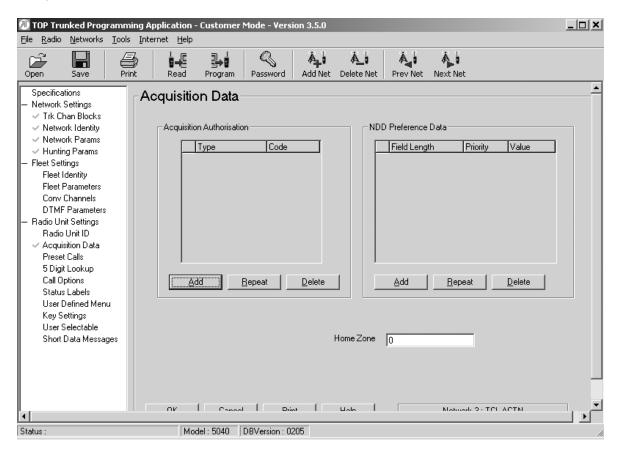


HUNTING PARAMETERS



Normal Hunt Channel List: 22, 26, 28, 36, 37, 38, 39, 122, 126, 128, 136, 137, 138, 139, 202, 206, 208, 216, 217, 218, 219, 302, 306, 308, 316, 317, 318, 319, 321, 361, 453, 478

ACQUISITION DATA



9. Summary of TeamTalk ActionNet Parameters

VARIABLE		MOBILE	PORTABLE	
NC1	CONT	20	10	LOWEST CHANNEL 1
NC2	CONT	15	21	HIGHEST CHANNEL 480
NX1	CONT	4	2	
NX2	CONT	4	5	
NZ1		1	1	COMPREHENSIVE HUNT OFF
NZ2		2	6	BACKGROUND HUNT ON
ND1		3	3	VOTE NOW ON
ND2		5	5	
NE		16	16	
NI		4	4	
NR		8	8	
NT		103	103	
NW		4	4	
TA		30	30	
TB		2	2	
TC		60	60	
TD		10	10	
TI		2	2	
TJ		20	20	
TN		7	7	
TP		5	5	
TS		5	5	
TT		60	60	
TW		60	60	
TL		70	70	
TH		2	2	
NS		2	2	
NV		1	1	
LM1		6	6	
LM2		6	6	
LM3		6	6	
NPON		1	1	
NPOFF		1	1	
LA		6	6	
LZ		3	3	
LSIL		9	9	
VOTE NOW		6	6	
LEVEL				
HOME ZONE		0	0	
N VOTE		1	1	
T VOTE		10	10	
LM VOTE		6	6	

CHANNELS 22, 26, 28, 36, 37, 38, 39, 122, 126, 128, 136, 137, 138, 139, 202, 206, 208, 216, 217, 218, 219, 302, 306, 308, 316, 317, 318, 319, 321, 361, 453, 478

NOTE ALL TAIT T700 AND T500 RADIOS NEED TO HAVE <u>COMPREHENSIVE HUNT TURNED ON</u> TO STOP RADIOS LOGGING OFF WHEN THEY CAN NOT FIND A SITE IN THE NORMAL HUNT LIST

10. Other Equipment Manufactures Summary

TeamTalk TaitNet Network Parameters 21 May 2001 For other Manufactures Equipment

Variable Name		Mobile	Portable			
NC1	CONTIN	30	25		Lowest Chan	7
NC2	CONTIN	20	20		Highest Chan	480
NX1	CONTIN	6	5		FPP	0
NX2	CONTIN	6	6		MEP	0
NZ1		1	1	Comprehensive hunt		On
NZ2		2	6	Background Hunt		On
ND1		3	3			
ND2		5		Network type		National
NE		16	16	Network ID		0
NI		4	4	Dialing Scheme		MPT1343
NR		8	8	Control category		Α
NT		103	103	Full off air call set up		Yes
NW		4	4	Default call time limit		180 sec
TA		30	30	Emg call time limit		780 sec
ТВ		2	2	Data call time limit		180 sec
TC		60	60	Call timer count up		No
TD		10	10	Ignore TSC call time limit		No
TI		2	2	Nokia TS support		No
TJ		40	40	Act on vote now		Yes
TN		10	10	Ignore LAB sub filed		No
TP		5	5	Freq Range start channel 1		
TS		5	5	RX	414.01250	
TT		60	60	тх	406.01250	
TW		60	60			
TL		90	90			
TH		2	2			
NS		2	2			
NV		1	1			
LM1		6	6			
LM2		6	6			
LM3		6	6			
NPON		1	1			
NPOFF		1	1			
LA		7	7			
LZ		3	3			
LSIL		0	0			
VOTE NOW LEVEL		6	6			
HOME ZONE		0	0			
N VOTE		1	1			
T VOTE		10	10			
LM VOTE		6	6			

Channels (control)

121,123,124,125,127,129,133,134,135,140,201,203,204,205,207 209,213,214,215,220,301,303,304,305,307,309,310,311,312,313,314,315