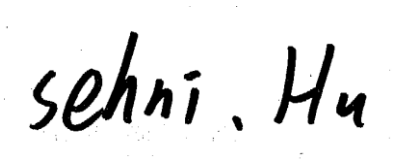
RADIO TEST REPORT
FCC 47 CFR PART 15 SUBPART E

Test Standard	**FCC Part 15.407**
Brand name	**D-Link**
Product name	**(1) AX1500 Wi-Fi 6 AI Range Extender; (2) AX1500 Mesh Range Extender**
Model No.	**E15**
Test Result	**Pass**
Statements of Conformity	**Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.**

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.
The test results of this report relate only to the tested sample (EUT) identified in this report.
The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc.(Wugu Laboratory)

Approved by:



Sehni Hu
Supervisor

Revision History

Rev.		Issue Date		Revisions	Effect Page	Revised By
00		June 30, 2022		Initial Issue	ALL	Allison Chen
01		July 5, 2022		See the following Note Rev.(01)	ALL	Allison Chen

Note:
Rev.(01)
1. Modified report number

TABLE OF CONTENTS

Summary of Dynamic Frequency of Selection Test

UNII	Description	Limit	Result
U-NII Band 2-A 5250-5350MHz	Channel Availability Check Time	> 60sec	Pass
	U-NII Detection Bandwidth	> 100% of the U-NII 99% transmission power bandwidth	Pass
	Statistical Performance Check	Type 1,2,3,4 >= 60% Type 1~4 and 5 >= 80% Type 6 >= 70%	Pass
	Channel Move Time	< 10 sec	Pass
	Channel Closing Transmission Time	< 200 ms + aggregate of 60 ms over remaining 10 s period	Pass
	Non-Occupancy Period Test	> 30 minutes	Pass
U-NII Band 2-C 5470-5725MHz	Channel Availability Check Time	> 60sec	Pass
	U-NII Detection Bandwidth	> 100% of the U-NII 99% transmission power bandwidth	Pass
	Statistical Performance Check	Type 1,2,3,4 >= 60% Type 1~4 and 5 >= 80% Type 6 >= 70%	Pass
	Channel Move Time	< 10 sec	Pass
	Channel Closing Transmission Time	< 200 ms + aggregate of 60 ms over remaining 10 s period	Pass
	Non-Occupancy Period Test	> 30 minutes	Pass

1. TEST RESULT CERTIFICATION

1.1 EUT INFORMATION

Applicant	D-Link Corporation 14420 Myford Road Suite 100, Irvine, California 92606, United States
Manufacturer	Amigo Technology Inc. No.82, Gongye 2nd Rd., Annan Dist., Tainan City 709Tainan, Taiwan.
Equipment	(1) AX1500 Wi-Fi 6 AI Range Extender; (2) AX1500 Mesh Range Extender
Model No.	E15
Model Discrepancy	N/A
Brand name	D-Link
Received Date	March 19, 2021
Date of Test	June 2, 2021 ~ May 11, 2022
Firmware Rev	1.00B33-220314
DFS Function	Master

Remark:
1. For more details, please refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

1.2 EUT CHANNEL INFORMATION

Frequency Range		**Mode**	**Frequency Range (MHz)**
	UNII 2a	IEEE 802.11a	5260 ~ 5320
		IEEE 802.11n HT 20	5260 ~ 5320
		IEEE 802.11n HT 40	5270 ~ 5310
		IEEE 802.11ac VHT 20	5260 ~ 5320
		IEEE 802.11ac VHT 40	5270 ~ 5310
		IEEE 802.11ac VHT 80	5290
		IEEE 802.11ax 20	5260 ~ 5320
		IEEE 802.11ax 40	5270 ~ 5310
		IEEE 802.11ax 80	5290
	UNII 2c	IEEE 802.11a	5500 ~ 5700
		IEEE 802.11n HT 20	5500 ~ 5700
		IEEE 802.11n HT 40	5510 ~ 5670
		IEEE 802.11ac VHT 20	5500 ~ 5700
		IEEE 802.11ac VHT 40	5510 ~ 5670
		IEEE 802.11ac VHT 80	5530
		IEEE 802.11ax 20	5500 ~ 5700
		IEEE 802.11ax 40	5510 ~ 5670
		IEEE 802.11ax 80	5530
Modulation Type	1. IEEE 802.11a mode: OFDM 2. IEEE 802.11n HT 20 mode: OFDM 3. IEEE 802.11n HT 40 mode: OFDM 4. IEEE 802.11ac VHT 80 mode: OFDM 5. IEEE 802.11ax HE 20 mode: OFDMA 6. IEEE 802.11ax HE 40 mode: OFDMA 7. IEEE 802.11ax HE 80 mode: OFDMA		

Remark:
1. Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 for test channels
2. For the EUT Frequency Range 5600~5650 MHz will be disabled.

Number of frequencies to be tested

Frequency range in which device operates	**Number of frequencies**	**Location in frequency range of operation**
☐ 1 MHz or less	1	Middle
☐ 1 MHz to 10 MHz	2	1 near top and 1 near bottom
☒ More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	☒ PIFA ☐ PCB ☐ Dipole ☐ Coils
Antenna Gain	Type: embedded antenna Chain 0: LYNwave / ALX20P-221AA9-00 Chain 1: LYNwave / ALX20P-221AA9-01
Antenna Connector	i-pex

Band	Chain 0 (dBi)	Chain 1 (dBi)	Total Gain (dBi)
5G_U-NII 1	3.1	3.3	6.21
5G_U-NII 2	3.1	3.3	6.21
5G_U-NII 2a	3.1	3.3	6.21
5G_U-NII 3	3.1	3.3	6.21

Notes:
1.The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203 and RSS-Gen 6.8.

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
Radiated Emission_9kHz-30MHz	± 3.814
Radiated Emission_30MHz-200MHz	± 4.272
Radiated Emission_200MHz-1GHz	± 4.619
Radiated Emission_1GHz-6GHz	± 5.522
Radiated Emission_6GHz-18GHz	± 5.228
Radiated Emission_18GHz-26GHz	± 4.089
Radiated Emission_26GHz-40GHz	± 4.019

Remark:
1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan. (R.O.C.)
CAB identifier: TW1309

Remark: The lab has been recognized as the FCC accredited lad under the KDB 974614 D01 and is listed in the FCC pubic Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309

1.6 INSTRUMENT CALIBRATION

Dynamic Frequency Selection					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
Attenuator	E-INSTRUMENT	EPA-600H	EC1400050	07/20/2020	07/19/2021
	E-INSTRUMENT	EPA-600H	EC1400050	07/08/2021	07/07/2022
Coaxial Cable	Woken	WC12	DC004	06/29/2020	06/28/2021
	Woken	WC12	DC004	06/28/2021	06/27/2022
Directional Couplers	Agilent	87301D	MY44350252	08/03/2020	08/02/2021
	Agilent	87301D	MY44350252	07/26/2021	07/25/2022
Power Divider	Marvelous Microwave	MVE8586	16011206	08/03/2020	08/02/2021
	Marvelous Microwave	MVE8586	16011206	07/20/2021	07/19/2022
Power Divider	Solvang Technology	STI08-0015	008	08/05/2020	08/04/2021
	Solvang Technology	STI08-0015	008	07/26/2021	07/25/2022
*Vector Signal Generator	R&S	SMU 200A	102239	04/19/2021	04/18/2022
*Vector Signal Generator	KEYSIGHT	N5182B/N5182BX07	MY61252828/ MY59362552	02/22/2022	02/22/2023
Spectrum Analyzer	R&S	FSU 26	100258	06/12/2020	06/11/2021
	R&S	FSU 26	100258	06/17/2021	06/16/2022
Software	GPIBShot, DFS-Aggregate-Time FSU, LANLook				

***Note:**

1. Device-2: Vector Signal Generator (R&S / SMU 200A)	Test Date: June 2, 2021 ~ April 18, 2022
2. Vector Signal Generator (KEYSIGHT / N5182B/N5182BX07)	Test Date: April 18 ~ May 11, 2022

Remark: Each piece of equipment is scheduled for calibration once a year.

1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment						
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**	**IC**
	N/A					

Support Equipment						
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**	**IC**
1	wireless card	Netgear	A6210	N/A	PY313400249	N/A
2	NB(J)	TOSHIBA	PT345T-00L002	N/A	PD97260H	1000M-7260H
3	NB	Lenovo	20175	N/A	TX2-RTL8723AS	6317A-RTL8723AS
4	AP	ASUS	RT-AX88U	N/A	MSQ-RTAXHP00	3568A-RTAXHP00

1.8 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, KDB 789033 D02, KDB 905462 D02.

2. TEST SUMMARY

FCC Standard Sec.	Chapter	Test Item	Result
15.203	1.3	Antenna Requirement	Pass
15.407(h)	4.1	Dynamic Frequency Selection	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE EUT CHANNEL NUMBER OF OPERATING CONDITION

<table>
<tr><td>Operation mode</td><td>1. IEEE 802.11a mode: 6Mbps
2. IEEE 802.11n HT 20 mode: MCS8
3. IEEE 802.11n HT 40 mode: MCS8
4. IEEE 802.11ac VHT 80 mode: MCS0
5. IEEE 802.11ax HE 20 mode: MCS0
6. IEEE 802.11ax HE 40 mode: MCS0
7. IEEE 802.11ax HE 80 mode: MCS0</td></tr>
<tr><td>Operating Frequency</td><td>
<table>
<tr><th></th><th>Mode</th><th>Frequency Range (MHz)</th></tr>
<tr><td rowspan="8">UNII 2a</td><td>IEEE 802.11a</td><td>5260 ~ 5320</td></tr>
<tr><td>IEEE 802.11n HT 20</td><td>5260 ~ 5320</td></tr>
<tr><td>IEEE 802.11n HT 40</td><td>5270 ~ 5310</td></tr>
<tr><td>IEEE 802.11ac VHT 80</td><td>5290</td></tr>
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<tr><td rowspan="8">UNII 2c</td><td>IEEE 802.11a</td><td>5500 ~ 5700</td></tr>
<tr><td>IEEE 802.11n HT 20</td><td>5500 ~ 5700</td></tr>
<tr><td>IEEE 802.11n HT 40</td><td>5510 ~ 5670</td></tr>
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<tr><td>IEEE 802.11ax 80</td><td>5530</td></tr>
</table>
</td></tr>
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Remark:
1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.

4. DYNAMIC FREQUENCY SELECTION

TEST PROCEDURE

According to FCC 47 CFR Part 15 Subpart E (Section 15.407),
KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02,
KDB 905462 D04 Operational Modes for DFS Testing New Rules v01
EUT is considered as a master device.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Operational Mode	
	Master Devise or Client With Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

4.1 DFS DETECTION THRESHOLDS

Table 3 below provides the DFS Detection Thresholds for Master Devices as well as Client Devices incorporating In-Service Monitoring.

Table 3: DFS Detection Thresholds for Master Devices

Maximum Transmit Power	Value (see notes 1, 2, and 3)
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. **Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. **Note 3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

4.2 DFS RESPONSE REQUIREMENT

Table 4 provides the response requirements for Master and Client Devices incorporating DFS.

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second periods. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the 99% power bandwidth See Note 3.
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. **Note 2:** The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate Channel changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. **Note 3:** During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.	

4.3 RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

4.3.1 Short Pulse Radar Test Waveforms

Radar Type 0 was used in the evaluation of the Client device for the purpose of measuring the Channel Move Time and the Channel Closing Transmission Time.

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	
1	1	Test A	$Roundup\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{PRI_{\mu\text{sec}}}\right)\right\}$	60%	30
		Test B			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a
Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms.

If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

4.3.2Long Pulse Radar Test Waveform

Table 6 – Long Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse radar test signal. If more than 30 waveforms are used for the Long Pulse radar test signal, then each additional waveform must also be unique and not repeated from the previous waveforms.
Each waveform is defined as follows:
Note: The center frequency for each of the 30 trials of the Bin 5 radar shall be randomly selected within 80% of the Occupied Bandwidth.
(1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
(2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst_Count.
(3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
(4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the same pulse width. Pulses in different Bursts may have different pulse widths.
(5) Each pulse has a linear frequency modulated chirp between 5 and 20 MHz, with the chirp width being randomly chosen. Each pulse within a **transmission period** will have the same chirp width. The chirp is centered on the pulse. For example, with a radar frequency of 5300 MHz and a 20 MHz chirped signal, the chirp starts at 5290 MHz and ends at 5310 MHz
(6) If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
(7) The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst_Count. Each interval is of length (12,000,000 / Burst_Count) microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and [(12,000,000 / Burst_Count) – (Total Burst Length) + (One Random PRI Interval)] microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

A representative example of a Long Pulse radar test waveform:
(1) The total test signal length is 12 seconds.
(2) 8 Bursts are randomly generated for the Burst_Count.
(3) Burst 1 has 2 randomly generated pulses.
(4) The pulse width (for both pulses) is randomly selected to be 75 microseconds.
(5) The PRI is randomly selected to be at 1213 microseconds.
(6) Bursts 2 through 8 are generated using steps 3 – 5.
(7) Each Burst is contained in even intervals of 1,500,000 microseconds. The starting location for Pulse 1, Burst 1 is randomly generated (1 to 1,500,000 minus the total Burst 1 length + 1 random PRI interval) at the 325,001 microsecond step. Bursts 2 through 8 randomly fall in successive 1,500,000 microsecond intervals (i.e. Burst 2 falls in the 1,500,001 – 3,000,000 microsecond range).

4.3.3Frequency Hopping Radar Test Waveform

Table 7 – Frequency Hopping Radar Test Signal

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

For the Frequency Hopping Radar Type, the same Burst parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724 MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

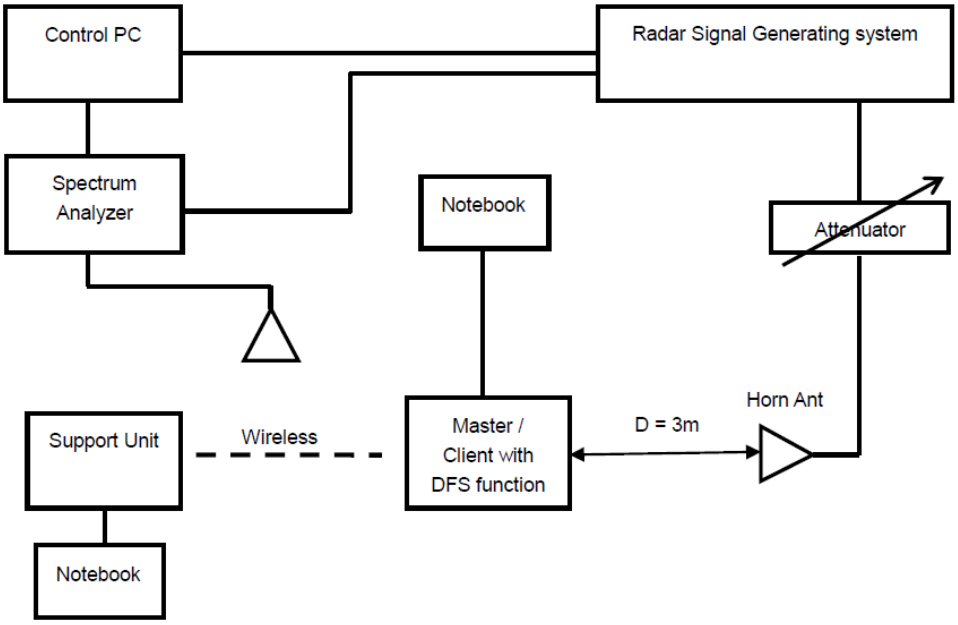
5. CALIBRATION SETUP AND DFS TEST SETUP CONFIGURATION

5.1 TEST SETUP CONFIGURATION

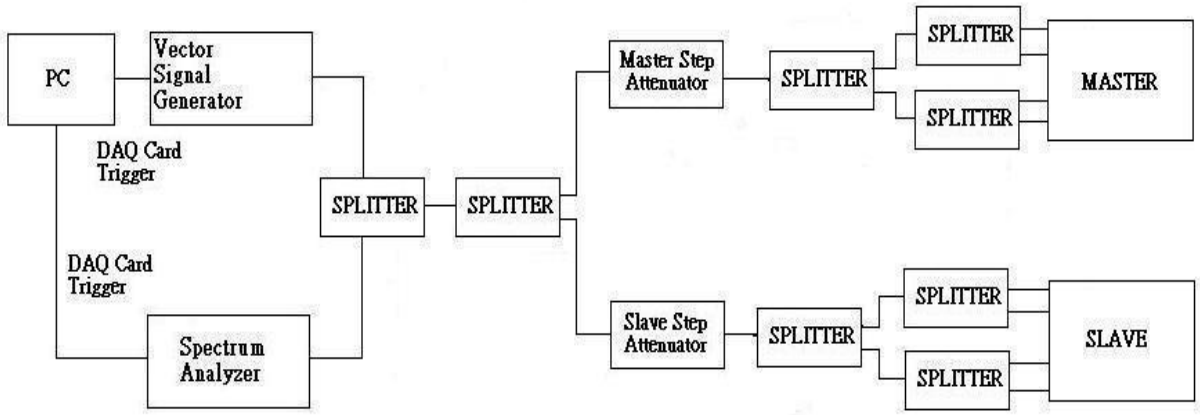
Radiated test setup up

The EUT is a U-NII Device operating in Master mode. The radar test signals are injected into the Master Device.

Radiated Setup Configuration of Master mode



Conducted test setup up



Channel Loading

System testing will be performed with channel-loading using means appropriate to the data types that are used by the unlicensed device. The following requirements apply:

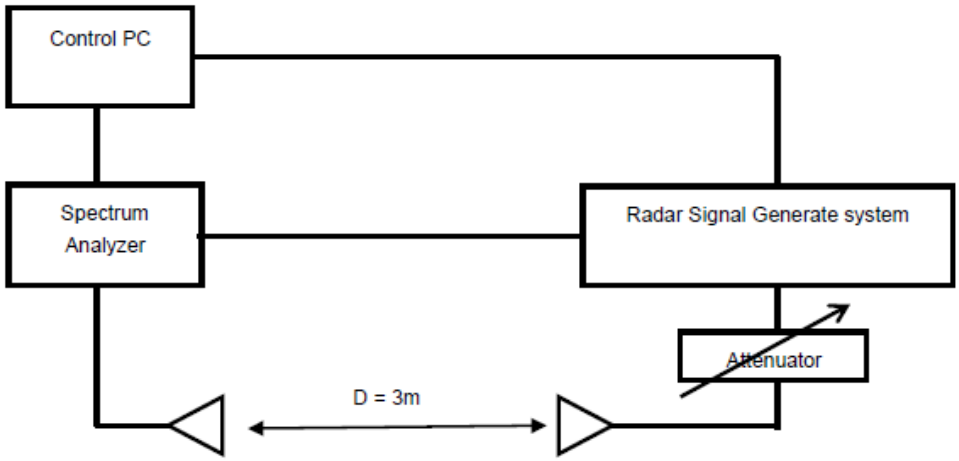
☐	(a) The data file must be of a type that is typical for the device (i.e., MPEG-2, MPEG-4, WAV, MP3, MP4, AVI, etc.) and must generally be transmitting in a streaming mode.
☐	(b) Software to ping the client is permitted to simulate data transfer but must have random ping intervals.
☑	(c) Timing plots are required with calculations demonstrating a minimum channel loading of approximately 17% or greater. For example, channel loading can be estimated by setting the spectrum analyzer for zero span and approximate the Time On/ (Time On + Off Time). This can be done with any appropriate channel BW and modulation type.
☐	(d) Unicast or Multicast protocols are preferable but other protocols may be used. The appropriate protocol used must be described in the test procedures.

5.2 CALIBATION OF RADAR WAVEFORM

The radar signal was the same as transmitted channels, and injected into the antenna of AP (master) or Client Device with Radar Detection, measured the channel closing transmission time and channel move time.

Radiated setup configuration of Calibration of DFS Detection Threshold Level

The calibrated conducted detection threshold level is set to -64dBm. The tested level is lower than required level hence it provides margin to the limit.

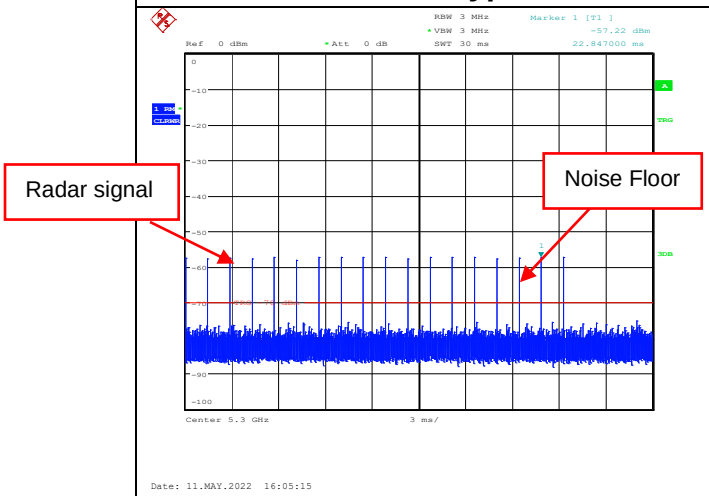
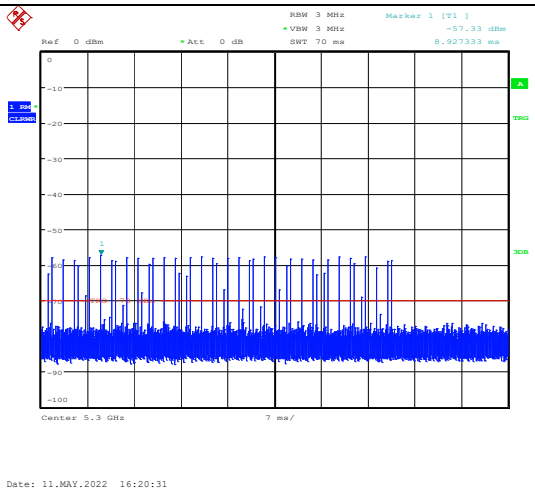
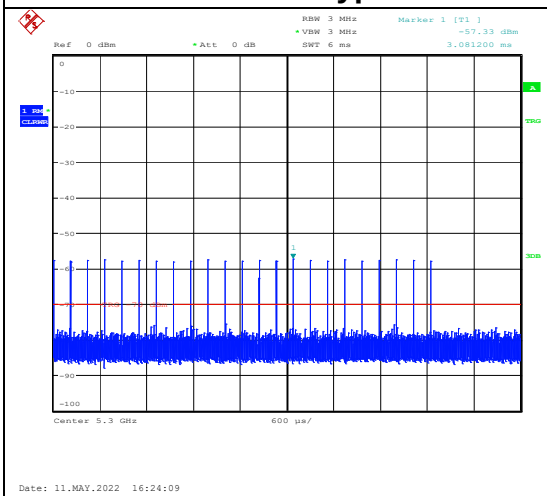
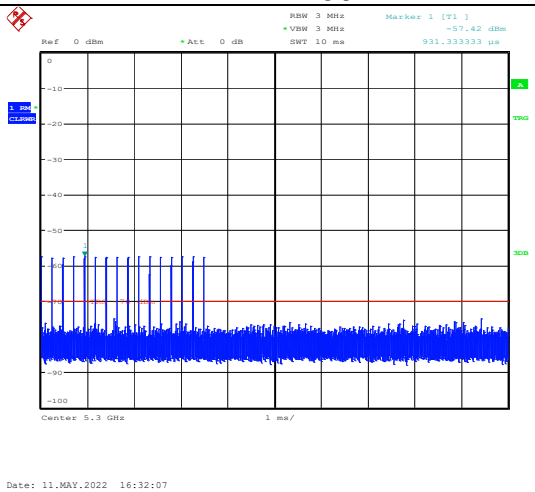


6. DFS TEST RESULT

Temperature:	17.6~25.9℃	**Test date:**	June 2, 2021~ May 11, 2022
Humidity:	41~71% RH	**Tested by:**	Jerry Chang

6.1 RADAR WAVEFORM CALIBRATION RESULT

< Channel Bandwidth 20MHz / 5300MHz >

Radar Type 0	Radar Type 1
	
Radar Type 2	**Radar Type 3**
	

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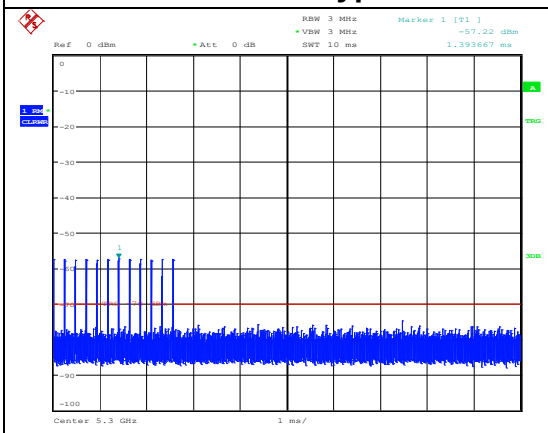	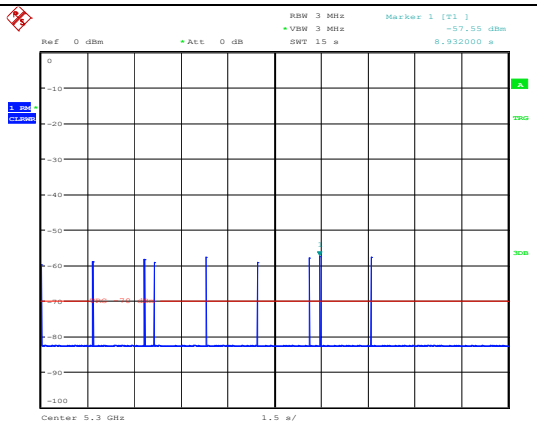
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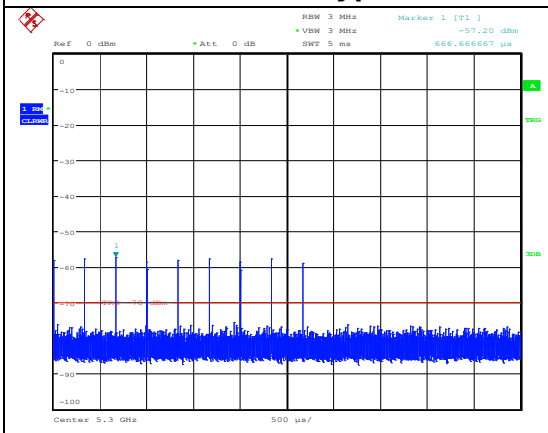	
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< Channel Bandwidth 40MHz / 5310MHz >

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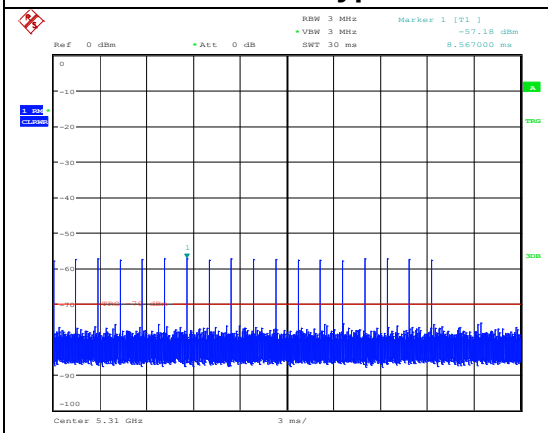	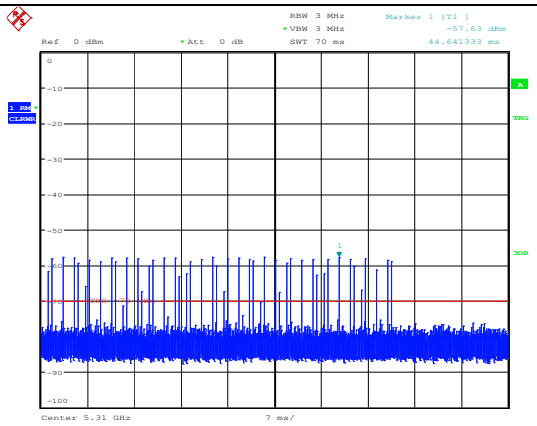
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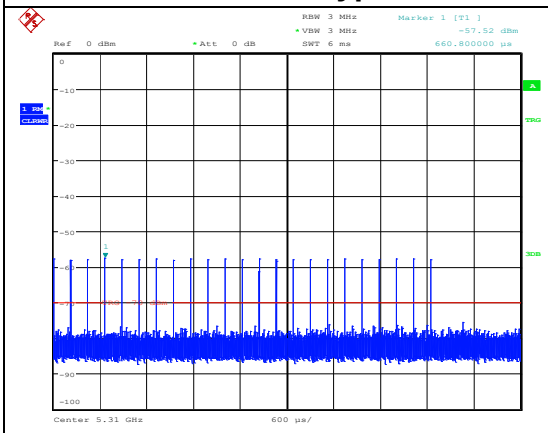	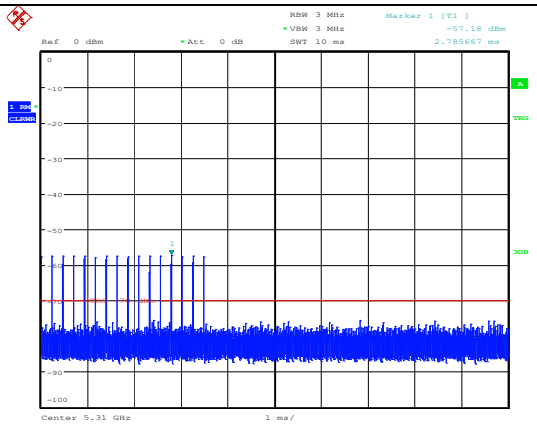
Date: 11.MAY.2022 16:25:12	Date: 11.MAY.2022 16:30:06

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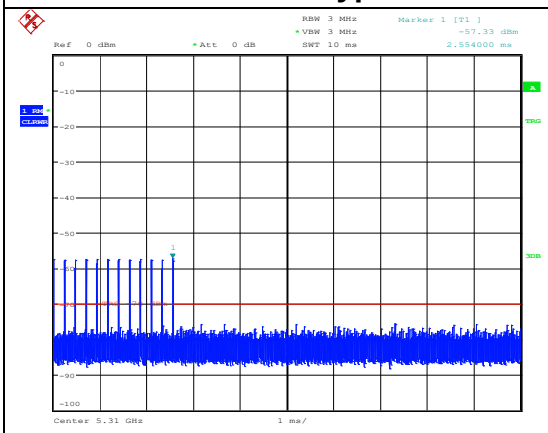
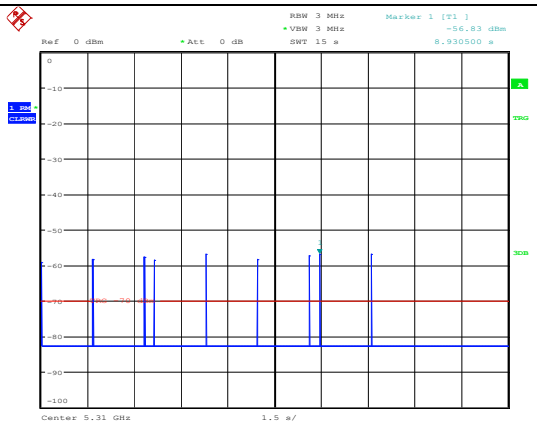
 Date: 11.MAY.2022 16:36:58	 Date: 11.MAY.2022 18:00:19
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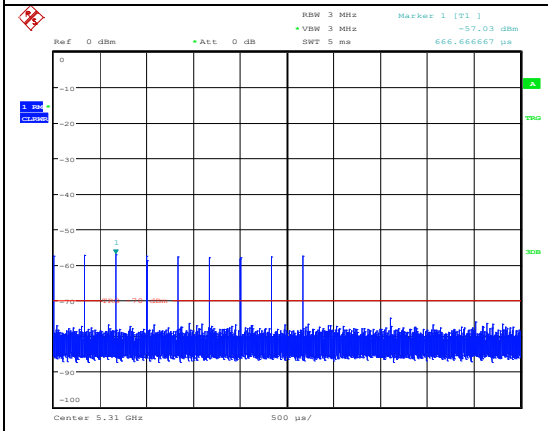
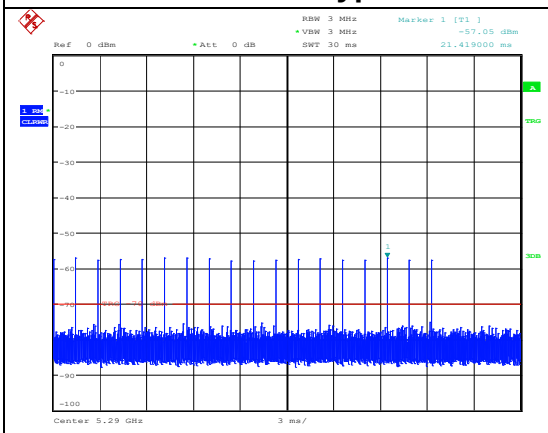
 Date: 11.MAY.2022 16:52:08	

< Channel Bandwidth 80MHz / 5290MHz >

Radar Type 0



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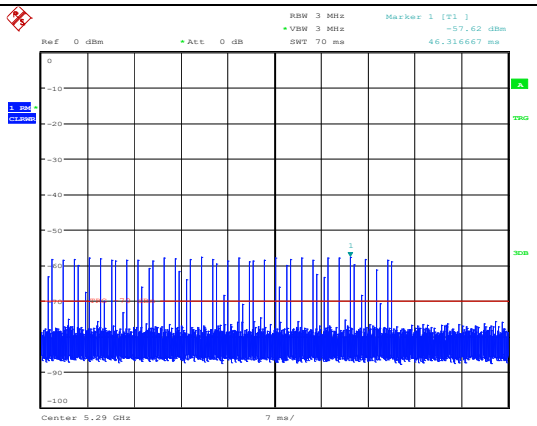
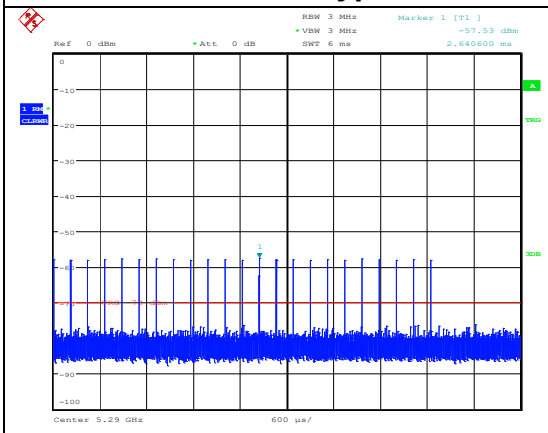
Radar Type 1



Date: 11.MAY.2022 16:21:14

Radar Type 2



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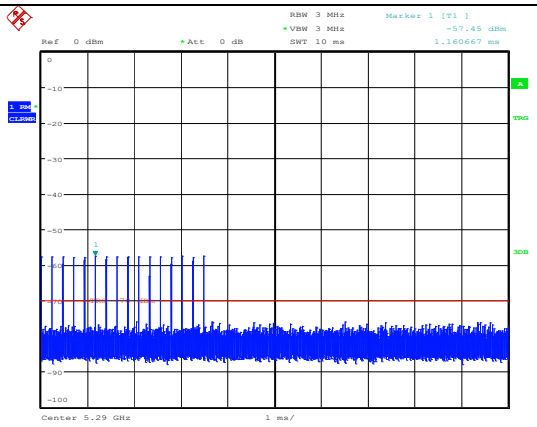
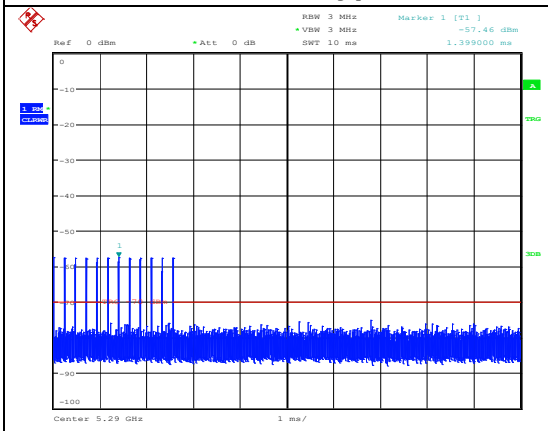
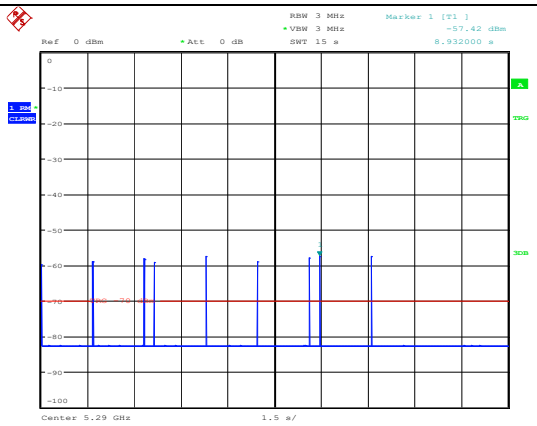
Radar Type 3



Date: 11.MAY.2022 16:32:51

Radar Type 4	Radar Type 5
	
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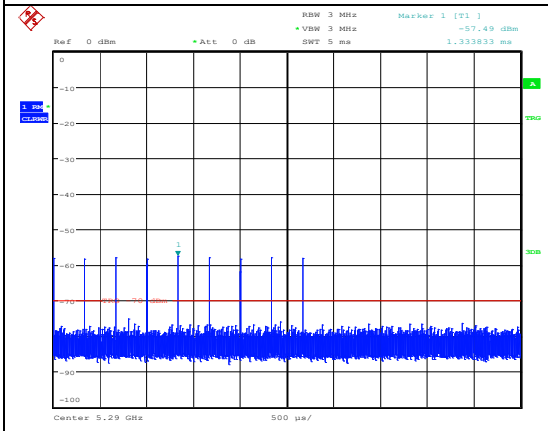
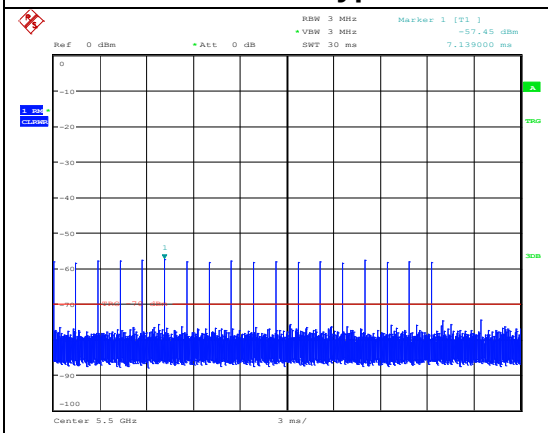
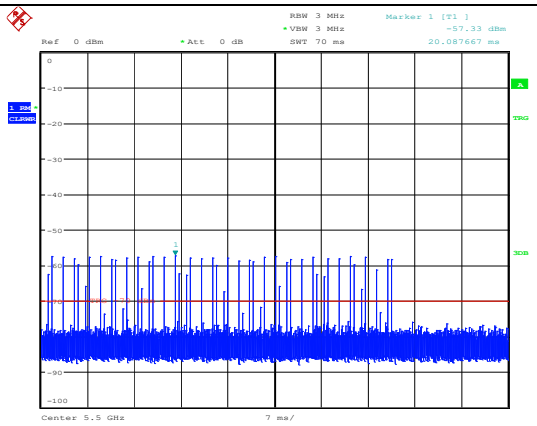
	
Date: 11.MAY.2022 17:05:29	

< Channel Bandwidth 20MHz / 5500MHz >

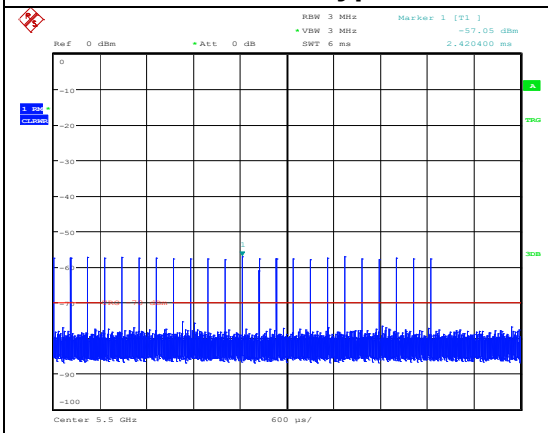
Radar Type 0



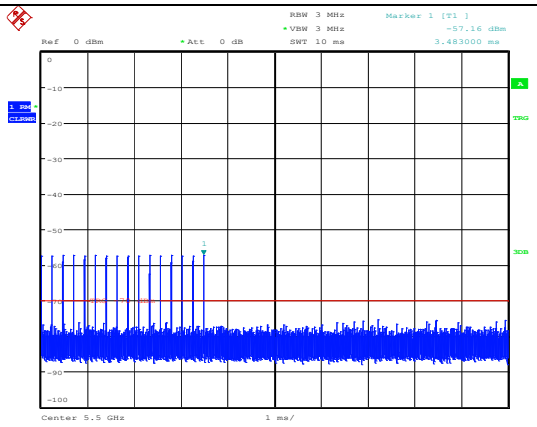
Radar Type 1

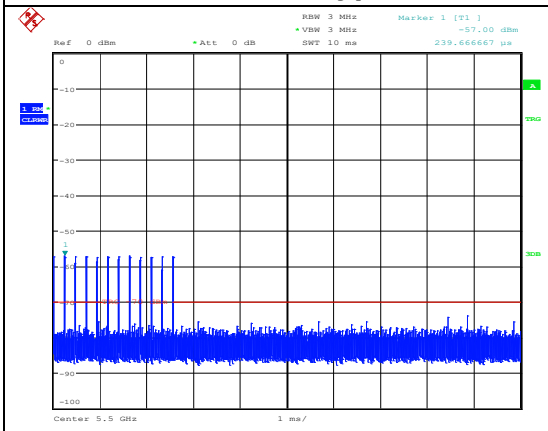
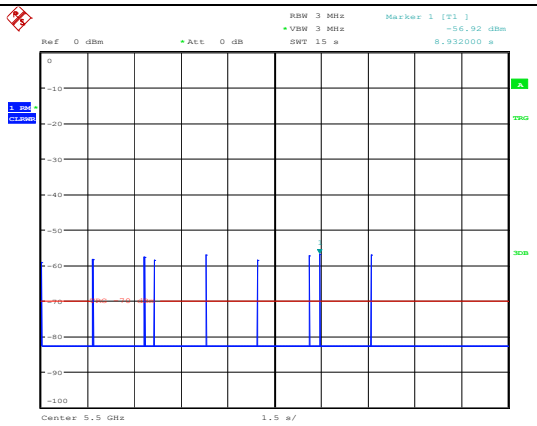
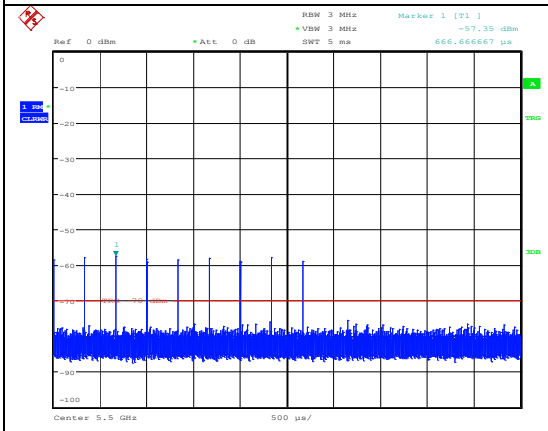


Radar Type 2



Radar Type 3



Radar Type 4	Radar Type 5
 Date: 11.MAY.2022 16:39:52	 Date: 11.MAY.2022 17:50:04
Radar Type 6	
 Date: 11.MAY.2022 16:47:20	

< Channel Bandwidth 40MHz / 5510MHz >

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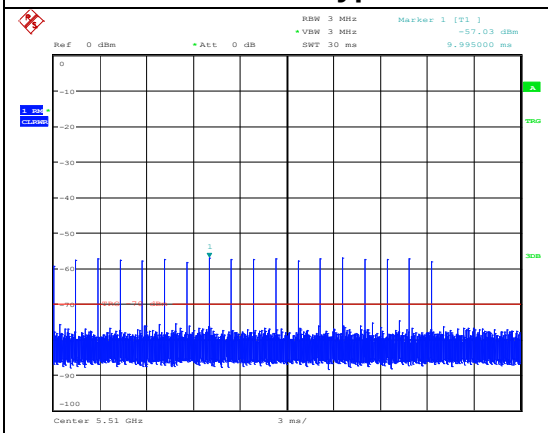
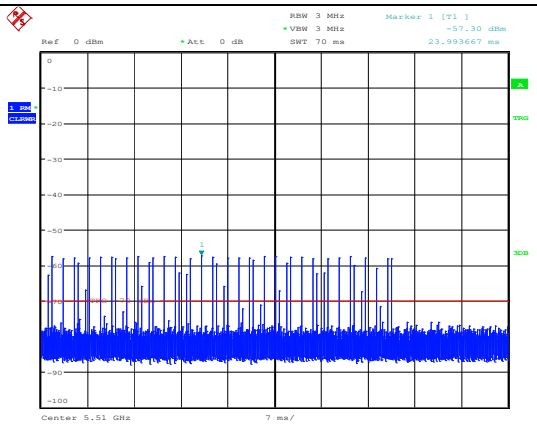


Date: 11.MAY.2022 16:12:01

Radar Type 1



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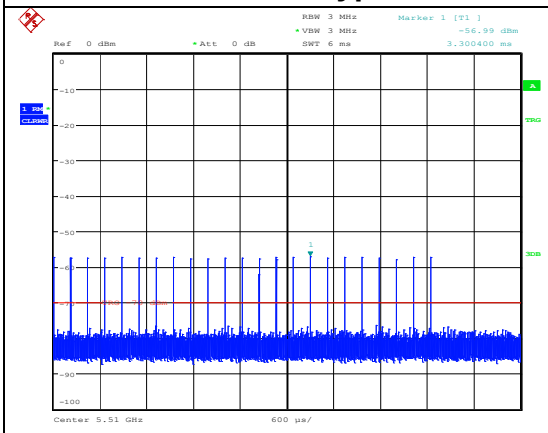
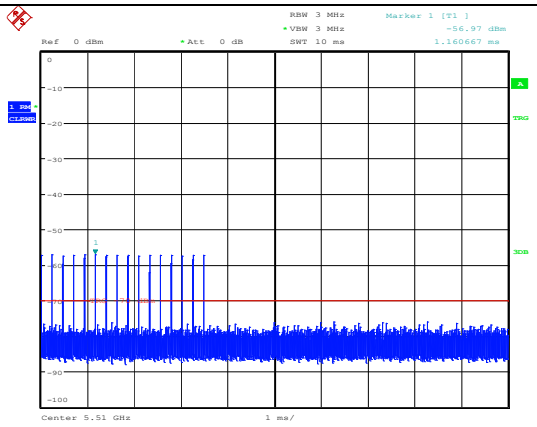
Radar Type 2

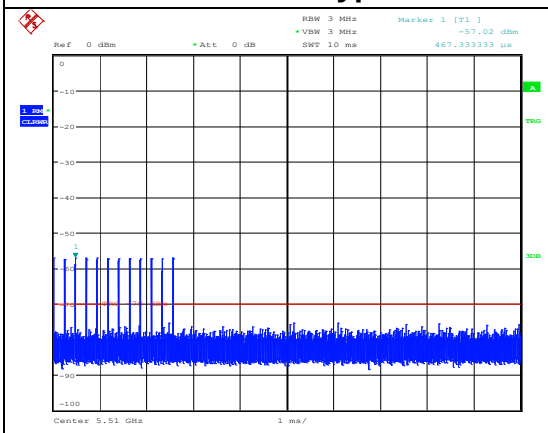
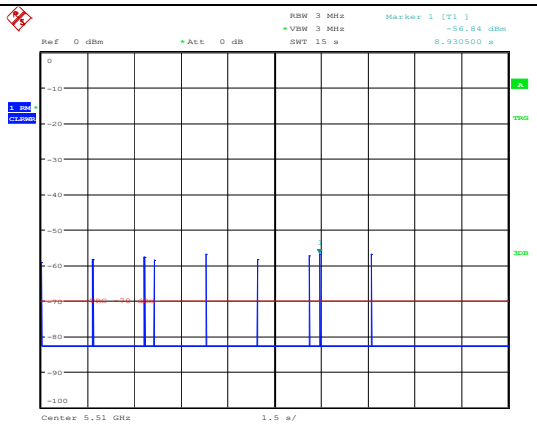
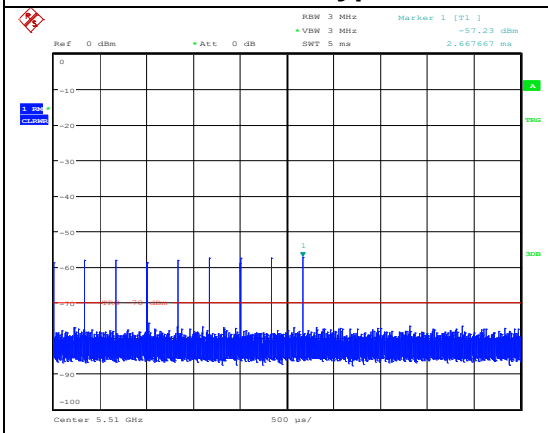


Date: 11.MAY.2022 16:26:44

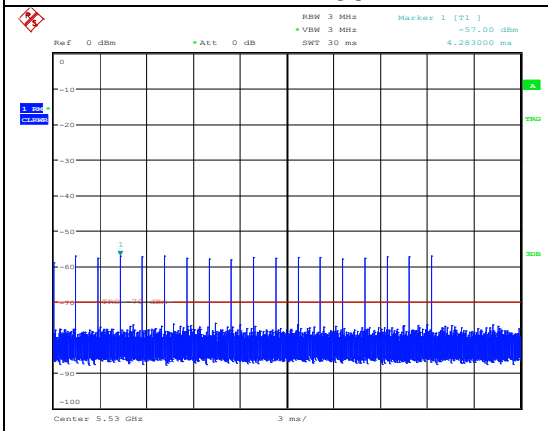
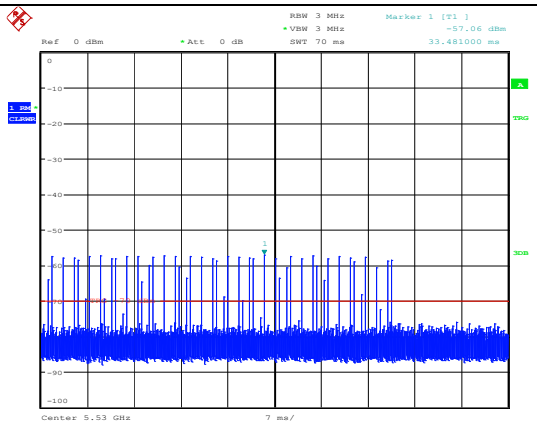
Radar Type 3



Date: 11.MAY.2022 16:30:53

Radar Type 4	Radar Type 5
	
Radar Type 6	
	

< Channel Bandwidth 80MHz / 5530MHz >

Radar Type 0	Radar Type 1
	
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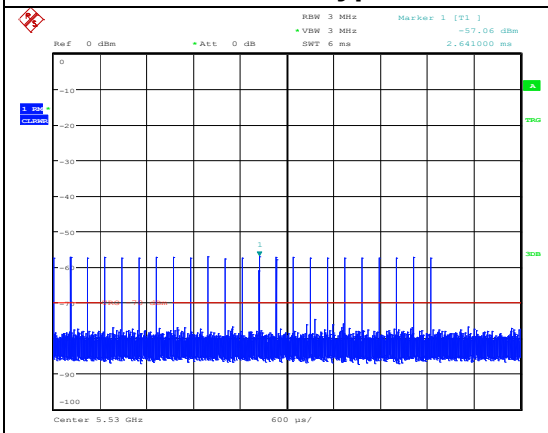
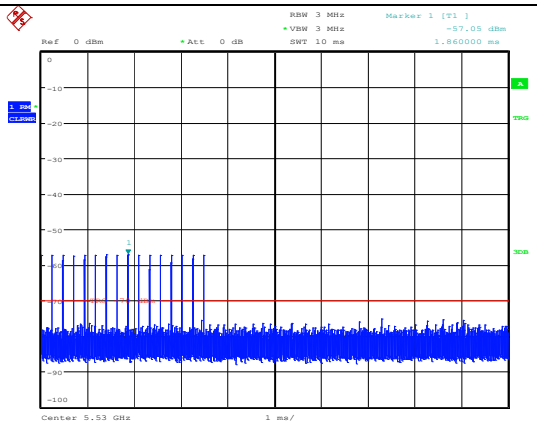
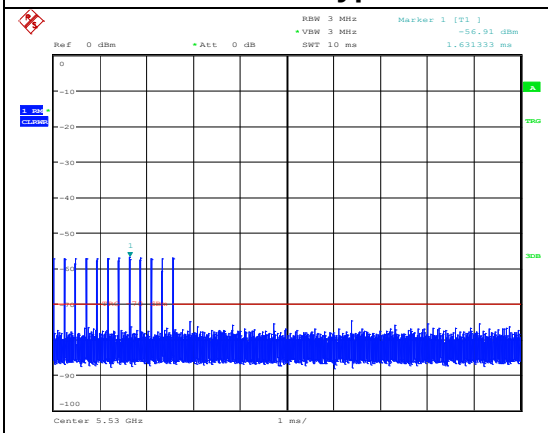
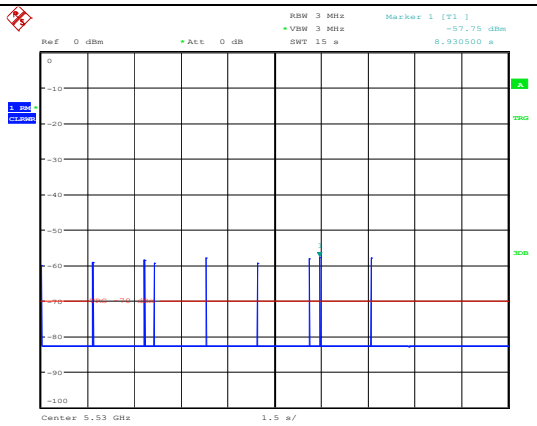
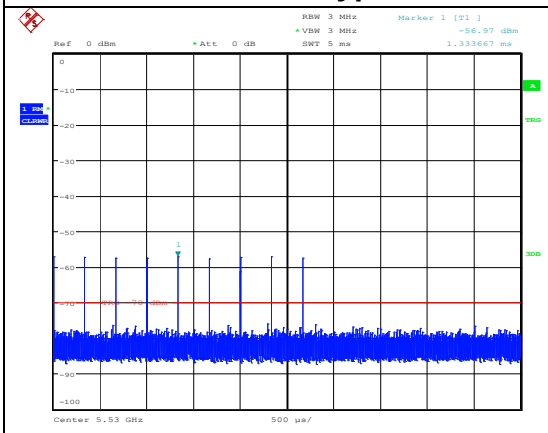
Radar Type 2	**Radar Type 3**
	
Date: 11.MAY.2022 16:27:19	Date: 11.MAY.2022 16:29:18

Radar Type 4	Radar Type 5
 Date: 11.MAY.2022 16:35:37	 Date: 11.MAY.2022 18:07:45
Radar Type 6	
 Date: 11.MAY.2022 17:03:01	

6.2 U-NII DETECTION BANDWIDTH (7.8.1)

6.2.1 Limit of U-NII Detection Bandwidth

The U-NII Detection Bandwidth shall contain minimum 100% of the 99% power bandwidth. During the U-NII Detection Bandwidth detection test, radar type 0 is used and for each frequency step the minimum percentage of detection is 90%. Measurements are performed with no data traffic.

6.2.2 Test Procedure

1. Adjust the equipment to produce a single burst of the Short Pulse Radar Type 0 at the center frequency of the EUT Operating Channel at the specified DFS Detection Threshold level.

2. Set the EUT up as a standalone device (no associated Client or Master, as appropriate) and no traffic. Frame based systems will be set to a talk/listen ratio reflecting the worst case (maximum) that is user configurable during this test.

3. Generate a single radar burst, and note the response of the EUT. Repeat for a minimum of 10 trials. The EUT must detect the Radar Waveform using the specified U-NII Detection Bandwidth criterion.

4. Starting at the center frequency of the EUT operating Channel, increase the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in report Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz below where the detection rate begins to fall. Record the highest frequency (denote as F_H) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies above FH is not required to demonstrate compliance.

5. Starting at the center frequency of the EUT operating Channel, decrease the radar frequency in 5 MHz steps, repeating the above test sequence, until the detection rate falls below the U-NII Detection Bandwidth criterion specified in report Table 4. Repeat this measurement in 1MHz steps at frequencies 5 MHz above where the detection rate begins to fall. Record the lowest frequency (denote as F_L) at which detection is greater than or equal to the U-NII Detection Bandwidth criterion. Recording the detection rate at frequencies below F_L is not required to demonstrate compliance.

6. The U-NII Detection Bandwidth is calculated as follows:
U-NII Detection Bandwidth = $F_H – F_L$

6.2.3Result of U-NII Detection Bandwidth

Channel Bandwidth 20MHz / 5300 MHz

CH60_5300MHz												Radar type 0
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F_H/F_L
	1	2	3	4	5	6	7	8	9	10		
5290	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5295	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
Detection Bandwidth = F_H - F_L = 5310 - 5290 = 20MHz												
EUT 99% Bandwidth = 16.577MHz												

Channel Bandwidth 20MHz / 5500 MHz

CH100_5500MHz												Radar type 0
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F_H/F_L
	1	2	3	4	5	6	7	8	9	10		
5490	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5495	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5505	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5510	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
Detection Bandwidth = F_H - F_L = 5510 - 5490 = 20MHz												
EUT 99% Bandwidth = 16.589MHz												

Channel Bandwidth 40MHz / 5310 MHz

CH102_5310MHz												Radar type 0
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F_H/F_L
	1	2	3	4	5	6	7	8	9	10		
5290	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5295	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5315	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5320	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5325	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5330	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
Detection Bandwidth = F_H - F_L = 5330 - 5290 = 40MHz												
EUT 99% Bandwidth = 36.451 MHz												

Channel Bandwidth 40MHz / 5510 MHz

CH102_5510MHz												Radar type 0
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F_H/F_L
	1	2	3	4	5	6	7	8	9	10		
5490	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5495	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5505	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5510	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5515	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5520	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5525	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5530	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
Detection Bandwidth = F_H - F_L = 5530 - 5490 = 40MHz												
EUT 99% Bandwidth = 36.386 MHz												

Channel Bandwidth 80MHz / 5290 MHz

CH106_5290MHz												Radar type 0
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F_H/F_L
	1	2	3	4	5	6	7	8	9	10		
5250	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5255	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5260	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5265	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5270	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5275	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5280	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5285	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5290	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5295	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5305	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5310	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5315	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5320	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5325	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5330	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
Detection Bandwidth = F_H - F_L = 5330 - 5250 = 80MHz												
EUT 99% Bandwidth = 75.725MHz												

Channel Bandwidth 80MHz / 5530 MHz

CH106_5530MHz												Radar type 0
Frequency (MHz)	Trial Number (Detection = Y, No Detection = N)										Detection Rate (%)	F_H/F_L
	1	2	3	4	5	6	7	8	9	10		
5490	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_L
5495	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5505	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5510	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5515	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5520	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5525	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5530	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5535	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5540	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5545	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5550	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5555	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5560	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5565	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	
5570	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	F_H
Detection Bandwidth = F_H - F_L = 5570 - 5490 = 80MHz												
EUT 99% Bandwidth = 75.959 MHz												

6.3 CHANNEL AVAILABILITY CHECK (7.8.2)

6.3.1 Limit of Channel Availability Check

The Initial Channel Availability Check Time tests that the EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the U-NII device checks for Radar Waveforms for **one minute** on the test Channel.

6.3.2 Test Procedure

6.3.2.1 Initial Channel Availability Check Time

This test does not use any radar waveforms and only needs to be performed one time.

1. The U-NII devices will be powered on and be instructed to operate on the appropriate U-NII Channel that must incorporate DFS functions. At the same time the EUT is powered on, the spectrum analyzer will be set to zero span modes with a 3 MHz RBW and 3 MHz VBW on the Channel occupied by the radar (Ch_r) with a 2.5 minute sweep time. The spectrum analyzer's sweep will be started at the same time power is applied to the U-NII device.
2. The EUT should not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle

6.3.2.2 Radar Burst at the Beginning of the Channel Availability Check Time

The steps below define the procedure to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1 dB occurs at the beginning of the Channel Availability Check Time. This is illustrated in Figure 15.

1. The Radar Waveform generator and EUT are connected using the applicable test setup and the power of the EUT is switched off.
2. The EUT is powered on at T_0. T_1 denotes the instant when the EUT has completed its power-up sequence (Tpower_up). The Channel Availability Check Time commences on Ch_r at instant T_1 and will end no sooner than T_1 + Tch_avail_check.
3. A single Burst of one of the Short Pulse Radar Types 0-4 will commence within a 6 second window starting at T_1. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
4. Visual indication or measured results on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of Chr for EUT emissions will continue for 2.5 minutes after the radar Burst has been generated.
5. Verify that during the 2.5 minute measurement window no EUT transmissions occurred on Ch_r. The Channel Availability Check results will be recorded.

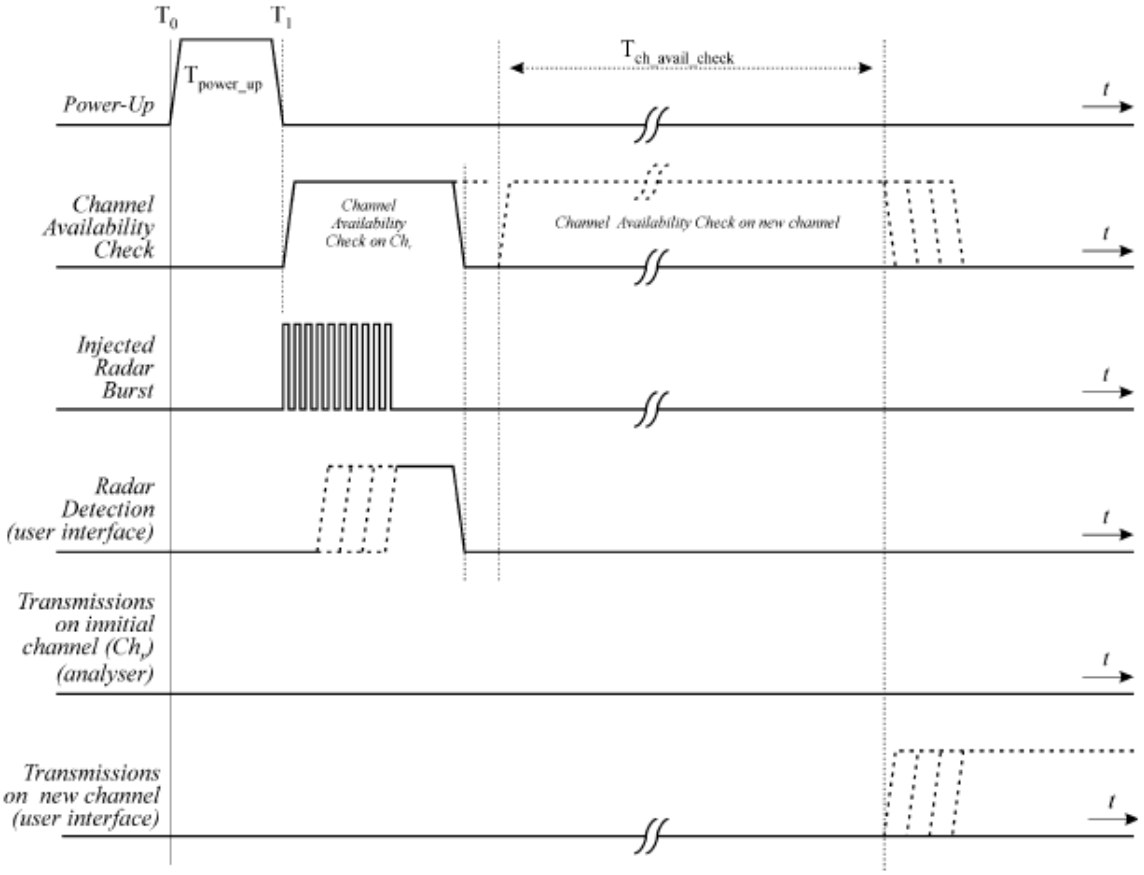


Figure 15: Example of timing for radar testing at the beginning of the Channel Availability Check Time

6.3.2.3 Radar Burst at the End of the Channel Availability Check Time

The steps below define the procedure to verify successful radar detection on the test Channel during a period equal to the Channel Availability Check Time and avoidance of operation on that Channel when a radar Burst with a level equal to the DFS Detection Threshold + 1dB occurs at the end of the Channel Availability Check Time. This is illustrated in Figure 16.

1. The Radar Waveform generator and EUT are connected using the applicable test setup and the power of the EUT is switched off.
2. The EUT is powered on at T0. T1 denotes the instant when the EUT has completed its power-up sequence (Tpower_up). The Channel Availability Check Time commences on Chr at instant T1 and will end no sooner than T1 + Tch_avail_check.
3. A single Burst of one of the Short Pulse Radar Types 1-4 will commence within a 6 second window starting at T1 + 54 seconds. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
4. Visual indication or measured results on the EUT of successful detection of the radar Burst will be recorded and reported. Observation of Chr for EUT emissions will continue for 2.5 minutes after the radar Burst has been generated.
5. Verify that during the 2.5 minute measurement window no EUT transmissions occurred on Chr. The Channel Availability Check results will be recorded.

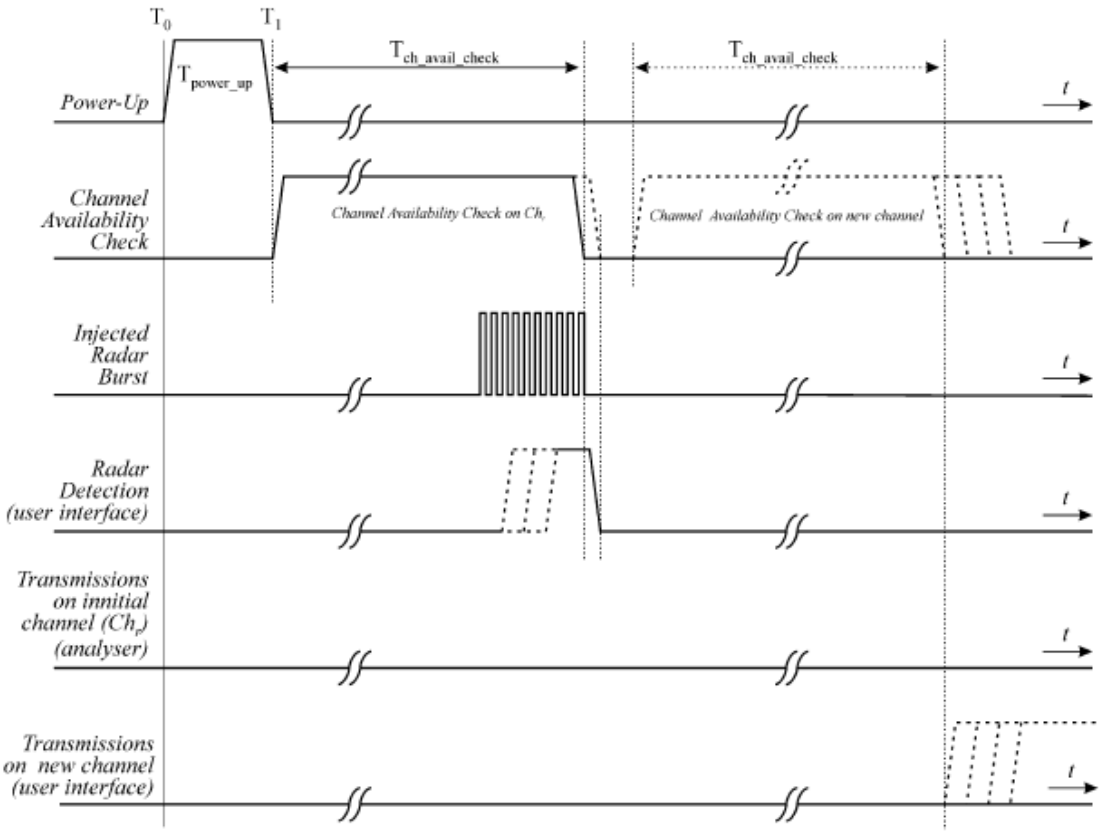
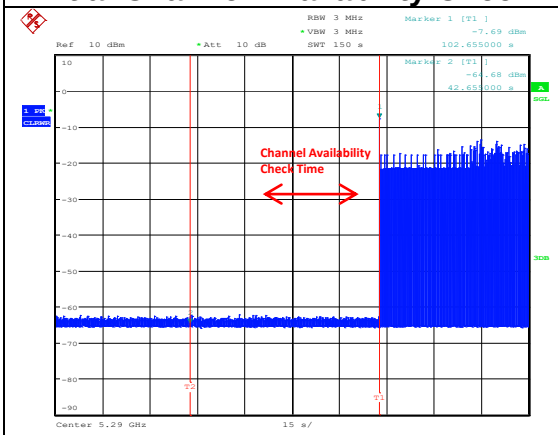
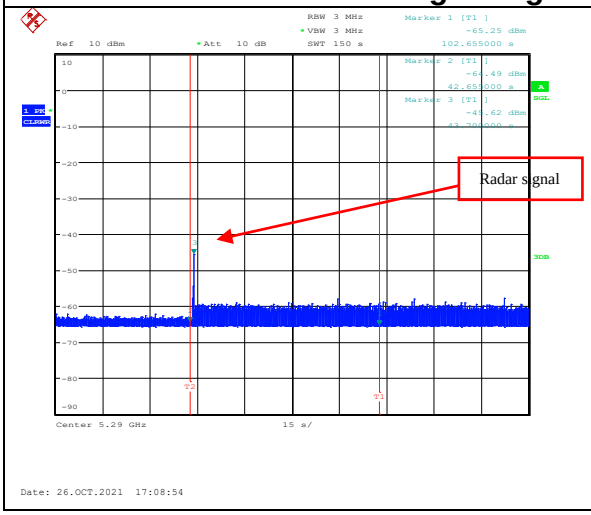
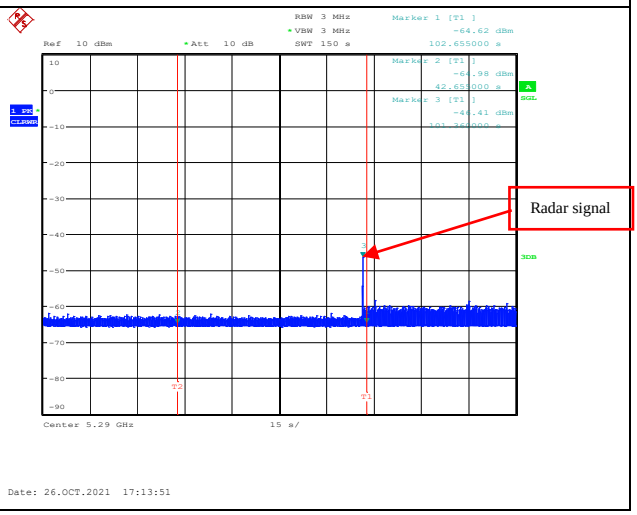


Figure 16: Example of timing for radar testing towards the end of the Channel Availability Check Time

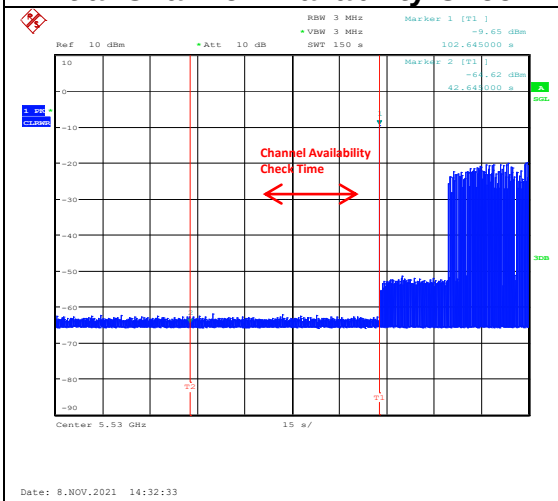
6.3.3 Result of Channel Availability Check

Channel Bandwidth 80MHz / 5290MHz

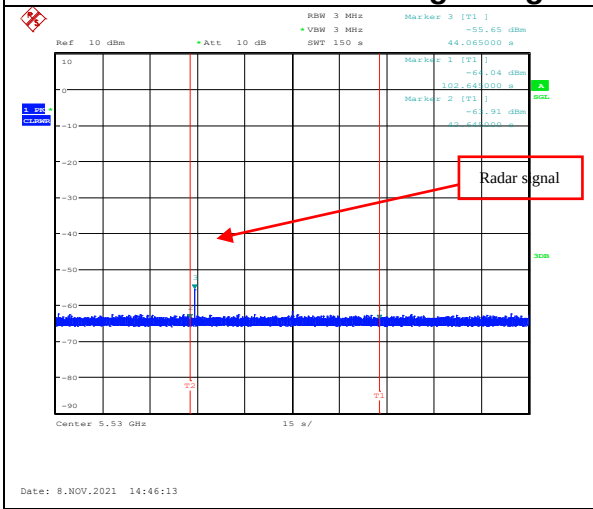
EUT Power up and Initial Channel Availability Check Time	
	
Radar Type 0 Radar Burst at the Beginning	**Radar Type 0 Radar Burst at the End**
	

Channel Bandwidth 80MHz / 5530MHz

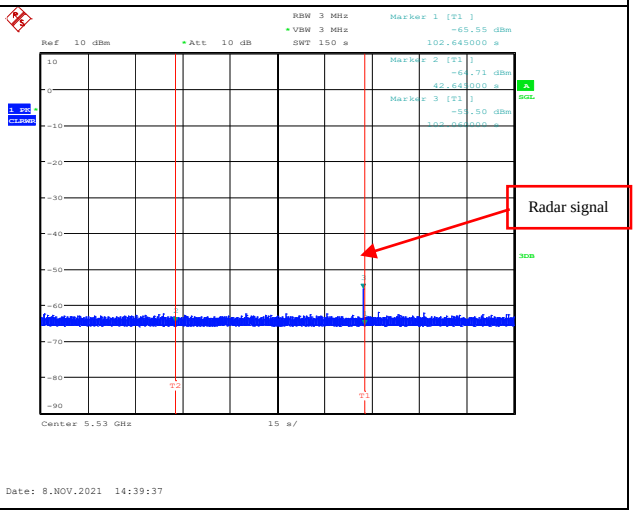
EUT Power up and Initial Channel Availability Check Time



Radar Type 0 Radar Burst at the Beginning



Radar Type 0 Radar Burst at the End



6.4 IN-SERVICE MONITORING: CHANNEL MOVE TIME, CHANNEL CLOSING TRANSMISSION TIME AND NON-OCCUPANCY PERIOD (7.8.3)

6.4.1 Limit of In-Service Monitoring

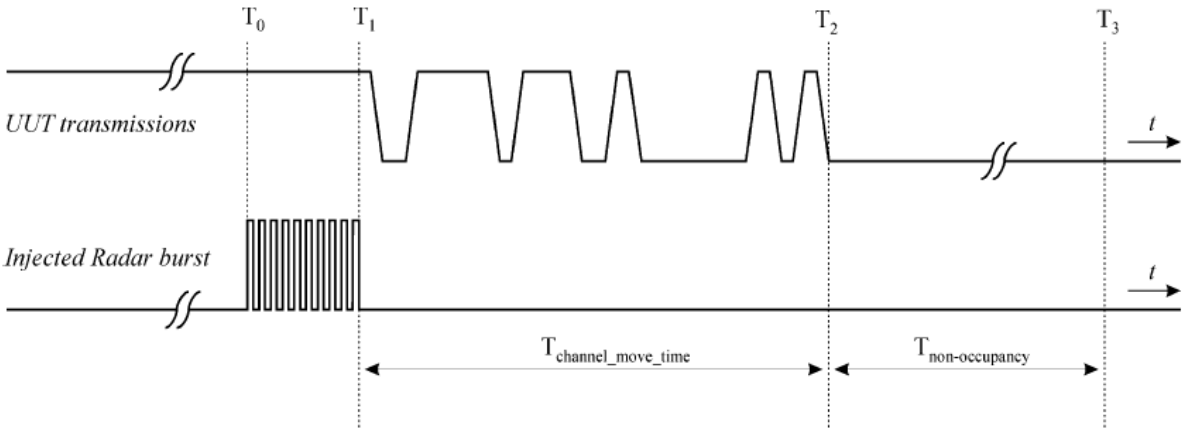
The EUT has In-Service Monitoring function to continuously monitor the radar signals, If radar is detected, it must leave the channel (Shutdown). The Channel Move Time to cease all transmissions on the current Channel upon detection of a Radar Waveform above the DFS Detection Threshold within **10 sec**.

The total duration of Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating Channel changes (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Non-Occupancy Period time is **30 minute** during which a Channel will not be utilized after a Radar Waveform is detected on that Channel

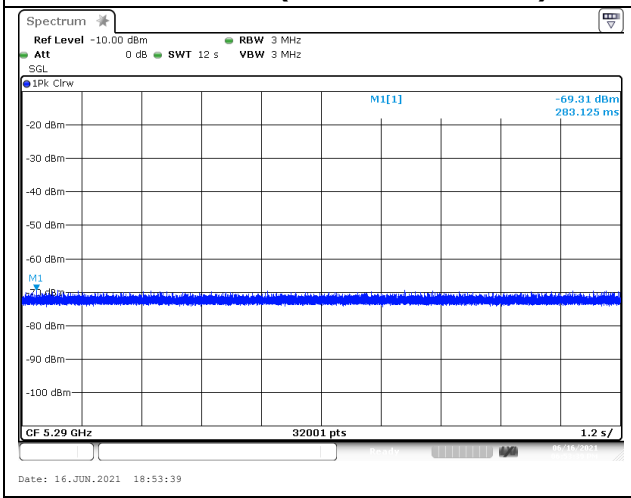
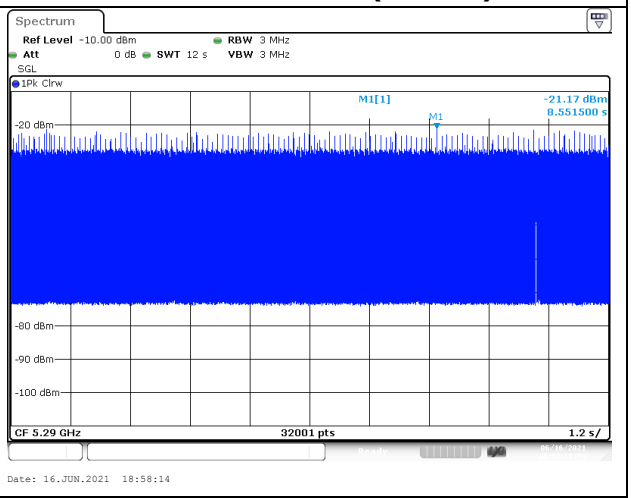
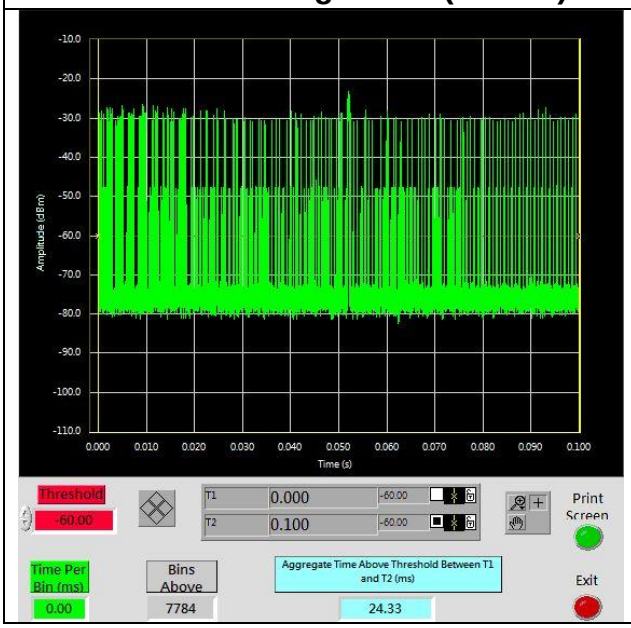
6.4.2 Test Procedures

1. One frequency will be chosen from the Operating Channels of the EUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.
2. In case the EUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the EUT (Master). For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. The TCP protocol unicast data stream was generated by the LanTest software with at least 17% activity ratio over any 100ms period.
4. Timing plots are reported with calculations demonstrating a minimum channel loading of approximately 17% or greater. For example, channel loading can be estimated by setting the spectrum analyzer for zero span and approximate the Time On/ (Time On + Off Time).
5. At time T0 the Radar Waveform generator sends a Burst of pulses for one of the Radar Type 0 in Table 5 at levels defined in Table 3, on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
6. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Measure and record the Channel Move Time and Channel Closing Transmission Time if radar detection occurs.
7. When operating as a Master Device, monitor the UUT for more than 30 minutes following instant T_2 to verify that the EUT does not resume any transmissions on this Channel. Perform this test once and record the measurement result.



6.4.3 Result of Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

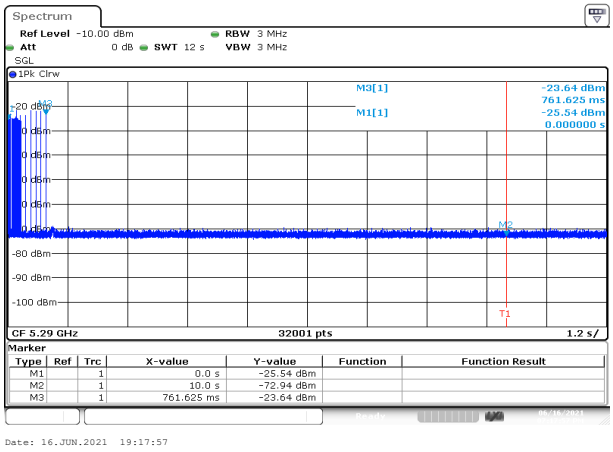
Data Traffic Channel Loading and Noise Floor Plots

Noise Floor (No transmission)	EUT data traffic (Master)
	
Channel Loading > 17% (Master)	
	

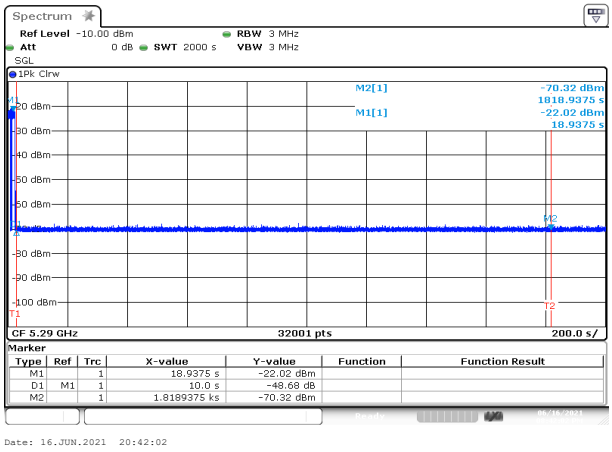
Channel Bandwidth 80MHz / 5290MHz

	Test Result	Limit
Channel Move Time	0.761625s	<10s
Channel closing transmission time	40.87 ms	60 ms

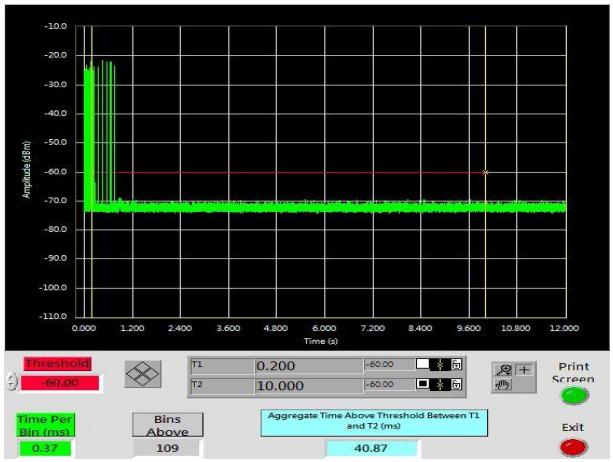
Channel Move Time



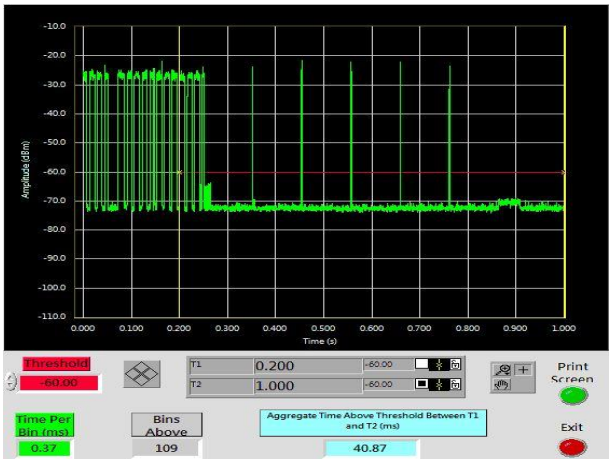
Non-Occupancy Period



Channel Closing Transmission Time



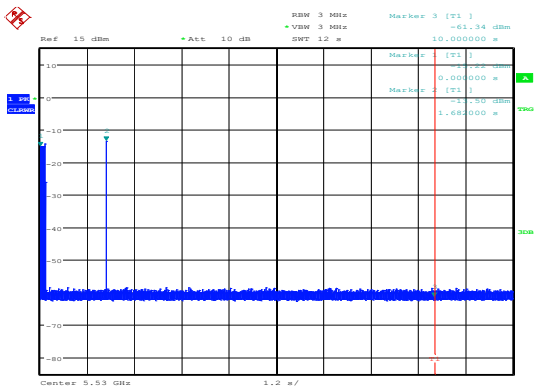
Channel Closing Transmission Time



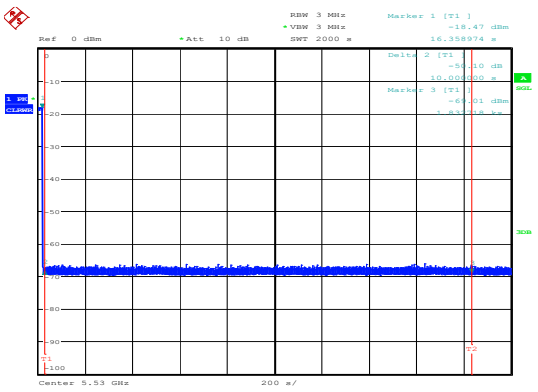
Channel Bandwidth 80MHz / 5530MHz

	Test Result	Limit
Channel Move Time	1.682s	<10s
Channel closing transmission time	0.80 ms	60 ms

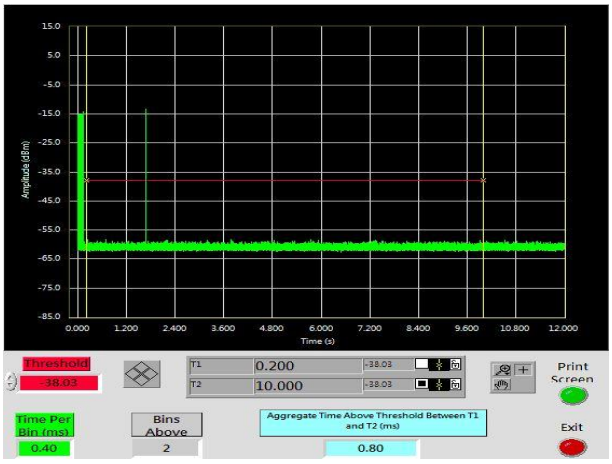
Channel Move Time



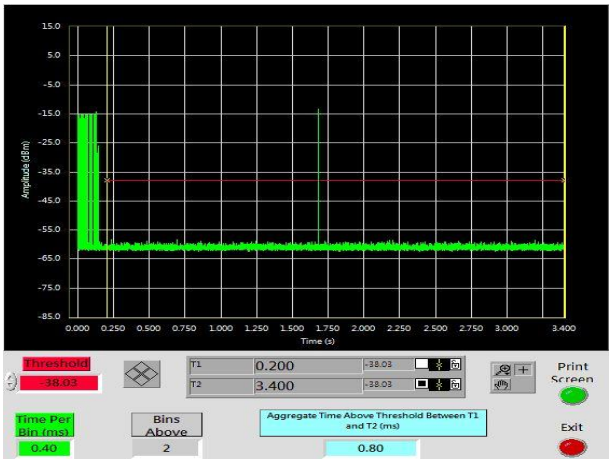
Non-Occupancy Period



Channel Closing Transmission Time



Channel Closing Transmission Time



6.5 STATISTICAL PERFORMANCE CHECK (7.8.4)

6.5.1 Limit of Statistical Performance Check

Short Pulse Radar Test

Once the performance requirements check is complete, statistical data will be gathered, to determine the ability of the device to detect the radar test waveforms (Short Pulse Radar Types 1-4) found in Table 5. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials. The percentage of successful detection is calculated by:

$$\frac{TotalWaveformDetections}{TotalWaveformTriaals} \times 100 = \text{Percentage of Successful Detection Radar Waveform N} = P_dN$$

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{P_d1 + P_d2 + P_d3 + P_d4}{4}$$

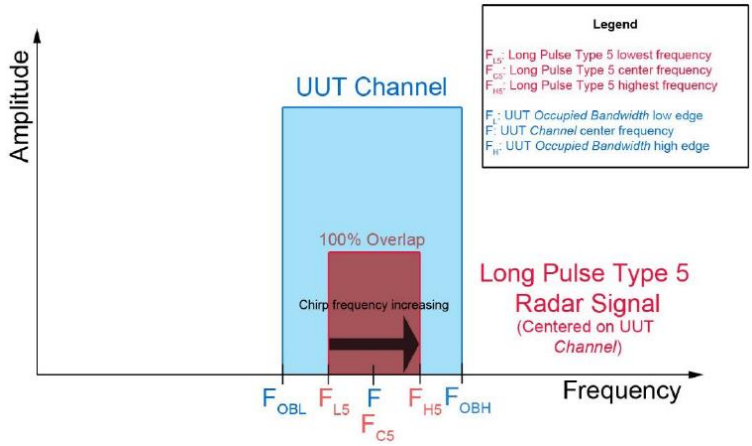
The minimum number of trails, minimum percentage of successful detection and the aggregate minimum percentage of successful detection are found in Table 5.

Long Pulse Radar Test

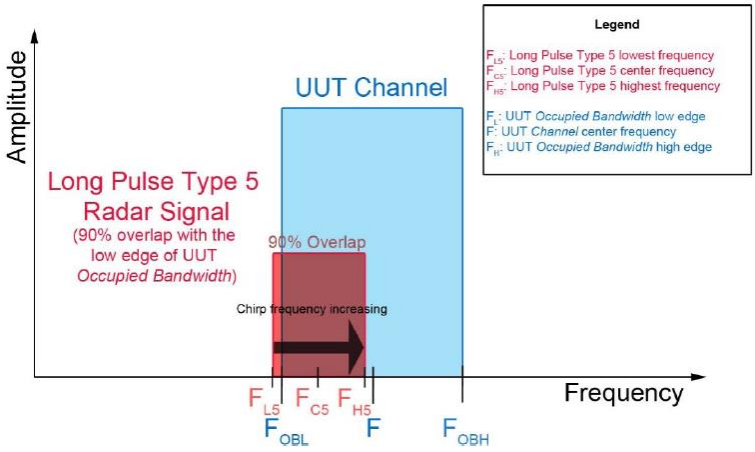
Statistical data will be gathered to determine the ability of the device to detect the Long Pulse Radar Type 5 found in Table 6. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trials.

Three subsets of trials will be performed with a minimum of ten trials per subset. The subset of trials differ in where the Long Pulse Type 5 Signal is tuned in frequency:

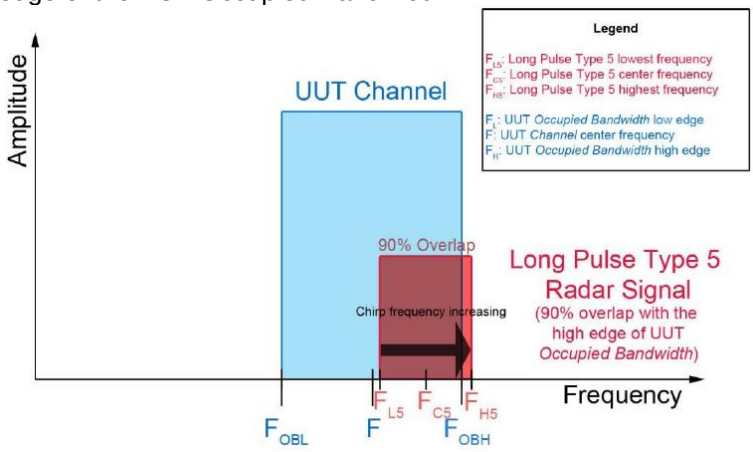
(a) The Channel center frequency.



(b) Tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the low edge of the EUT Occupied Bandwidth.



(c) Tuned frequencies such that 90% of the Long Pulse Type 5 frequency modulation is within the high edge of the EUT Occupied Bandwidth.



For subset case 1: the center frequency of the signal generator will remain fixed at the center of the UUT Channel.

For subset case 2: to retain 90% frequency overlap between the radar signal and the UUT Occupied Bandwidth, the center frequency of the signal generator will vary for each of the ten trials in subset case 2. The center frequency of the signal generator for each trial is calculated by:

F_L + (0.4* Chirp Width [in MHz])

For subset case 3: to retain 90% frequency overlap between the radar signal and the UUT Occupied Bandwidth, the center frequency of the signal generator will vary for each of the ten trials in subset case 3. The center frequency of the signal generator for each trial is calculated by:

F_H - (0.4* Chirp Width [in MHz])

The percentage of successful detection is calculated by dividing the sum of the detections for the three subsets by the sum of trials for the three subsets:

$$\frac{TotalWaveformDetections}{TotalWaveformTriaals} \times 100$$

Frequency Hopping Radar Test

Statistical data will be gathered to determine the ability of the device to detect the Frequency Hopping radar test signal (radar type 6) found in Table 7. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs. The probability of successful detection is calculated by:

$$\frac{TotalWaveformDetections}{TotalWaveformTriaals} \times 100$$

6.5.2 Test Procedures

1. One frequency will be chosen from the Operating Channels of the UUT within the 5250-5350 MHz or 5470-5725 MHz bands.
2. In case the UUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the UUT (Master). For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.
3. The TCP protocol unicast data stream was generated by the LanTest software with at least 17% activity ratio over any 100ms period.
4. At time T0 the Radar Waveform generator sends a Burst of pulses for each of the Radar Types 1-6 at DFS Detection Threshold levels on the Operating Channel. An additional 1 dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.
5. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Radar Types 1-4 and 6 to ensure detection occurs.
6. Observe the transmissions of the EUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs.

Channel Bandwidth 20MHz/ 5300MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	100		60	Pass
2	30	100		60	Pass
3	30	86.67		60	Pass
4	30	76.67		60	Pass
Aggregate (Radar Types 1-4)	120	90.835		80	Pass
Long Pulse Radar Type	**Minimum Number of Trials**	**Each Detection(%)**	**Total Detection(%)**	**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
5	Center:10	90	96.67	80	Pass
	Low Edge:10	100			
	High Edge:10	100			
Frequency Hopping Radar Type	**Minimum Number of Trials**	**Detection(%)**		**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
6	30	73.33		70	Pass

Channel Bandwidth 40MHz/ 5310MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	100		60	Pass
2	30	80		60	Pass
3	30	80		60	Pass
4	30	86.67		60	Pass
Aggregate (Radar Types 1-4)	120	86.6675		80	Pass
Long Pulse Radar Type	**Minimum Number of Trials**	**Each Detection(%)**	**Total Detection(%)**	**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
5	Center:10	100	100	80	Pass
	Low Edge:10	100			
	High Edge:10	100			
Frequency Hopping Radar Type	**Minimum Number of Trials**	**Detection(%)**		**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
6	30	76.67		70	Pass

Channel Bandwidth 80MHz/ 5290MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	83.33		60	Pass
2	30	93.33		60	Pass
3	30	83.33		60	Pass
4	30	90		60	Pass
Aggregate (Radar Types 1-4)	120	87.4975		80	Pass
Long Pulse Radar Type	**Minimum Number of Trials**	**Each Detection(%)**	**Total Detection(%)**	**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
5	Center:10	100	100	80	Pass
	Low Edge:10	100			
	High Edge:10	100			
Frequency Hopping Radar Type	**Minimum Number of Trials**	**Detection(%)**		**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
6	30	73.33		70	Pass

Channel Bandwidth 20MHz/ 5500MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	100		60	Pass
2	30	93.33		60	Pass
3	30	76.67		60	Pass
4	30	73.33		60	Pass
Aggregate (Radar Types 1-4)	120	85.8325		80	Pass
Long Pulse Radar Type	**Minimum Number of Trials**	**Each Detection(%)**	**Total Detection(%)**	**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
5	Center:10	100	100	80	Pass
	Low Edge:10	100			
	High Edge:10	100			
Frequency Hopping Radar Type	**Minimum Number of Trials**	**Detection(%)**		**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
6	30	73.33		70	Pass

Channel Bandwidth 40MHz/ 5510MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	100		60	Pass
2	30	83.33		60	Pass
3	30	76.67		60	Pass
4	30	76.67		60	Pass
Aggregate (Radar Types 1-4)	120	84.1675		80	Pass
Long Pulse Radar Type	**Minimum Number of Trials**	**Each Detection(%)**	**Total Detection(%)**	**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
5	Center:10	100	100	80	Pass
	Low Edge:10	100			
	High Edge:10	100			
Frequency Hopping Radar Type	**Minimum Number of Trials**	**Detection(%)**		**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
6	30	73.33		70	Pass

Channel Bandwidth 80MHz/ 5530MHz

Short Pulse Radar Type	Minimum Number of Trials	Detection(%)		Minmum Percentage of Successful Detection(%)	Pass/Fail
1	30	100		60	Pass
2	30	93.33		60	Pass
3	30	73.33		60	Pass
4	30	80		60	Pass
Aggregate (Radar Types 1-4)	120	86.665		80	Pass
Long Pulse Radar Type	**Minimum Number of Trials**	**Each Detection(%)**	**Total Detection(%)**	**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
5	Center:10	100	100	80	Pass
	Low Edge:10	100			
	High Edge:10	100			
Frequency Hopping Radar Type	**Minimum Number of Trials**	**Detection(%)**		**Minmum Percentage of Successful Detection(%)**	**Pass/Fail**
6	30	76.67		70	Pass

- End of Test Report -

7. APPENDIX I RADAR TEST WAVEFORMS

< Channel Bandwidth 20MHz / 5300MHz >

Short Pulse Radar Test Waveforms

Radar Type 1

Trial	VSG Freqency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	PRI (msec)	Test A/B A/B	Successful Detection (Yes/No)
1	5300	18	1165.5	858	A	Yes
2	5300	5	1672.2	598	A	Yes
3	5300	10	1432.7	698	A	Yes
4	5300	12	1355	738	A	Yes
5	5300	4	1730.1	578	A	Yes
6	5300	3	1792.1	558	A	Yes
7	5300	19	1139	878	A	Yes
8	5300	13	1319.3	758	A	Yes
9	5300	17	1193.3	838	A	Yes
10	5300	2	1858.7	538	A	Yes
11	5300	20	1113.6	898	A	Yes
12	5300	11	1392.8	718	A	Yes
13	5300	9	1474.9	678	A	Yes
14	5300	1	1930.5	518	A	Yes
15	5300	7	1567.4	638	A	Yes
16	5300	-	813	1230	B	Yes
17	5300	-	585.1	1709	B	Yes
18	5300	-	684.5	1461	B	Yes
19	5300	-	795.5	1257	B	Yes
20	5300	-	1029.9	971	B	Yes
21	5300	-	784.9	1274	B	Yes
22	5300	-	489.7	2042	B	Yes
23	5300	-	401.8	2489	B	Yes
24	5300	-	428.4	2334	B	Yes
25	5300	-	686.3	1457	B	Yes
26	5300	-	1538.5	650	B	Yes
27	5300	-	377.4	2650	B	Yes
28	5300	-	1201.9	832	B	Yes
29	5300	-	456	2193	B	Yes
30	5300	-	555.9	1799	B	Yes

Radar Type 2

Trial	VSG Freqency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(μs)	(μs)	(Yes/No)
1	5300	23	1.5	220	Yes
2	5300	25	2.5	155	Yes
3	5300	27	3.5	210	Yes
4	5300	25	2.3	156	Yes
5	5300	29	4.7	153	Yes
6	5300	25	2.4	165	Yes
7	5300	28	4.1	218	Yes
8	5300	29	4.8	212	Yes
9	5300	29	4.7	199	Yes
10	5300	24	1.6	205	Yes
11	5300	25	2.6	186	Yes
12	5300	24	2	208	Yes
13	5300	27	3.5	188	Yes
14	5300	28	4.4	179	Yes
15	5300	26	3.2	229	Yes
16	5300	27	3.6	183	Yes
17	5300	26	2.8	181	Yes
18	5300	29	4.7	180	Yes
19	5300	24	1.6	226	Yes
20	5300	26	3.1	184	Yes
21	5300	26	2.8	189	Yes
22	5300	24	1.6	167	Yes
23	5300	26	3.1	157	Yes
24	5300	25	2.7	227	Yes
25	5300	27	3.8	221	Yes
26	5300	25	2.4	202	Yes
27	5300	27	3.4	171	Yes
28	5300	23	1	182	Yes
29	5300	23	1.3	197	Yes
30	5300	24	1.7	194	Yes

Radar Type 3

Trial	VSG Freqency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5300	16	6.5	232	Yes
2	5300	17	7.5	239	Yes
3	5300	17	8.5	372	Yes
4	5300	16	7.3	382	Yes
5	5300	18	9.7	489	Yes
6	5300	17	7.4	451	No
7	5300	18	9.1	204	Yes
8	5300	18	9.8	314	Yes
9	5300	18	9.7	225	Yes
10	5300	16	6.6	228	Yes
11	5300	17	7.6	463	Yes
12	5300	16	7	365	Yes
13	5300	17	8.5	211	Yes
14	5300	18	9.4	325	Yes
15	5300	17	8.2	474	Yes
16	5300	17	8.6	400	Yes
17	5300	17	7.8	468	Yes
18	5300	18	9.7	202	Yes
19	5300	16	6.6	410	Yes
20	5300	17	8.1	439	Yes
21	5300	17	7.8	409	Yes
22	5300	16	6.6	261	Yes
23	5300	17	8.1	475	Yes
24	5300	17	7.7	333	Yes
25	5300	18	8.8	216	No
26	5300	17	7.4	260	No
27	5300	17	8.4	363	No
28	5300	16	6	452	Yes
29	5300	16	6.3	272	Yes
30	5300	16	6.7	268	Yes

Radar Type 4

Trial	VSG Freqency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5300	12	12.2	232	Yes
2	5300	13	14.5	239	Yes
3	5300	15	16.5	372	No
4	5300	13	13.9	382	Yes
5	5300	16	19.2	489	Yes
6	5300	13	14.1	451	Yes
7	5300	15	18	204	Yes
8	5300	16	19.4	314	Yes
9	5300	16	19.3	225	Yes
10	5300	12	12.4	228	Yes
11	5300	14	14.7	463	Yes
12	5300	13	13.3	365	Yes
13	5300	15	16.6	211	Yes
14	5300	16	18.5	325	No
15	5300	14	15.9	474	No
16	5300	15	16.9	400	Yes
17	5300	14	15.1	468	Yes
18	5300	16	19.2	202	Yes
19	5300	12	12.5	410	No
20	5300	14	15.6	439	Yes
21	5300	14	15	409	Yes
22	5300	12	12.3	261	Yes
23	5300	14	15.8	475	No
24	5300	14	14.8	333	No
25	5300	15	17.3	216	No
26	5300	13	14.2	260	Yes
27	5300	14	16.3	363	Yes
28	5300	12	11	452	Yes
29	5300	12	11.6	272	Yes
30	5300	12	12.7	268	Yes

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Trial Number:	1			VSG Freqency(MHz):		5300
Number of Bursts in Trial:	9			Successful Detection:		No
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	56.8	7			505791
2	2	69.3	7	1325.7		827892
3	2	80.5	7	1003.5		1150939
4	1	66.1	7			142835
5	3	95.5	7	1398.5	1176.5	464917
6	2	67.2	7	1488.8		787881
7	3	88.7	7	1674.3	1078.3	1109444
8	3	96.5	7	1157.5	1705.5	102804
9	3	95.7	7	1814.3	1790.3	424833

Radar Type 5_Trial 2

Trial Number:	2			VSG Freqency(MHz):		5300
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.8	11			518559
2	2	70.7	11	1260.3		740770
3	1	62.7	11			43804
4	2	81.1	11	1853.9		266682
5	3	91.6	11	1182.4	1597.4	489248
6	2	77.3	11	1722.7		712574
7	2	82.7	11	1825.3		16221
8	2	72.7	11	1514.3		239312
9	3	95.2	11	1113.8	1399.8	462008
10	1	58.4	11			687000
11	2	75.6	11	1253.4		909259
12	2	72	11	1240		211897
13	1	57.6	11			435781

Radar Type 5_Trial 3

Trial Number:	3	VSG Freqency(MHz):	5300
Number of Bursts in Trial:	15	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	76.6	14	1083.4		570628
2	2	71	14	1356		763437
3	3	84.9	14	1333.1	1609.1	159379
4	2	67.9	14	975.1		353429
5	2	79.7	14	1051.3		546819
6	1	50.5	14			741113
7	1	53.6	14			136172
8	1	59.6	14			329765
9	1	66.5	14			523306
10	3	92.7	14	1566.3	1761.3	713583
11	3	97.9	14	1227.1	952.1	111937
12	2	75.9	14	1762.1		305154
13	1	54.4	14			499561
14	3	87.8	14	1494.2	1300.2	691134
15	3	92.7	14	1263.3	1112.3	88160

Radar Type 5_Trial 4

Trial Number:	4	VSG Freqency(MHz):	5300
Number of Bursts in Trial:	12	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	85.8	10	1669.2	1410.2	351791
2	2	79.1	10	1699.9		594029
3	1	61.1	10			837158
4	1	54.1	10			80802
5	3	86.9	10	1127.1	923.1	322391
6	2	82.5	10	1687.5		563973
7	1	54.6	10			807675
8	3	88.1	10	1002.9	1691.9	50815
9	3	87.2	10	1736.8	1625.8	292220
10	2	71.4	10	1335.6		534558
11	2	69.2	10	1510.8		775987
12	1	66.4	10			21153

Radar Type 5_Trial 5

Trial Number:	5	VSG Freqency(MHz):	5300
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	77.4	19	1011.6		165995
2	2	71	19	1222		318441
3	1	56.5	19			471624
4	1	57.7	19			624176
5	3	93.4	19	1545.6	1810.6	146546
6	2	75	19	953		299659
7	3	99.3	19	1336.7	1215.7	451332
8	3	92.8	19	1885.2	1205.2	602340
9	1	59.5	19			128500
10	2	81.3	19	1747.7		280671
11	2	77.6	19	1643.4		432946
12	3	87.6	19	1699.4	999.4	584139
13	3	88.2	19	1783.8	1110.8	109116
14	3	92.8	19	1199.2	1610.2	261386
15	3	86	19	1886	986	413437
16	3	91.4	19	1775.6	1318.6	565228
17	2	78.1	19	1597.9		90631
18	1	64.8	19			243625
19	1	55.2	19			396629

Radar Type 5_Trial 6

Trial Number:	6	VSG Freqency(MHz):	5300
Number of Bursts in Trial:	12	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	87.2	10	1563.8	1839.8	867122
2	3	89.6	10	1341.4	1512.4	113816
3	3	90	10	947	1541	355467
4	3	86.9	10	1057.1	1487.1	596574
5	1	66	10			840937
6	3	97.4	10	1336.6	1454.6	84105
7	2	71.5	10	1171.5		325946
8	3	85.2	10	996.8	948.8	567402
9	2	75.1	10	1758.9		809271
10	2	72	10	1085		54426
11	2	82.9	10	1306.1		296377
12	3	97.7	10	1308.3	1844.3	537126

Radar Type 5_Trial 7

Trial Number:	7	VSG Freqency(MHz):	5300
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.6	17	1302.4	999.4	518206
2	1	60.4	17			16439
3	3	84.2	17	1834.8	1597.8	176758
4	2	76.3	17	1217.7		338480
5	3	88.6	17	1289.4	1771.4	497794
6	1	59.9	17			661425
7	3	84.9	17	1261.1	1365.1	157222
8	1	54.5	17			319091
9	1	50.8	17			480828
10	1	55.1	17			641719
11	3	95.1	17	1675.9	1013.9	137485
12	2	83.2	17	1701.8		298500
13	1	54.5	17			460570
14	1	51.5	17			621845
15	2	73.6	17	1091.4		117946
16	1	65.9	17			279611
17	3	94.1	17	1105.9	1735.9	438645
18	3	96.5	17	903.5	1084.5	599717

Radar Type 5_Trial 8

Trial Number:	8	VSG Freqency(MHz):	5300
Number of Bursts in Trial:	20	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	63.3	19			88435
2	1	60	19			233755
3	2	72.4	19	996.6		377962
4	1	66.2	19			524214
5	2	82	19	933		70391
6	2	76.9	19	1208.1		215368
7	3	87.4	19	1497.6	1002.6	359056
8	3	84.1	19	1510.9	1010.9	503764
9	3	90.5	19	1691.5	1759.5	52367
10	1	60.4	19			197691
11	2	71.9	19	1077.1		342454
12	3	89.9	19	1776.1	1160.1	485224
13	2	74.1	19	1044.9		34745
14	2	70.7	19	932.3		179725
15	2	76.6	19	1715.4		324324
16	3	83.6	19	1448.4	917.4	468103
17	2	81.1	19	1598.9		16866
18	2	77.1	19	1244.9		161750
19	1	54	19			307173
20	1	66.5	19			452528

Radar Type 5_Trial 9

Trial Number:	9	VSG Freqency(MHz):	5300
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	97.5	19	918.5	1278.5	627010
2	2	81.4	19	1232.6		151499
3	3	93.2	19	1061.8	1784.8	303073
4	1	60.3	19			457641
5	1	54.3	19			609973
6	2	82.1	19	1142.9		132665
7	3	94.5	19	1324.5	1462.5	284456
8	1	56.8	19			438708
9	2	82.4	19	1103.6		590746
10	1	64.5	19			114107
11	2	73.8	19	1744.2		266070
12	1	55.5	19			419524
13	3	91.2	19	1458.8	988.8	570171
14	2	78.7	19	1877.3		94960
15	1	58.7	19			247970
16	2	72.9	19	1124.1		400470
17	2	75.3	19	935.7		553009
18	2	80.3	19	1882.7		76261
19	2	78.5	19	1258.5		228792

Radar Type 5_Trial 10

Trial Number:	10			VSG Freqency(MHz):	5300	
Number of Bursts in Trial:	10			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.2	7			727000
2	3	88.9	7	1619.1	1067.1	1014862
3	1	54.5	7			109740
4	2	69.4	7	1546.6		399887
5	2	74.5	7	1172.5		690242
6	2	82.6	7	1539.4		980619
7	1	60.9	7			73901
8	2	81	7	1840		363866
9	2	74.4	7	1378.6		654563
10	1	56.5	7			946035

Radar Type 5_Trial 11

Trial Number:	11			VSG Freqency(MHz):	5296.1215	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	70.9	11	1044.1		29261
2	2	70.5	11	1769.5		252311
3	3	96.5	11	1384.5	1247.5	474890
4	1	61.9	11			700112
5	2	77.5	11	1837.5		1761
6	3	99.1	11	1138.9	1158.9	224578
7	2	81.9	11	1813.1		448072
8	2	66.9	11	964.1		671896
9	1	62	11			895362
10	1	61.8	11			197821
11	3	100	11	1303	1697	419849
12	2	82.4	11	1740.6		643536
13	2	80.6	11	1276.4		867122

Radar Type 5_Trial 12

Trial Number:	12			VSG Freqency(MHz):	5295.3215	
Number of Bursts in Trial:	11			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	51.6	9			201180
2	2	76	9	1002		464941
3	3	86.7	9	1699.3	1592.3	727080
4	1	66.3	9			994255
5	3	98.8	9	1196.2	1814.2	168219
6	3	95.5	9	1724.5	1512.5	431449
7	1	61.9	9			697377
8	1	53.7	9			961212
9	1	58.2	9			136083
10	1	50.7	9			400380
11	3	98.7	9	1636.3	1586.3	662730

Radar Type 5_Trial 13

Trial Number:	13	VSG Freqency(MHz):	5297.3215
Number of Bursts in Trial:	16	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.8	14	910.2	965.2	636157
2	2	77.7	14	1813.3		70943
3	3	92.9	14	1514.1	1790.1	251524
4	1	61.9	14			434008
5	2	68.6	14	1397.4		614910
6	2	77.7	14	1548.3		48726
7	3	93.5	14	1117.5	1233.5	229702
8	1	51	14			411980
9	2	70.1	14	1071.9		592107
10	1	50.2	14			26434
11	1	61.5	14			207894
12	3	94	14	1397	1332	387915
13	2	77.3	14	1159.7		570305
14	3	93.7	14	1350.3	1896.3	4064
15	1	63.7	14			185575
16	2	79.7	14	1764.3		366216

Radar Type 5_Trial 14

Trial Number:	14	VSG Freqency(MHz):	5298.9215
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	76.8	18	1816.2		486496
2	1	56	18			649127
3	1	63.3	18			145037
4	2	68.5	18	1680.5		305438
5	2	78.5	18	1824.5		466217
6	2	74.9	18	1822.1		627521
7	1	58.3	18			125290
8	1	52.8	18			286330
9	3	93.5	18	1653.5	1489.5	445360
10	3	87.9	18	1295.1	1248.1	606743
11	1	66.3	18			105370
12	1	62.2	18			266703
13	3	85.6	18	1885.4	1377.4	425493
14	1	62.4	18			589415
15	1	52.8	18			85503
16	1	62.7	18			246607
17	2	69.7	18	1876.3		406665
18	3	97.9	18	954.1	1546.1	566929

Radar Type 5_Trial 15

Trial Number:	15	VSG Freqency(MHz):	5296.9215
Number of Bursts in Trial:	15	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	65.1	13			78786
2	3	99.8	13	948.2	1779.2	271291
3	1	56.1	13			466238
4	2	70	13	1295		658425
5	3	98.3	13	1720.7	972.7	54697
6	3	84.4	13	1367.6	1238.6	247761
7	2	68.4	13	1740.6		441115
8	3	99	13	1639	1211	633835
9	1	62.2	13			31029
10	2	80.3	13	970.7		224448
11	3	90.2	13	1382.8	1677.8	416419
12	2	82	13	1490		610871
13	1	59.3	13			7180
14	2	72.6	13	1167.4		200518
15	3	85.1	13	1007.9	1162.9	393401

Radar Type 5_Trial 16

Trial Number:	16	VSG Freqency(MHz):	5297.7215
Number of Bursts in Trial:	16	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	65.8	15			551501
2	3	85.2	15	1543.8	1265.8	729923
3	3	97.7	15	1813.3	1408.3	165204
4	3	95	15	932	1770	346186
5	2	82.2	15	1407.8		527759
6	2	70.1	15	1101.9		709276
7	2	71.8	15	1694.2		143143
8	2	69.4	15	1890.6		324158
9	3	90	15	1562	1234	504798
10	2	68.5	15	1811.5		686164
11	2	80.8	15	1500.2		120866
12	1	61.3	15			302644
13	2	81.2	15	1400.8		483304
14	1	65.5	15			666028
15	1	57.7	15			98815
16	3	97.4	15	1367.6	1804.6	279081

Radar Type 5_Trial 17

Trial Number:	17	VSG Freqency(MHz):	5296.5215
Number of Bursts in Trial:	13	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	98.8	12	1222.2	1169.2	566865
2	2	74.2	12	1148.8		790881
3	2	79.5	12	1027.5		94028
4	2	78.5	12	923.5		317465
5	1	63.9	12			541217
6	2	73.5	12	1543.5		763013
7	1	56.7	12			66625
8	1	57.7	12			290248
9	2	78.9	12	1056.1		513091
10	1	50.1	12			737158
11	2	79.6	12	1435.4		38997
12	1	62.7	12			262629
13	2	78	12	1102		485451

Radar Type 5_Trial 18

Trial Number:	18	VSG Freqency(MHz):	5299.3215
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	62.7	19			485076
2	1	61.4	19			7893
3	2	78.5	19	1360.5		160344
4	3	93.7	19	983.3	1774.3	312049
5	2	77.2	19	1132.8		465338
6	2	69.8	19	1789.2		617300
7	2	77.2	19	1023.8		141660
8	1	55.1	19			294589
9	2	67.7	19	1072.3		446586
10	3	87.5	19	1642.5	965.5	597492
11	2	77.7	19	1869.3		122596
12	3	93.3	19	1517.7	910.7	274853
13	2	80.4	19	1336.6		427416
14	1	66.2	19			581583
15	1	51.5	19			104303
16	2	67.5	19	1352.5		256366
17	2	73	19	1732		408672
18	3	87.2	19	1189.8	1836.8	559548
19	3	83.4	19	983.6	1446.6	85113

Radar Type 5_Trial 19

Trial Number:	19			VSG Freqency(MHz):	5294.5215	
Number of Bursts in Trial:	10			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	54.4	7			453323
2	2	83	7	1637		742838
3	3	91.4	7	1474.6	1186.6	1032362
4	1	57.8	7			126692
5	2	79.9	7	1592.1		416647
6	3	94.1	7	1905.9	1184.9	706212
7	2	71.1	7	1878.9		997026
8	3	92.3	7	1799.7	1292.7	90626
9	2	78.4	7	1408.6		381140
10	3	90	7	1670	1701	670238

Radar Type 5_Trial 20

Trial Number:	20			VSG Freqency(MHz):	5296.9215	
Number of Bursts in Trial:	14			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	66.1	13			687291
2	2	82.1	13	1857.9		39223
3	3	90.6	13	1673.4	1210.4	245904
4	1	59.1	13			454178
5	3	91.4	13	1138.6	1647.6	659373
6	2	77.3	13	1791.7		13715
7	1	57.1	13			221198
8	1	52.2	13			428848
9	2	67.6	13	1154.4		635505
10	1	53.9	13			844207
11	3	95.8	13	1093.2	1780.2	194888
12	2	80.5	13	1915.5		402287
13	3	92.2	13	1013.8	1830.8	608896
14	2	81.1	13	1744.9		816285

Radar Type 5_Trial 21

Trial Number:	21			VSG Freqency(MHz):	5303.4785	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	86.7	12	1675.3	1844.3	182467
2	1	51.7	12			406544
3	3	85.3	12	1456.7	1037.7	628364
4	3	83.5	12	1556.5	1046.5	851151
5	1	57.3	12			155687
6	1	55.2	12			379167
7	3	90.3	12	1895.7	1522.7	600387
8	1	55.8	12			826085
9	1	62.9	12			128160
10	3	96.2	12	1545.8	1209.8	350547
11	1	58.2	12			574984
12	3	95.1	12	1656.9	1458.9	795566
13	2	71.3	12	1877.7		100491

Radar Type 5_Trial 22

Trial Number:	22			VSG Freqency(MHz):	5305.4785	
Number of Bursts in Trial:	9			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	53.6	7			468582
2	3	98.7	7	1889.3	1143.3	789407
3	3	99.6	7	1343.4	1312.4	1111748
4	1	56	7			105687
5	2	77.5	7	1293.5		428293
6	3	98.9	7	1274.1	1004.1	750482
7	1	65.2	7			1074354
8	1	51.6	7			65890
9	1	55.4	7			388998

Radar Type 5_Trial 23

Trial Number:	23	VSG Freqency(MHz):	5303.0785
Number of Bursts in Trial:	14	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	87.2	13	976.8	1182.8	456222
2	3	84.1	13	1371.9	1726.9	662502
3	3	89	13	967	1039	16717
4	3	88.9	13	1357.1	1738.1	223331
5	3	94.5	13	986.5	1466.5	430680
6	1	65.2	13			639436
7	1	55.4	13			846981
8	2	83.2	13	1070.8		198521
9	3	87.7	13	1173.3	1039.3	404915
10	2	74	13	1161		612568
11	3	90.8	13	1506.2	1882.2	817524
12	1	60.3	13			173201
13	2	71.1	13	1801.9		379951
14	2	78.1	13	1777.9		587132

Radar Type 5_Trial 24

Trial Number:	24	VSG Freqency(MHz):	5303.8785
Number of Bursts in Trial:	13	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	58.8	11			856587
2	3	87.7	11	1491.3	1450.3	158431
3	3	85	11	1345	1336	381373
4	2	73.1	11	1582.9		604827
5	3	99.7	11	949.3	1372.3	827314
6	1	60.2	11			131379
7	2	69.2	11	1913.8		354215
8	3	94.4	11	1898.6	1169.6	576540
9	1	50.9	11			802360
10	3	96.4	11	1332.6	1767.6	103505
11	1	56	11			327585
12	1	53.5	11			550800
13	1	53.5	11			774253

Radar Type 5_Trial 25

Trial Number:	25	VSG Freqency(MHz):	5301.8785
Number of Bursts in Trial:	17	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	68	16	1699		58267
2	3	98	16	981	1380	228326
3	2	68.2	16	1687.8		398813
4	2	81.7	16	1280.3		570087
5	2	76.9	16	1744.1		37258
6	2	79.5	16	1206.5		207709
7	2	81.3	16	1084.7		378378
8	1	64.6	16			549911
9	1	51.1	16			16288
10	3	94.6	16	1633.4	1154.4	186405
11	2	68.5	16	1641.5		357224
12	1	60.8	16			528866
13	2	75	16	1493		697742
14	1	50.4	16			166097
15	2	79.7	16	1539.3		336250
16	1	58.4	16			507802
17	3	84.2	16	1458.8	1431.8	676043

Radar Type 5_Trial 26

Trial Number:	26	VSG Freqency(MHz):	5304.2785
Number of Bursts in Trial:	12	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	54.2	10			205511
2	1	61	10			447775
3	2	82.5	10	1009.5		689367
4	2	70.6	10	1232.4		931205
5	3	90.8	10	1674.2	1636.2	175168
6	2	68.4	10	1916.6		417080
7	3	92.6	10	1744.4	1784.4	657633
8	2	75.7	10	1291.3		900689
9	1	65.6	10			145963
10	3	91.4	10	1473.6	1019.6	387034
11	3	86.2	10	1224.8	1531.8	628615
12	3	92.8	10	1855.2	1312.2	869468

Radar Type 5_Trial 27

Trial Number:	27			VSG Freqency(MHz):	5302.6785
Number of Bursts in Trial:	15			Successful Detection:	Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	83.1	14	1483.9		92710
2	3	92.6	14	1705.4	1506.4	285381
3	2	82.9	14	1601.1		478875
4	3	91	14	935	1252	671881
5	1	61.7	14			68990
6	3	87.4	14	931.6	936.6	261939
7	3	85.3	14	1581.7	958.7	454720
8	2	69.4	14	1080.6		649017
9	3	92.3	14	1066.7	1366.7	45024
10	1	63.8	14			238778
11	2	80.9	14	1766.1		431503
12	3	89.8	14	1884.2	1616.2	623037
13	1	63.4	14			21285
14	1	57.7	14			215068
15	3	93.2	14	1870.8	1865.8	406865

Radar Type 5_Trial 28

Trial Number:	28			VSG Freqency(MHz):	5306.2785
Number of Bursts in Trial:	8			Successful Detection:	Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	66.5	5			1130152
2	1	62.3	5			1493868
3	2	74.6	5	1573.4		358181
4	1	59.8	5			721861
5	3	89.5	5	1555.5	1249.5	1083093
6	3	85.9	5	1311.1	1756.1	1446033
7	2	66.7	5	1397.3		313511
8	3	92.1	5	1374.9	1126.9	676008

Radar Type 5_Trial 29

Trial Number:	29			VSG Freqency(MHz):	5305.8785	
Number of Bursts in Trial:	8			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	95	6	1799	1886	1038009
2	2	71	6	1447		1402462
3	2	83	6	1262		268919
4	2	77.3	6	940.7		632072
5	2	79.5	6	1108.5		995039
6	2	75.7	6	966.3		1358052
7	1	55.9	6			224291
8	1	61.3	6			587763

Radar Type 5_Trial 30

Trial Number:	30			VSG Freqency(MHz):	5305.0785	
Number of Bursts in Trial:	10			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	88.1	8	1827.9	1810.9	758285
2	3	95.2	8	1441.8	1525.8	1048432
3	2	71.9	8	1067.1		143532
4	2	68	8	1477		433771
5	1	51.9	8			725019
6	3	85.6	8	1159.4	1500.4	1013071
7	2	69.9	8	1077.1		107668
8	1	63.3	8			398642
9	1	63.1	8			689270
10	3	94.4	8	1609.6	1429.6	977450

Frequency Hopping Radar Test Waveforms

Radar Type 6

Trial	Pulse Width	PRI	Pulses per Hop	Hopping Rate	Hopping Sequence Length	Successful Detection
	(µsec)	(µsec)		(kHz)	(msec)	(Yes/No)
1	1	333	9	0.333	300	Yes
2	1	333	9	0.333	300	No
3	1	333	9	0.333	300	No
4	1	333	9	0.333	300	Yes
5	1	333	9	0.333	300	Yes
6	1	333	9	0.333	300	Yes
7	1	333	9	0.333	300	Yes
8	1	333	9	0.333	300	Yes
9	1	333	9	0.333	300	No
10	1	333	9	0.333	300	No
11	1	333	9	0.333	300	Yes
12	1	333	9	0.333	300	No
13	1	333	9	0.333	300	Yes
14	1	333	9	0.333	300	Yes
15	1	333	9	0.333	300	No
16	1	333	9	0.333	300	Yes
17	1	333	9	0.333	300	Yes
18	1	333	9	0.333	300	Yes
19	1	333	9	0.333	300	Yes
20	1	333	9	0.333	300	Yes
21	1	333	9	0.333	300	Yes
22	1	333	9	0.333	300	Yes
23	1	333	9	0.333	300	Yes
24	1	333	9	0.333	300	No
25	1	333	9	0.333	300	Yes
26	1	333	9	0.333	300	Yes
27	1	333	9	0.333	300	Yes
28	1	333	9	0.333	300	Yes
29	1	333	9	0.333	300	No
30	1	333	9	0.333	300	Yes

< Channel Bandwidth 40MHz / 5310MHz >

Short Pulse Radar Test Waveforms

Radar Type 1

Trial	VSG Freqency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	PRI (msec)	Test A/B A/B	Successful Detection (Yes/No)
1	5310	18	1165.5	858	A	Yes
2	5310	5	1672.2	598	A	Yes
3	5310	10	1432.7	698	A	Yes
4	5310	12	1355	738	A	Yes
5	5310	4	1730.1	578	A	Yes
6	5310	3	1792.1	558	A	Yes
7	5310	19	1139	878	A	Yes
8	5310	13	1319.3	758	A	Yes
9	5310	17	1193.3	838	A	Yes
10	5310	2	1858.7	538	A	Yes
11	5310	20	1113.6	898	A	Yes
12	5310	11	1392.8	718	A	Yes
13	5310	9	1474.9	678	A	Yes
14	5310	1	1930.5	518	A	Yes
15	5310	7	1567.4	638	A	Yes
16	5310	-	813	1230	B	Yes
17	5310	-	585.1	1709	B	Yes
18	5310	-	684.5	1461	B	Yes
19	5310	-	795.5	1257	B	Yes
20	5310	-	1029.9	971	B	Yes
21	5310	-	784.9	1274	B	Yes
22	5310	-	489.7	2042	B	Yes
23	5310	-	401.8	2489	B	Yes
24	5310	-	428.4	2334	B	Yes
25	5310	-	686.3	1457	B	Yes
26	5310	-	1538.5	650	B	Yes
27	5310	-	377.4	2650	B	Yes
28	5310	-	1201.9	832	B	Yes
29	5310	-	456	2193	B	Yes
30	5310	-	555.9	1799	B	Yes

Radar Type 2

Trial	VSG Freqency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(μs)	(μs)	(Yes/No)
1	5310	23	1.5	220	Yes
2	5310	25	2.5	155	Yes
3	5310	27	3.5	210	Yes
4	5310	25	2.3	156	No
5	5310	29	4.7	153	Yes
6	5310	25	2.4	165	No
7	5310	28	4.1	218	Yes
8	5310	29	4.8	212	No
9	5310	29	4.7	199	Yes
10	5310	24	1.6	205	Yes
11	5310	25	2.6	186	Yes
12	5310	24	2	208	No
13	5310	27	3.5	188	Yes
14	5310	28	4.4	179	Yes
15	5310	26	3.2	229	Yes
16	5310	27	3.6	183	Yes
17	5310	26	2.8	181	Yes
18	5310	29	4.7	180	No
19	5310	24	1.6	226	Yes
20	5310	26	3.1	184	Yes
21	5310	26	2.8	189	Yes
22	5310	24	1.6	167	Yes
23	5310	26	3.1	157	Yes
24	5310	25	2.7	227	No
25	5310	27	3.8	221	Yes
26	5310	25	2.4	202	Yes
27	5310	27	3.4	171	Yes
28	5310	23	1	182	Yes
29	5310	23	1.3	197	Yes
30	5310	24	1.7	194	Yes

Radar Type 3

Trial	VSG Freqency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5310	16	6.5	232	No
2	5310	17	7.5	239	Yes
3	5310	17	8.5	372	Yes
4	5310	16	7.3	382	Yes
5	5310	18	9.7	489	Yes
6	5310	17	7.4	451	Yes
7	5310	18	9.1	204	Yes
8	5310	18	9.8	314	Yes
9	5310	18	9.7	225	Yes
10	5310	16	6.6	228	Yes
11	5310	17	7.6	463	No
12	5310	16	7	365	Yes
13	5310	17	8.5	211	Yes
14	5310	18	9.4	325	No
15	5310	17	8.2	474	Yes
16	5310	17	8.6	400	No
17	5310	17	7.8	468	No
18	5310	18	9.7	202	Yes
19	5310	16	6.6	410	No
20	5310	17	8.1	439	Yes
21	5310	17	7.8	409	Yes
22	5310	16	6.6	261	Yes
23	5310	17	8.1	475	Yes
24	5310	17	7.7	333	Yes
25	5310	18	8.8	216	Yes
26	5310	17	7.4	260	Yes
27	5310	17	8.4	363	Yes
28	5310	16	6	452	Yes
29	5310	16	6.3	272	Yes
30	5310	16	6.7	268	Yes

Radar Type 4

Trial	VSG Freqency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5310	12	12.2	232	Yes
2	5310	13	14.5	239	Yes
3	5310	15	16.5	372	Yes
4	5310	13	13.9	382	Yes
5	5310	16	19.2	489	Yes
6	5310	13	14.1	451	Yes
7	5310	15	18	204	Yes
8	5310	16	19.4	314	Yes
9	5310	16	19.3	225	Yes
10	5310	12	12.4	228	Yes
11	5310	14	14.7	463	Yes
12	5310	13	13.3	365	Yes
13	5310	15	16.6	211	Yes
14	5310	16	18.5	325	Yes
15	5310	14	15.9	474	Yes
16	5310	15	16.9	400	Yes
17	5310	14	15.1	468	Yes
18	5310	16	19.2	202	Yes
19	5310	12	12.5	410	Yes
20	5310	14	15.6	439	Yes
21	5310	14	15	409	Yes
22	5310	12	12.3	261	Yes
23	5310	14	15.8	475	Yes
24	5310	14	14.8	333	No
25	5310	15	17.3	216	No
26	5310	13	14.2	260	Yes
27	5310	14	16.3	363	Yes
28	5310	12	11	452	Yes
29	5310	12	11.6	272	No
30	5310	12	12.7	268	No

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Trial Number:	1			VSG Freqency(MHz):		5310
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	56.8	7			505791
2	2	69.3	7	1325.7		827892
3	2	80.5	7	1003.5		1150939
4	1	66.1	7			142835
5	3	95.5	7	1398.5	1176.5	464917
6	2	67.2	7	1488.8		787881
7	3	88.7	7	1674.3	1078.3	1109444
8	3	96.5	7	1157.5	1705.5	102804
9	3	95.7	7	1814.3	1790.3	424833

Radar Type 5_Trial 2

Trial Number:	2			VSG Freqency(MHz):		5310
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.8	11			518559
2	2	70.7	11	1260.3		740770
3	1	62.7	11			43804
4	2	81.1	11	1853.9		266682
5	3	91.6	11	1182.4	1597.4	489248
6	2	77.3	11	1722.7		712574
7	2	82.7	11	1825.3		16221
8	2	72.7	11	1514.3		239312
9	3	95.2	11	1113.8	1399.8	462008
10	1	58.4	11			687000
11	2	75.6	11	1253.4		909259
12	2	72	11	1240		211897
13	1	57.6	11			435781

Radar Type 5_Trial 3

Trial Number:	3	VSG Freqency(MHz):	5310
Number of Bursts in Trial:	15	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	76.6	14	1083.4		570628
2	2	71	14	1356		763437
3	3	84.9	14	1333.1	1609.1	159379
4	2	67.9	14	975.1		353429
5	2	79.7	14	1051.3		546819
6	1	50.5	14			741113
7	1	53.6	14			136172
8	1	59.6	14			329765
9	1	66.5	14			523306
10	3	92.7	14	1566.3	1761.3	713583
11	3	97.9	14	1227.1	952.1	111937
12	2	75.9	14	1762.1		305154
13	1	54.4	14			499561
14	3	87.8	14	1494.2	1300.2	691134
15	3	92.7	14	1263.3	1112.3	88160

Radar Type 5_Trial 4

Trial Number:	4	VSG Freqency(MHz):	5310
Number of Bursts in Trial:	12	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	85.8	10	1669.2	1410.2	351791
2	2	79.1	10	1699.9		594029
3	1	61.1	10			837158
4	1	54.1	10			80802
5	3	86.9	10	1127.1	923.1	322391
6	2	82.5	10	1687.5		563973
7	1	54.6	10			807675
8	3	88.1	10	1002.9	1691.9	50815
9	3	87.2	10	1736.8	1625.8	292220
10	2	71.4	10	1335.6		534558
11	2	69.2	10	1510.8		775987
12	1	66.4	10			21153

Radar Type 5_Trial 5

Trial Number:	5	VSG Freqency(MHz):	5310
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	77.4	19	1011.6		165995
2	2	71	19	1222		318441
3	1	56.5	19			471624
4	1	57.7	19			624176
5	3	93.4	19	1545.6	1810.6	146546
6	2	75	19	953		299659
7	3	99.3	19	1336.7	1215.7	451332
8	3	92.8	19	1885.2	1205.2	602340
9	1	59.5	19			128500
10	2	81.3	19	1747.7		280671
11	2	77.6	19	1643.4		432946
12	3	87.6	19	1699.4	999.4	584139
13	3	88.2	19	1783.8	1110.8	109116
14	3	92.8	19	1199.2	1610.2	261386
15	3	86	19	1886	986	413437
16	3	91.4	19	1775.6	1318.6	565228
17	2	78.1	19	1597.9		90631
18	1	64.8	19			243625
19	1	55.2	19			396629

Radar Type 5_Trial 6

Trial Number:	6	VSG Freqency(MHz):	5310
Number of Bursts in Trial:	12	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	87.2	10	1563.8	1839.8	867122
2	3	89.6	10	1341.4	1512.4	113816
3	3	90	10	947	1541	355467
4	3	86.9	10	1057.1	1487.1	596574
5	1	66	10			840937
6	3	97.4	10	1336.6	1454.6	84105
7	2	71.5	10	1171.5		325946
8	3	85.2	10	996.8	948.8	567402
9	2	75.1	10	1758.9		809271
10	2	72	10	1085		54426
11	2	82.9	10	1306.1		296377
12	3	97.7	10	1308.3	1844.3	537126

Radar Type 5_Trial 7

Trial Number:	7	VSG Freqency(MHz):	5310
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.6	17	1302.4	999.4	518206
2	1	60.4	17			16439
3	3	84.2	17	1834.8	1597.8	176758
4	2	76.3	17	1217.7		338480
5	3	88.6	17	1289.4	1771.4	497794
6	1	59.9	17			661425
7	3	84.9	17	1261.1	1365.1	157222
8	1	54.5	17			319091
9	1	50.8	17			480828
10	1	55.1	17			641719
11	3	95.1	17	1675.9	1013.9	137485
12	2	83.2	17	1701.8		298500
13	1	54.5	17			460570
14	1	51.5	17			621845
15	2	73.6	17	1091.4		117946
16	1	65.9	17			279611
17	3	94.1	17	1105.9	1735.9	438645
18	3	96.5	17	903.5	1084.5	599717

Radar Type 5_Trial 8

Trial Number:	8	VSG Freqency(MHz):	5310
Number of Bursts in Trial:	20	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	63.3	19			88435
2	1	60	19			233755
3	2	72.4	19	996.6		377962
4	1	66.2	19			524214
5	2	82	19	933		70391
6	2	76.9	19	1208.1		215368
7	3	87.4	19	1497.6	1002.6	359056
8	3	84.1	19	1510.9	1010.9	503764
9	3	90.5	19	1691.5	1759.5	52367
10	1	60.4	19			197691
11	2	71.9	19	1077.1		342454
12	3	89.9	19	1776.1	1160.1	485224
13	2	74.1	19	1044.9		34745
14	2	70.7	19	932.3		179725
15	2	76.6	19	1715.4		324324
16	3	83.6	19	1448.4	917.4	468103
17	2	81.1	19	1598.9		16866
18	2	77.1	19	1244.9		161750
19	1	54	19			307173
20	1	66.5	19			452528

Radar Type 5_Trial 9

Trial Number:	9	VSG Freqency(MHz):	5310
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	97.5	19	918.5	1278.5	627010
2	2	81.4	19	1232.6		151499
3	3	93.2	19	1061.8	1784.8	303073
4	1	60.3	19			457641
5	1	54.3	19			609973
6	2	82.1	19	1142.9		132665
7	3	94.5	19	1324.5	1462.5	284456
8	1	56.8	19			438708
9	2	82.4	19	1103.6		590746
10	1	64.5	19			114107
11	2	73.8	19	1744.2		266070
12	1	55.5	19			419524
13	3	91.2	19	1458.8	988.8	570171
14	2	78.7	19	1877.3		94960
15	1	58.7	19			247970
16	2	72.9	19	1124.1		400470
17	2	75.3	19	935.7		553009
18	2	80.3	19	1882.7		76261
19	2	78.5	19	1258.5		228792

Radar Type 5_Trial 10

Trial Number:	10			VSG Freqency(MHz):		5310
Number of Bursts in Trial:	10			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.2	7			727000
2	3	88.9	7	1619.1	1067.1	1014862
3	1	54.5	7			109740
4	2	69.4	7	1546.6		399887
5	2	74.5	7	1172.5		690242
6	2	82.6	7	1539.4		980619
7	1	60.9	7			73901
8	2	81	7	1840		363866
9	2	74.4	7	1378.6		654563
10	1	56.5	7			946035

Radar Type 5_Trial 11

Trial Number:	11			VSG Freqency(MHz):		5296.182
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	70.9	11	1044.1		29261
2	2	70.5	11	1769.5		252311
3	3	96.5	11	1384.5	1247.5	474890
4	1	61.9	11			700112
5	2	77.5	11	1837.5		1761
6	3	99.1	11	1138.9	1158.9	224578
7	2	81.9	11	1813.1		448072
8	2	66.9	11	964.1		671896
9	1	62	11			895362
10	1	61.8	11			197821
11	3	100	11	1303	1697	419849
12	2	82.4	11	1740.6		643536
13	2	80.6	11	1276.4		867122

Radar Type 5_Trial 12

Trial Number:	12	VSG Freqency(MHz):	5296.582
Number of Bursts in Trial:	11	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	51.6	9			201180
2	2	76	9	1002		464941
3	3	86.7	9	1699.3	1592.3	727080
4	1	66.3	9			994255
5	3	98.8	9	1196.2	1814.2	168219
6	3	95.5	9	1724.5	1512.5	431449
7	1	61.9	9			697377
8	1	53.7	9			961212
9	1	58.2	9			136083
10	1	50.7	9			400380
11	3	98.7	9	1636.3	1586.3	662730

Radar Type 5_Trial 13

Trial Number:	13	VSG Freqency(MHz):	5297.382
Number of Bursts in Trial:	16	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.8	14	910.2	965.2	636157
2	2	77.7	14	1813.3		70943
3	3	92.9	14	1514.1	1790.1	251524
4	1	61.9	14			434008
5	2	68.6	14	1397.4		614910
6	2	77.7	14	1548.3		48726
7	3	93.5	14	1117.5	1233.5	229702
8	1	51	14			411980
9	2	70.1	14	1071.9		592107
10	1	50.2	14			26434
11	1	61.5	14			207894
12	3	94	14	1397	1332	387915
13	2	77.3	14	1159.7		570305
14	3	93.7	14	1350.3	1896.3	4064
15	1	63.7	14			185575
16	2	79.7	14	1764.3		366216

Radar Type 5_Trial 14

Trial Number:	14	VSG Freqency(MHz):	5298.982
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	76.8	18	1816.2		486496
2	1	56	18			649127
3	1	63.3	18			145037
4	2	68.5	18	1680.5		305438
5	2	78.5	18	1824.5		466217
6	2	74.9	18	1822.1		627521
7	1	58.3	18			125290
8	1	52.8	18			286330
9	3	93.5	18	1653.5	1489.5	445360
10	3	87.9	18	1295.1	1248.1	606743
11	1	66.3	18			105370
12	1	62.2	18			266703
13	3	85.6	18	1885.4	1377.4	425493
14	1	62.4	18			589415
15	1	52.8	18			85503
16	1	62.7	18			246607
17	2	69.7	18	1876.3		406665
18	3	97.9	18	954.1	1546.1	566929

Radar Type 5_Trial 15

Trial Number:	15			VSG Freqency(MHz):	5296.982	
Number of Bursts in Trial:	15			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	65.1	13			78786
2	3	99.8	13	948.2	1779.2	271291
3	1	56.1	13			466238
4	2	70	13	1295		658425
5	3	98.3	13	1720.7	972.7	54697
6	3	84.4	13	1367.6	1238.6	247761
7	2	68.4	13	1740.6		441115
8	3	99	13	1639	1211	633835
9	1	62.2	13			31029
10	2	80.3	13	970.7		224448
11	3	90.2	13	1382.8	1677.8	416419
12	2	82	13	1490		610871
13	1	59.3	13			7180
14	2	72.6	13	1167.4		200518
15	3	85.1	13	1007.9	1162.9	393401

Radar Type 5_Trial 16

Trial Number:	16	VSG Freqency(MHz):	5297.782
Number of Bursts in Trial:	16	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	65.8	15			551501
2	3	85.2	15	1543.8	1265.8	729923
3	3	97.7	15	1813.3	1408.3	165204
4	3	95	15	932	1770	346186
5	2	82.2	15	1407.8		527759
6	2	70.1	15	1101.9		709276
7	2	71.8	15	1694.2		143143
8	2	69.4	15	1890.6		324158
9	3	90	15	1562	1234	504798
10	2	68.5	15	1811.5		686164
11	2	80.8	15	1500.2		120866
12	1	61.3	15			302644
13	2	81.2	15	1400.8		483304
14	1	65.5	15			666028
15	1	57.7	15			98815
16	3	97.4	15	1367.6	1804.6	279081

Radar Type 5_Trial 17

Trial Number:	17	VSG Freqency(MHz):	5296.582
Number of Bursts in Trial:	13	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	98.8	12	1222.2	1169.2	566865
2	2	74.2	12	1148.8		790881
3	2	79.5	12	1027.5		94028
4	2	78.5	12	923.5		317465
5	1	63.9	12			541217
6	2	73.5	12	1543.5		763013
7	1	56.7	12			66625
8	1	57.7	12			290248
9	2	78.9	12	1056.1		513091
10	1	50.1	12			737158
11	2	79.6	12	1435.4		38997
12	1	62.7	12			262629
13	2	78	12	1102		485451

Radar Type 5_Trial 18

Trial Number:	18	VSG Freqency(MHz):	5299.382
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	62.7	19			485076
2	1	61.4	19			7893
3	2	78.5	19	1360.5		160344
4	3	93.7	19	983.3	1774.3	312049
5	2	77.2	19	1132.8		465338
6	2	69.8	19	1789.2		617300
7	2	77.2	19	1023.8		141660
8	1	55.1	19			294589
9	2	67.7	19	1072.3		446586
10	3	87.5	19	1642.5	965.5	597492
11	2	77.7	19	1869.3		122596
12	3	93.3	19	1517.7	910.7	274853
13	2	80.4	19	1336.6		427416
14	1	66.2	19			581583
15	1	51.5	19			104303
16	2	67.5	19	1352.5		256366
17	2	73	19	1732		408672
18	3	87.2	19	1189.8	1836.8	559548
19	3	83.4	19	983.6	1446.6	85113

Radar Type 5_Trial 19

Trial Number:	19			VSG Freqency(MHz):		5294.582
Number of Bursts in Trial:	10			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	54.4	7			453323
2	2	83	7	1637		742838
3	3	91.4	7	1474.6	1186.6	1032362
4	1	57.8	7			126692
5	2	79.9	7	1592.1		416647
6	3	94.1	7	1905.9	1184.9	706212
7	2	71.1	7	1878.9		997026
8	3	92.3	7	1799.7	1292.7	90626
9	2	78.4	7	1408.6		381140
10	3	90	7	1670	1701	670238

Radar Type 5_Trial 20

Trial Number:	20			VSG Freqency(MHz):		5296.982
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	66.1	13			687291
2	2	82.1	13	1857.9		39223
3	3	90.6	13	1673.4	1210.4	245904
4	1	59.1	13			454178
5	3	91.4	13	1138.6	1647.6	659373
6	2	77.3	13	1791.7		13715
7	1	57.1	13			221198
8	1	52.2	13			428848
9	2	67.6	13	1154.4		635505
10	1	53.9	13			844207
11	3	95.8	13	1093.2	1780.2	194888
12	2	80.5	13	1915.5		402287
13	3	92.2	13	1013.8	1830.8	608896
14	2	81.1	13	1744.9		816285

Radar Type 5_Trial 21

Trial Number:	21			VSG Freqency(MHz):	5323.418	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	86.7	12	1675.3	1844.3	182467
2	1	51.7	12			406544
3	3	85.3	12	1456.7	1037.7	628364
4	3	83.5	12	1556.5	1046.5	851151
5	1	57.3	12			155687
6	1	55.2	12			379167
7	3	90.3	12	1895.7	1522.7	600387
8	1	55.8	12			826085
9	1	62.9	12			128160
10	3	96.2	12	1545.8	1209.8	350547
11	1	58.2	12			574984
12	3	95.1	12	1656.9	1458.9	795566
13	2	71.3	12	1877.7		100491

Radar Type 5_Trial 22

Trial Number:	22			VSG Freqency(MHz):	5325.418	
Number of Bursts in Trial:	9			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	53.6	7			468582
2	3	98.7	7	1889.3	1143.3	789407
3	3	99.6	7	1343.4	1312.4	1111748
4	1	56	7			105687
5	2	77.5	7	1293.5		428293
6	3	98.9	7	1274.1	1004.1	750482
7	1	65.2	7			1074354
8	1	51.6	7			65890
9	1	55.4	7			388998

Radar Type 5_Trial 23

Trial Number:	23	VSG Freqency(MHz):	5323.018
Number of Bursts in Trial:	14	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	87.2	13	976.8	1182.8	456222
2	3	84.1	13	1371.9	1726.9	662502
3	3	89	13	967	1039	16717
4	3	88.9	13	1357.1	1738.1	223331
5	3	94.5	13	986.5	1466.5	430680
6	1	65.2	13			639436
7	1	55.4	13			846981
8	2	83.2	13	1070.8		198521
9	3	87.7	13	1173.3	1039.3	404915
10	2	74	13	1161		612568
11	3	90.8	13	1506.2	1882.2	817524
12	1	60.3	13			173201
13	2	71.1	13	1801.9		379951
14	2	78.1	13	1777.9		587132

Radar Type 5_Trial 24

Trial Number:	24			VSG Freqency(MHz):	5323.818	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	58.8	11			856587
2	3	87.7	11	1491.3	1450.3	158431
3	3	85	11	1345	1336	381373
4	2	73.1	11	1582.9		604827
5	3	99.7	11	949.3	1372.3	827314
6	1	60.2	11			131379
7	2	69.2	11	1913.8		354215
8	3	94.4	11	1898.6	1169.6	576540
9	1	50.9	11			802360
10	3	96.4	11	1332.6	1767.6	103505
11	1	56	11			327585
12	1	53.5	11			550800
13	1	53.5	11			774253

Radar Type 5_Trial 25

Trial Number:	25	VSG Freqency(MHz):	5321.818
Number of Bursts in Trial:	17	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	68	16	1699		58267
2	3	98	16	981	1380	228326
3	2	68.2	16	1687.8		398813
4	2	81.7	16	1280.3		570087
5	2	76.9	16	1744.1		37258
6	2	79.5	16	1206.5		207709
7	2	81.3	16	1084.7		378378
8	1	64.6	16			549911
9	1	51.1	16			16288
10	3	94.6	16	1633.4	1154.4	186405
11	2	68.5	16	1641.5		357224
12	1	60.8	16			528866
13	2	75	16	1493		697742
14	1	50.4	16			166097
15	2	79.7	16	1539.3		336250
16	1	58.4	16			507802
17	3	84.2	16	1458.8	1431.8	676043

Radar Type 5_Trial 26

Trial Number:	26			VSG Freqency(MHz):	5324.218	
Number of Bursts in Trial:	12			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	54.2	10			205511
2	1	61	10			447775
3	2	82.5	10	1009.5		689367
4	2	70.6	10	1232.4		931205
5	3	90.8	10	1674.2	1636.2	175168
6	2	68.4	10	1916.6		417080
7	3	92.6	10	1744.4	1784.4	657633
8	2	75.7	10	1291.3		900689
9	1	65.6	10			145963
10	3	91.4	10	1473.6	1019.6	387034
11	3	86.2	10	1224.8	1531.8	628615
12	3	92.8	10	1855.2	1312.2	869468

Radar Type 5_Trial 27

Trial Number:	27			VSG Freqency(MHz):	5322.618	
Number of Bursts in Trial:	15			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	83.1	14	1483.9		92710
2	3	92.6	14	1705.4	1506.4	285381
3	2	82.9	14	1601.1		478875
4	3	91	14	935	1252	671881
5	1	61.7	14			68990
6	3	87.4	14	931.6	936.6	261939
7	3	85.3	14	1581.7	958.7	454720
8	2	69.4	14	1080.6		649017
9	3	92.3	14	1066.7	1366.7	45024
10	1	63.8	14			238778
11	2	80.9	14	1766.1		431503
12	3	89.8	14	1884.2	1616.2	623037
13	1	63.4	14			21285
14	1	57.7	14			215068
15	3	93.2	14	1870.8	1865.8	406865

Radar Type 5_Trial 28

Trial Number:	28			VSG Freqency(MHz):	5326.218	
Number of Bursts in Trial:	8			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	66.5	5			1130152
2	1	62.3	5			1493868
3	2	74.6	5	1573.4		358181
4	1	59.8	5			721861
5	3	89.5	5	1555.5	1249.5	1083093
6	3	85.9	5	1311.1	1756.1	1446033
7	2	66.7	5	1397.3		313511
8	3	92.1	5	1374.9	1126.9	676008

Radar Type 5_Trial 29

Trial Number:	29			VSG Freqency(MHz):	5325.818	
Number of Bursts in Trial:	8			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	95	6	1799	1886	1038009
2	2	71	6	1447		1402462
3	2	83	6	1262		268919
4	2	77.3	6	940.7		632072
5	2	79.5	6	1108.5		995039
6	2	75.7	6	966.3		1358052
7	1	55.9	6			224291
8	1	61.3	6			587763

Radar Type 5_Trial 30

Trial Number:	30			VSG Freqency(MHz):	5325.018	
Number of Bursts in Trial:	10			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	88.1	8	1827.9	1810.9	758285
2	3	95.2	8	1441.8	1525.8	1048432
3	2	71.9	8	1067.1		143532
4	2	68	8	1477		433771
5	1	51.9	8			725019
6	3	85.6	8	1159.4	1500.4	1013071
7	2	69.9	8	1077.1		107668
8	1	63.3	8			398642
9	1	63.1	8			689270
10	3	94.4	8	1609.6	1429.6	977450

Frequency Hopping Radar Test Waveforms

Radar Type 6

Trial	Pulse Width	PRI	Pulses per Hop	Hopping Rate	Hopping Sequence Length	Successful Detection
	(µsec)	(µsec)		(kHz)	(msec)	(Yes/No)
1	1	333	9	0.333	300	No
2	1	333	9	0.333	300	No
3	1	333	9	0.333	300	Yes
4	1	333	9	0.333	300	Yes
5	1	333	9	0.333	300	Yes
6	1	333	9	0.333	300	Yes
7	1	333	9	0.333	300	Yes
8	1	333	9	0.333	300	No
9	1	333	9	0.333	300	Yes
10	1	333	9	0.333	300	Yes
11	1	333	9	0.333	300	Yes
12	1	333	9	0.333	300	Yes
13	1	333	9	0.333	300	Yes
14	1	333	9	0.333	300	Yes
15	1	333	9	0.333	300	Yes
16	1	333	9	0.333	300	Yes
17	1	333	9	0.333	300	No
18	1	333	9	0.333	300	Yes
19	1	333	9	0.333	300	Yes
20	1	333	9	0.333	300	Yes
21	1	333	9	0.333	300	Yes
22	1	333	9	0.333	300	Yes
23	1	333	9	0.333	300	Yes
24	1	333	9	0.333	300	No
25	1	333	9	0.333	300	No
26	1	333	9	0.333	300	Yes
27	1	333	9	0.333	300	Yes
28	1	333	9	0.333	300	Yes
29	1	333	9	0.333	300	No
30	1	333	9	0.333	300	Yes

< Channel Bandwidth 80MHz / 5290MHz >

Short Pulse Radar Test Waveforms

Radar Type 1

Trial	VSG Freqency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	PRI (msec)	Test A/B A/B	Successful Detection (Yes/No)
1	5290	18	1165.5	858	A	Yes
2	5290	5	1672.2	598	A	Yes
3	5290	10	1432.7	698	A	Yes
4	5290	12	1355	738	A	Yes
5	5290	4	1730.1	578	A	Yes
6	5290	3	1792.1	558	A	Yes
7	5290	19	1139	878	A	Yes
8	5290	13	1319.3	758	A	Yes
9	5290	17	1193.3	838	A	Yes
10	5290	2	1858.7	538	A	Yes
11	5290	20	1113.6	898	A	Yes
12	5290	11	1392.8	718	A	Yes
13	5290	9	1474.9	678	A	Yes
14	5290	1	1930.5	518	A	Yes
15	5290	7	1567.4	638	A	No
16	5290	-	813	1230	B	Yes
17	5290	-	585.1	1709	B	Yes
18	5290	-	684.5	1461	B	Yes
19	5290	-	795.5	1257	B	Yes
20	5290	-	1029.9	971	B	No
21	5290	-	784.9	1274	B	Yes
22	5290	-	489.7	2042	B	No
23	5290	-	401.8	2489	B	Yes
24	5290	-	428.4	2334	B	Yes
25	5290	-	686.3	1457	B	Yes
26	5290	-	1538.5	650	B	Yes
27	5290	-	377.4	2650	B	No
28	5290	-	1201.9	832	B	Yes
29	5290	-	456	2193	B	No
30	5290	-	555.9	1799	B	Yes

Radar Type 2

Trial	VSG Freqency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(μs)	(μs)	(Yes/No)
1	5290	23	1.5	220	No
2	5290	25	2.5	155	Yes
3	5290	27	3.5	210	Yes
4	5290	25	2.3	156	Yes
5	5290	29	4.7	153	Yes
6	5290	25	2.4	165	Yes
7	5290	28	4.1	218	Yes
8	5290	29	4.8	212	Yes
9	5290	29	4.7	199	Yes
10	5290	24	1.6	205	Yes
11	5290	25	2.6	186	Yes
12	5290	24	2	208	Yes
13	5290	27	3.5	188	Yes
14	5290	28	4.4	179	Yes
15	5290	26	3.2	229	Yes
16	5290	27	3.6	183	Yes
17	5290	26	2.8	181	Yes
18	5290	29	4.7	180	No
19	5290	24	1.6	226	Yes
20	5290	26	3.1	184	Yes
21	5290	26	2.8	189	Yes
22	5290	24	1.6	167	Yes
23	5290	26	3.1	157	Yes
24	5290	25	2.7	227	Yes
25	5290	27	3.8	221	Yes
26	5290	25	2.4	202	Yes
27	5290	27	3.4	171	Yes
28	5290	23	1	182	Yes
29	5290	23	1.3	197	Yes
30	5290	24	1.7	194	Yes

Radar Type 3

Trial	VSG Freqency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5290	16	6.5	232	Yes
2	5290	17	7.5	239	Yes
3	5290	17	8.5	372	Yes
4	5290	16	7.3	382	Yes
5	5290	18	9.7	489	Yes
6	5290	17	7.4	451	Yes
7	5290	18	9.1	204	Yes
8	5290	18	9.8	314	Yes
9	5290	18	9.7	225	Yes
10	5290	16	6.6	228	Yes
11	5290	17	7.6	463	Yes
12	5290	16	7	365	Yes
13	5290	17	8.5	211	Yes
14	5290	18	9.4	325	Yes
15	5290	17	8.2	474	Yes
16	5290	17	8.6	400	Yes
17	5290	17	7.8	468	Yes
18	5290	18	9.7	202	Yes
19	5290	16	6.6	410	Yes
20	5290	17	8.1	439	Yes
21	5290	17	7.8	409	Yes
22	5290	16	6.6	261	Yes
23	5290	17	8.1	475	Yes
24	5290	17	7.7	333	Yes
25	5290	18	8.8	216	No
26	5290	17	7.4	260	No
27	5290	17	8.4	363	No
28	5290	16	6	452	No
29	5290	16	6.3	272	No
30	5290	16	6.7	268	Yes

Radar Type 4

Trial	VSG Freqency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5290	12	12.2	232	Yes
2	5290	13	14.5	239	Yes
3	5290	15	16.5	372	Yes
4	5290	13	13.9	382	No
5	5290	16	19.2	489	Yes
6	5290	13	14.1	451	Yes
7	5290	15	18	204	Yes
8	5290	16	19.4	314	Yes
9	5290	16	19.3	225	Yes
10	5290	12	12.4	228	Yes
11	5290	14	14.7	463	Yes
12	5290	13	13.3	365	Yes
13	5290	15	16.6	211	Yes
14	5290	16	18.5	325	Yes
15	5290	14	15.9	474	Yes
16	5290	15	16.9	400	Yes
17	5290	14	15.1	468	Yes
18	5290	16	19.2	202	Yes
19	5290	12	12.5	410	Yes
20	5290	14	15.6	439	Yes
21	5290	14	15	409	Yes
22	5290	12	12.3	261	Yes
23	5290	14	15.8	475	Yes
24	5290	14	14.8	333	No
25	5290	15	17.3	216	Yes
26	5290	13	14.2	260	Yes
27	5290	14	16.3	363	Yes
28	5290	12	11	452	Yes
29	5290	12	11.6	272	Yes
30	5290	12	12.7	268	No

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Trial Number:	1	VSG Freqency(MHz):	5290
Number of Bursts in Trial:	15	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	78.9	14	1792.1		653527
2	3	91.5	14	1682.5	1223.5	50203
3	3	86.8	14	1267.2	1878.2	242923
4	2	73.8	14	1356.2		437159
5	1	50.4	14			631625
6	1	50.6	14			26565
7	2	75.4	14	1045.6		220040
8	3	90.7	14	1892.3	1810.3	411732
9	1	64.8	14			607579
10	3	95.1	14	1801.9	1246.9	2691
11	2	82.5	14	1694.5		196025
12	3	95.4	14	952.6	1580.6	388505
13	2	72.3	14	1691.7		582383
14	3	87	14	933	1656	775144
15	2	73.4	14	1691.6		172074

Radar Type 5_Trial 2

Trial Number:	2	VSG Freqency(MHz):	5290
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	99.8	18	1452.2	1703.2	303452
2	3	91.3	18	925.7	1150.7	464689
3	2	70.5	18	1383.5		625913
4	2	76.1	18	1162.9		123690
5	3	97.4	18	1459.6	1871.6	283450
6	1	54	18			446297
7	2	73.3	18	1130.7		606454
8	2	67.9	18	1368.1		103793
9	2	69.2	18	1441.8		264732
10	2	78.1	18	1670.9		425747
11	1	54.3	18			587817
12	2	69.9	18	1656.1		83821
13	1	55.6	18			245571
14	1	54.5	18			406526
15	3	91.7	18	1353.3	1830.3	565512
16	1	53.7	18			64223
17	1	57.2	18			225458
18	3	96.4	18	1727.6	1125.6	385003

Radar Type 5_Trial 3

Trial Number:	3	VSG Freqency(MHz):	5290
Number of Bursts in Trial:	17	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	77.7	16	1806.3		578941
2	3	85.8	16	1005.2	1610.2	46780
3	3	95.5	16	1499.5	910.5	216888
4	2	72.4	16	1673.6		387413
5	3	85.7	16	1103.3	1908.3	556883
6	3	94	16	1408	1213	25814
7	2	77	16	1728		196190
8	2	73.5	16	1219.5		366859
9	2	78.4	16	1715.6		536773
10	3	94.6	16	1373.4	1477.4	4857
11	3	98	16	1305	1011	175089
12	2	75.9	16	1052.1		345965
13	3	88.3	16	1053.7	1831.7	515278
14	3	98.5	16	969.5	1097.5	686094
15	1	58	16			154702
16	2	81.2	16	1716.8		324794
17	1	56.3	16			496031

Radar Type 5_Trial 4

Trial Number:	4			VSG Freqency(MHz):		5290
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	56.8	12			810107
2	2	76	12	1053		162071
3	3	88.7	12	911.3	1854.3	368621
4	1	58.2	12			577684
5	1	57.5	12			784633
6	1	55.6	12			136742
7	2	73.5	12	1094.5		343897
8	2	67.5	12	1858.5		550467
9	3	95.7	12	1391.3	965.3	757106
10	3	96.1	12	1263.9	1292.9	110813
11	2	80.7	12	1097.3		318220
12	2	69.8	12	1298.2		525607
13	3	86.1	12	1226.9	1584.9	730844
14	2	73.2	12	937.8		85523

Radar Type 5_Trial 5

Trial Number:	5			VSG Freqency(MHz):		5290
Number of Bursts in Trial:	8			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	91.4	5	1357.6	1329.6	512556
2	2	75.3	5	1286.7		876312
3	3	99	5	998	1454	1238489
4	3	94.7	5	1141.3	1289.3	105025
5	1	51.1	5			468600
6	2	77.9	5	1773.1		831072
7	2	77.4	5	1745.6		1194122
8	1	55.6	5			60452

Radar Type 5_Trial 6

Trial Number:	6			VSG Freqency(MHz):		5290
Number of Bursts in Trial:	8			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	76.6	5	1422.4		423536
2	3	99.1	5	1404.9	1095.9	785821
3	2	73.9	5	1326.1		1149639
4	2	75.6	5	1676.4		15650
5	2	78.7	5	995.3		378863
6	2	70	5	1660		741913
7	3	93.4	5	1375.6	1544.6	1103343
8	3	89.9	5	1572.1	1085.1	1466319

Radar Type 5_Trial 7

Trial Number:	7			VSG Freqency(MHz):		5290
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	55.9	13			190875
2	1	61.9	13			398509
3	2	74.4	13	1123.6		604894
4	3	98.2	13	1618.8	1125.8	810572
5	3	84.9	13	1650.1	1756.1	164659
6	2	77.7	13	1841.3		371850
7	2	68.5	13	1225.5		579660
8	3	88.1	13	1164.9	1073.9	785348
9	2	70.2	13	936.8		139596
10	2	80.2	13	981.8		346695
11	2	71.9	13	1434.1		554098
12	1	54.8	13			762023
13	3	90	13	1160	1266	113938
14	3	97.9	13	969.1	1430.1	320841

Radar Type 5_Trial 8

Trial Number:	8	VSG Freqency(MHz):	5290
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.4	18	1375.6	1796.6	409181
2	1	53.7	18			573170
3	3	92.3	18	1463.7	1638.7	68612
4	2	71.4	18	953.6		229759
5	1	56.6	18			391402
6	1	50.6	18			552989
7	3	89.3	18	1127.7	1457.7	48860
8	1	53.7	18			210371
9	1	56.8	18			371690
10	1	53.3	18			533266
11	2	79	18	1336		29119
12	1	51.2	18			190402
13	3	99.5	18	1700.5	1235.5	349990
14	3	89.7	18	1779.3	1032.3	510722
15	3	84.4	18	1806.6	1356.6	9265
16	2	81.9	18	1379.1		170199
17	2	76.9	18	983.1		331442
18	1	53.5	18			493624

Radar Type 5_Trial 9

Trial Number:	9	VSG Freqency(MHz):	5290
Number of Bursts in Trial:	11	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	74.2	9	1261.8		1070959
2	1	55.8	9			246823
3	3	90.1	9	1886.9	1883.9	509052
4	2	68.8	9	1574.2		774177
5	3	95.4	9	1069.6	1089.6	1037016
6	3	88	9	1899	1278	213794
7	3	88.3	9	1781.7	1257.7	477193
8	1	63.6	9			743012
9	1	56.7	9			1007181
10	1	60.9	9			181812
11	2	74.5	9	1530.5		445456

Radar Type 5_Trial 10

Trial Number:	10	VSG Freqency(MHz):	5290
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	71	19	1590		409766
2	1	55.9	19			563947
3	2	72.5	19	1222.5		86147
4	1	65.6	19			239281
5	2	78.7	19	1921.3		390525
6	1	52.7	19			545098
7	2	70.1	19	1292.9		67331
8	3	83.4	19	1142.6	1537.6	219493
9	1	57.2	19			373138
10	1	63.3	19			525781
11	3	92.8	19	1521.2	982.2	48522
12	1	50.6	19			201356
13	1	52.2	19			354405
14	1	55	19			506806
15	2	71.1	19	1189.9		29817
16	2	69.1	19	1068.9		182294
17	3	83.7	19	1490.3	965.3	334058
18	2	78.2	19	1909.8		486742
19	2	78.9	19	1186.1		11020

Radar Type 5_Trial 11

Trial Number:	11			VSG Freqency(MHz):		5258.194
Number of Bursts in Trial:	16			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	53.6	15			194565
2	3	88.3	15	1248.7	1627.7	374615
3	1	53.2	15			557990
4	2	68.4	15	1783.6		737153
5	2	80.7	15	1199.3		171969
6	3	84.1	15	980.9	1398.9	352745
7	1	57.8	15			535693
8	2	77.5	15	1460.5		715670
9	1	58.3	15			149840
10	1	54.3	15			331382
11	2	83.2	15	1414.8		511682
12	3	93	15	1708	984	691782
13	3	93.9	15	1435.1	1830.1	126963
14	2	78.3	15	1767.7		308271
15	2	79.3	15	976.7		489748
16	3	85.9	15	1472.1	1441.1	669750

Radar Type 5_Trial 12

Trial Number:	12			VSG Freqency(MHz):	5259.794	
Number of Bursts in Trial:	19			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	97.4	19	1678.6	1094.6	88101
2	1	56.5	19			241230
3	3	85.6	19	1377.4	1698.4	392012
4	2	70.8	19	1742.2		545321
5	3	86.9	19	965.1	1636.1	69461
6	1	64.3	19			222415
7	3	98.5	19	1248.5	1124.5	373713
8	2	69.7	19	1372.3		526587
9	3	90.2	19	1267.8	1169.8	50715
10	2	81.4	19	1311.6		203226
11	1	55.2	19			356583
12	3	87.9	19	1398.1	1580.1	506859
13	1	63.7	19			32080
14	2	74.3	19	1814.7		184213
15	2	68.8	19	1137.2		337293
16	1	54.6	19			490784
17	3	85.5	19	1632.5	1671.5	13202
18	2	77.8	19	1265.2		165774
19	1	57.3	19			318944

Radar Type 5_Trial 13

Trial Number:	13			VSG Freqency(MHz):	5256.994	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	86.2	12	1582.8	1236.8	687817
2	2	67.7	12	1234.3		912342
3	3	87.6	12	1128.4	953.4	214860
4	3	91.9	12	1649.1	1905.1	437096
5	2	81.5	12	1833.5		661118
6	2	70.8	12	1443.2		884543
7	2	75.2	12	1191.8		187504
8	1	61.8	12			411333
9	2	79.1	12	1830.9		633546
10	2	74.1	12	1653.9		857161
11	2	70.3	12	1488.7		160138
12	3	98.9	12	1693.1	1611.1	382366
13	2	72.3	12	1478.7		606405

Radar Type 5_Trial 14

Trial Number:	14			VSG Freqency(MHz):	5258.594	
Number of Bursts in Trial:	17			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	72.9	16	1257.1		633588
2	2	69.2	16	1817.8		101295
3	2	73.7	16	1170.3		272023
4	1	62.6	16			443059
5	3	98.2	16	1102.8	1717.8	611506
6	1	57.3	16			80431
7	3	92	16	1310	1303	250125
8	3	89.4	16	1215.6	1497.6	420437
9	3	89.9	16	1369.1	915.1	591222
10	3	83.6	16	1722.4	979.4	59158
11	2	78.3	16	961.7		229752
12	3	99.3	16	1790.7	1602.7	399016
13	2	78.9	16	1126.1		571312
14	2	69.9	16	1438.1		38290
15	1	63.8	16			209184
16	3	84.1	16	1603.9	1305.9	378347
17	3	85.5	16	1253.5	1503.5	548427

Radar Type 5_Trial 15

Trial Number:	15			VSG Freqency(MHz):		5256.994
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	78.5	12	1290.5		21024
2	1	57.5	12			228609
3	1	66.1	12			435956
4	2	71	12	1342		642677
5	3	93.2	12	1053.8	1138.8	848462
6	2	68.2	12	1398.8		202726
7	1	59.8	12			410648
8	1	64.6	12			618124
9	1	54	12			825395
10	3	100	12	1081	1683	176744
11	1	61.7	12			385011
12	1	52.4	12			592150
13	2	69.4	12	1102.6		799036
14	3	95.6	12	1327.4	1780.4	151364

Radar Type 5_Trial 16

Trial Number:	16			VSG Freqency(MHz):		5260.194
Number of Bursts in Trial:	20			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	69.8	20	1745.2		250638
2	2	82.6	20	1044.4		395765
3	2	82.9	20	1171.1		540217
4	1	65	20			88377
5	3	94.6	20	1209.4	949.4	232549
6	1	50.5	20			378666
7	1	56.2	20			523603
8	1	56.5	20			70428
9	2	78.1	20	1900.9		214762
10	3	85.9	20	1751.1	997.1	358956
11	2	67.9	20	1629.1		504247
12	3	96.4	20	979.6	1641.6	52374
13	3	84.1	20	1891.9	1408.9	196707
14	1	59.2	20			342980
15	3	92.7	20	1685.3	1292.3	485584
16	1	52.6	20			34715
17	1	50.8	20			179777
18	1	61.4	20			325155
19	2	77.7	20	1167.3		469082
20	3	93.7	20	1677.3	1780.3	16737

Radar Type 5_Trial 17

Trial Number:	17			VSG Freqency(MHz):		5259.394
Number of Bursts in Trial:	18			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	95.7	18	1615.3	1789.3	179146
2	1	62.8	18			341288
3	2	82.8	18	1412.2		501326
4	1	51.3	18			663629
5	2	79.8	18	1565.2		159766
6	1	50.9	18			321318
7	1	63.9	18			483084
8	3	98	18	1360	1402	640865
9	3	94.1	18	1521.9	1724.9	139635
10	1	57.3	18			301770
11	2	80.2	18	1148.8		462349
12	3	86.9	18	1018.1	1162.1	622458
13	2	70.4	18	1834.6		120024
14	3	88.1	18	1699.9	1194.9	280331
15	1	58.4	18			443001
16	2	66.7	18	1585.3		602657
17	3	96.1	18	1009.9	1849.9	100111
18	1	54.9	18			261981

Radar Type 5_Trial 18

Trial Number:	18			VSG Freqency(MHz):	5256.594	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	69.2	11	1186.8		585557
2	3	83.5	11	1338.5	1157.5	807113
3	2	79.2	11	1296.8		111635
4	2	71.9	11	1355.1		334897
5	2	79.4	11	1110.6		558001
6	2	80.2	11	1171.8		781275
7	1	53	11			84250
8	3	96.8	11	1115.2	1776.2	306634
9	3	84.2	11	1456.8	1007.8	529715
10	1	50.5	11			754756
11	2	72	11	1512		56647
12	1	51.4	11			280213
13	3	99.1	11	1544.9	1025.9	502430

Radar Type 5_Trial 19

Trial Number:	19	VSG Freqency(MHz):	5257.394
Number of Bursts in Trial:	14	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	50.3	13			675111
2	2	74.8	13	1869.2		27037
3	2	75.8	13	1922.2		234029
4	3	100	13	1695	1517	440310
5	1	57	13			649379
6	3	99.8	13	972.2	1216.2	1539
7	2	81.5	13	1101.5		208670
8	3	85.2	13	1022.8	1885.8	415106
9	3	93.7	13	995.3	1534.3	622328
10	3	86.6	13	1373.4	1501.4	828647
11	1	58.2	13			183492
12	1	62.4	13			391012
13	2	70.7	13	993.3		597745
14	1	55.6	13			806285

Radar Type 5_Trial 20

Trial Number:	20	VSG Freqency(MHz):	5260.194
Number of Bursts in Trial:	20	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	81	20	1086		110183
2	2	75.9	20	1785.1		254716
3	3	96	20	1252	1571	398846
4	1	50.8	20			546206
5	2	75.9	20	1773.1		92251
6	1	56.5	20			237599
7	3	96	20	1603	1075	381147
8	3	92.3	20	1745.7	1252.7	524877
9	3	94.3	20	1854.7	1304.7	74325
10	1	64.4	20			219750
11	2	73.7	20	1089.3		364490
12	3	83.5	20	946.5	1340.5	507697
13	1	52.5	20			56869
14	3	98.3	20	970.7	1848.7	200916
15	2	83	20	975		346550
16	2	66.8	20	1423.2		490677
17	1	63.4	20			38928
18	2	76	20	1349		183748
19	3	92.7	20	1571.3	1533.3	327620
20	1	58.2	20			474583

Radar Type 5_Trial 21

Trial Number:	21			VSG Freqency(MHz):		5325.406
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	79.9	6	1595.1		46826
2	1	62.1	6			369988
3	3	94.6	6	955.4	1826.4	691302
4	3	88.2	6	1142.8	1602.8	1013799
5	1	51.4	6			7115
6	2	66.9	6	1082.1		329768
7	1	64.5	6			653210
8	2	69.8	6	1732.2		974535
9	2	75.5	6	1205.5		1297914

Radar Type 5_Trial 22

Trial Number:	22			VSG Freqency(MHz):		5323.006
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	96.9	12	1514.1	1091.1	185857
2	2	71	12	1251		393484
3	1	59.5	12			601558
4	1	58.6	12			808773
5	2	74.6	12	1305.4		160668
6	2	72	12	952		368053
7	2	70.9	12	1250.1		575160
8	3	88.2	12	1839.8	1125.8	780315
9	3	99.7	12	1506.3	1725.3	134922
10	3	96.1	12	984.9	1027.9	341861
11	3	94.9	12	1752.1	1357.1	548004
12	1	53.1	12			757907
13	1	58.1	12			109906
14	2	80.5	12	1799.5		316654

Radar Type 5_Trial 23

Trial Number:	23			VSG Freqency(MHz):		5323.806
Number of Bursts in Trial:	12			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	61.4	10			612517
2	2	76.3	10	1532.7		853585
3	2	73.6	10	1662.4		98227
4	3	97.3	10	1130.7	1467.7	339738
5	2	83.3	10	1581.7		581764
6	1	52.2	10			825081
7	2	76.9	10	1290.1		68412
8	2	73.1	10	1013.9		310277
9	2	82.3	10	1725.7		551634
10	2	69.8	10	1716.2		793794
11	1	62.5	10			38710
12	2	75.7	10	1010.3		280644

Radar Type 5_Trial 24

Trial Number:	24			VSG Freqency(MHz):		5323.406
Number of Bursts in Trial:	12			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	68.9	11	1854.1		521865
2	2	81.3	11	1279.7		764308
3	1	57.8	11			8867
4	3	99.5	11	1510.5	1585.5	250188
5	1	59	11			493150
6	3	92.1	11	1047.9	1893.9	733284
7	2	76.2	11	1467.8		975804
8	2	66.7	11	1261.3		220991
9	3	97.4	11	1665.6	1165.6	461867
10	3	93.5	11	990.5	1080.5	704281
11	1	64.2	11			947596
12	2	74.8	11	1884.2		190960

Radar Type 5_Trial 25

Trial Number:	25			VSG Freqency(MHz):		5322.606
Number of Bursts in Trial:	15			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	78	13	1092		346364
2	2	76.2	13	1912.8		539337
3	1	62.1	13			734004
4	2	78.6	13	1128.4		128987
5	1	63.8	13			322992
6	2	79.9	13	1875.1		515372
7	3	97.9	13	1289.1	1869.1	707622
8	1	55.1	13			105282
9	2	71.8	13	1112.2		298621
10	2	81.6	13	1657.4		491723
11	2	83.2	13	967.8		685785
12	1	61.9	13			81521
13	2	77.9	13	1036.1		274834
14	2	69.7	13	1911.3		467646
15	2	81.3	13	1226.7		661559

Radar Type 5_Trial 26

Trial Number:	26			VSG Freqency(MHz):		5325.406
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	67.5	6	1246.5		96006
2	3	98.7	6	1463.3	1759.3	418078
3	2	73.7	6	1481.3		741337
4	3	88.7	6	1203.3	1565.3	1062958
5	3	89.7	6	1013.3	1597.3	56204
6	3	96.2	6	1532.8	1072.8	378515
7	3	98.9	6	1519.1	1719.1	700394
8	1	53.1	6			1025049
9	3	89.6	6	1576.4	953.4	16500

Radar Type 5_Trial 27

Trial Number:	27			VSG Freqency(MHz):		5323.406
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	80.4	11	1085.6		234538
2	1	50.2	11			458575
3	3	87.1	11	1510.9	1071.9	679747
4	1	52.7	11			905139
5	2	77	11	1011		207123
6	3	91.5	11	1397.5	1888.5	429490
7	2	83.2	11	1748.8		652857
8	2	68	11	1030		877359
9	1	62	11			179918
10	3	98.8	11	1879.2	996.2	402059
11	2	69.2	11	1078.8		626176
12	1	57	11			850121
13	3	90.1	11	1346.9	994.9	152001

Radar Type 5_Trial 28

Trial Number:	28			VSG Freqency(MHz):		5325.406
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	98.3	6	1005.7	1051.7	542105
2	1	59.3	6			866090
3	1	52.3	6			1189301
4	2	71.9	6	1248.1		180263
5	1	57.3	6			503522
6	1	53.9	6			826142
7	3	87.3	6	1185.7	1567.7	1146840
8	3	98.2	6	1170.8	1232.8	140330
9	3	96	6	1490	1214	462520

Radar Type 5_Trial 29

Trial Number:	29			VSG Freqency(MHz):		5325.406
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	71.6	6	1162.4		785881
2	3	89.4	6	1532.6	1714.6	1106617
3	1	60.7	6			100838
4	1	58.6	6			423987
5	2	68	6	1216		746103
6	2	73.6	6	1352.4		1068547
7	1	54.7	6			61047
8	2	74.5	6	1402.5		383483
9	2	78.7	6	1261.3		706410

Radar Type 5_Trial 30

Trial Number:	30			VSG Freqency(MHz):		5320.606
Number of Bursts in Trial:	18			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	79.1	18	1527.9		512995
2	2	73.1	18	1770.9		10578
3	2	72.5	18	1448.5		171439
4	3	98.3	18	1595.7	1192.7	331513
5	1	63.5	18			494600
6	3	92.9	18	944.1	1750.1	653072
7	3	95.1	18	1629.9	1772.9	151294
8	2	78.1	18	1100.9		313052
9	2	80.3	18	1518.7		473457
10	3	98.5	18	1808.5	1065.5	633336
11	1	65.2	18			132109
12	3	99.9	18	1765.1	1206.1	292335
13	2	79.1	18	1340.9		453620
14	1	50.4	18			615793
15	2	74.3	18	1607.7		111992
16	2	77.5	18	1334.5		272884
17	1	50.4	18			435260
18	1	64.3	18			596480

Frequency Hopping Radar Test Waveforms

Radar Type 6

Trial	Pulse Width	PRI	Pulses per Hop	Hopping Rate	Hopping Sequence Length	Successful Detection
	(μsec)	(μsec)		(kHz)	(msec)	(Yes/No)
1	1	333	9	0.333	300	No
2	1	333	9	0.333	300	Yes
3	1	333	9	0.333	300	Yes
4	1	333	9	0.333	300	Yes
5	1	333	9	0.333	300	Yes
6	1	333	9	0.333	300	No
7	1	333	9	0.333	300	Yes
8	1	333	9	0.333	300	No
9	1	333	9	0.333	300	No
10	1	333	9	0.333	300	Yes
11	1	333	9	0.333	300	Yes
12	1	333	9	0.333	300	Yes
13	1	333	9	0.333	300	Yes
14	1	333	9	0.333	300	Yes
15	1	333	9	0.333	300	Yes
16	1	333	9	0.333	300	No
17	1	333	9	0.333	300	No
18	1	333	9	0.333	300	No
19	1	333	9	0.333	300	Yes
20	1	333	9	0.333	300	Yes
21	1	333	9	0.333	300	Yes
22	1	333	9	0.333	300	Yes
23	1	333	9	0.333	300	Yes
24	1	333	9	0.333	300	Yes
25	1	333	9	0.333	300	Yes
26	1	333	9	0.333	300	Yes
27	1	333	9	0.333	300	Yes
28	1	333	9	0.333	300	Yes
29	1	333	9	0.333	300	No
30	1	333	9	0.333	300	Yes

< Channel Bandwidth 20MHz / 5500 MHz >

Short Pulse Radar Test Waveforms

Radar Type 1

Trial	VSG Freqency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	PRI (msec)	Test A/B A/B	Successful Detection (Yes/No)
1	5500	18	1165.5	858	A	Yes
2	5500	5	1672.2	598	A	Yes
3	5500	10	1432.7	698	A	Yes
4	5500	12	1355	738	A	Yes
5	5500	4	1730.1	578	A	Yes
6	5500	3	1792.1	558	A	Yes
7	5500	19	1139	878	A	Yes
8	5500	13	1319.3	758	A	Yes
9	5500	17	1193.3	838	A	Yes
10	5500	2	1858.7	538	A	Yes
11	5500	20	1113.6	898	A	Yes
12	5500	11	1392.8	718	A	Yes
13	5500	9	1474.9	678	A	Yes
14	5500	1	1930.5	518	A	Yes
15	5500	7	1567.4	638	A	Yes
16	5500	-	813	1230	B	Yes
17	5500	-	585.1	1709	B	Yes
18	5500	-	684.5	1461	B	Yes
19	5500	-	795.5	1257	B	Yes
20	5500	-	1029.9	971	B	Yes
21	5500	-	784.9	1274	B	Yes
22	5500	-	489.7	2042	B	Yes
23	5500	-	401.8	2489	B	Yes
24	5500	-	428.4	2334	B	Yes
25	5500	-	686.3	1457	B	Yes
26	5500	-	1538.5	650	B	Yes
27	5500	-	377.4	2650	B	Yes
28	5500	-	1201.9	832	B	Yes
29	5500	-	456	2193	B	Yes
30	5500	-	555.9	1799	B	Yes

Radar Type 2

Trial	VSG Freqency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(μs)	(μs)	(Yes/No)
1	5500	23	1.5	220	Yes
2	5500	25	2.5	155	Yes
3	5500	27	3.5	210	Yes
4	5500	25	2.3	156	Yes
5	5500	29	4.7	153	No
6	5500	25	2.4	165	No
7	5500	28	4.1	218	Yes
8	5500	29	4.8	212	Yes
9	5500	29	4.7	199	Yes
10	5500	24	1.6	205	Yes
11	5500	25	2.6	186	Yes
12	5500	24	2	208	Yes
13	5500	27	3.5	188	Yes
14	5500	28	4.4	179	Yes
15	5500	26	3.2	229	Yes
16	5500	27	3.6	183	Yes
17	5500	26	2.8	181	Yes
18	5500	29	4.7	180	Yes
19	5500	24	1.6	226	Yes
20	5500	26	3.1	184	Yes
21	5500	26	2.8	189	Yes
22	5500	24	1.6	167	Yes
23	5500	26	3.1	157	Yes
24	5500	25	2.7	227	Yes
25	5500	27	3.8	221	Yes
26	5500	25	2.4	202	Yes
27	5500	27	3.4	171	Yes
28	5500	23	1	182	Yes
29	5500	23	1.3	197	Yes
30	5500	24	1.7	194	Yes

Radar Type 3

Trial	VSG Freqency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5500	16	6.5	232	Yes
2	5500	17	7.5	239	No
3	5500	17	8.5	372	No
4	5500	16	7.3	382	Yes
5	5500	18	9.7	489	Yes
6	5500	17	7.4	451	Yes
7	5500	18	9.1	204	No
8	5500	18	9.8	314	No
9	5500	18	9.7	225	No
10	5500	16	6.6	228	Yes
11	5500	17	7.6	463	Yes
12	5500	16	7	365	Yes
13	5500	17	8.5	211	Yes
14	5500	18	9.4	325	Yes
15	5500	17	8.2	474	Yes
16	5500	17	8.6	400	Yes
17	5500	17	7.8	468	No
18	5500	18	9.7	202	Yes
19	5500	16	6.6	410	Yes
20	5500	17	8.1	439	Yes
21	5500	17	7.8	409	Yes
22	5500	16	6.6	261	No
23	5500	17	8.1	475	Yes
24	5500	17	7.7	333	Yes
25	5500	18	8.8	216	Yes
26	5500	17	7.4	260	Yes
27	5500	17	8.4	363	Yes
28	5500	16	6	452	Yes
29	5500	16	6.3	272	Yes
30	5500	16	6.7	268	Yes

Radar Type 4

Trial	VSG Freqency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5500	12	12.2	232	Yes
2	5500	13	14.5	239	No
3	5500	15	16.5	372	Yes
4	5500	13	13.9	382	Yes
5	5500	16	19.2	489	Yes
6	5500	13	14.1	451	Yes
7	5500	15	18	204	Yes
8	5500	16	19.4	314	Yes
9	5500	16	19.3	225	Yes
10	5500	12	12.4	228	Yes
11	5500	14	14.7	463	Yes
12	5500	13	13.3	365	Yes
13	5500	15	16.6	211	Yes
14	5500	16	18.5	325	Yes
15	5500	14	15.9	474	Yes
16	5500	15	16.9	400	No
17	5500	14	15.1	468	Yes
18	5500	16	19.2	202	Yes
19	5500	12	12.5	410	Yes
20	5500	14	15.6	439	Yes
21	5500	14	15	409	No
22	5500	12	12.3	261	No
23	5500	14	15.8	475	Yes
24	5500	14	14.8	333	No
25	5500	15	17.3	216	No
26	5500	13	14.2	260	Yes
27	5500	14	16.3	363	Yes
28	5500	12	11	452	Yes
29	5500	12	11.6	272	No
30	5500	12	12.7	268	No

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Trial Number:	1	VSG Freqency(MHz):	5500
Number of Bursts in Trial:	9	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	56.8	7			505791
2	2	69.3	7	1325.7		827892
3	2	80.5	7	1003.5		1150939
4	1	66.1	7			142835
5	3	95.5	7	1398.5	1176.5	464917
6	2	67.2	7	1488.8		787881
7	3	88.7	7	1674.3	1078.3	1109444
8	3	96.5	7	1157.5	1705.5	102804
9	3	95.7	7	1814.3	1790.3	424833

Radar Type 5_Trial 2

Trial Number:	2	VSG Freqency(MHz):	5500
Number of Bursts in Trial:	13	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.8	11			518559
2	2	70.7	11	1260.3		740770
3	1	62.7	11			43804
4	2	81.1	11	1853.9		266682
5	3	91.6	11	1182.4	1597.4	489248
6	2	77.3	11	1722.7		712574
7	2	82.7	11	1825.3		16221
8	2	72.7	11	1514.3		239312
9	3	95.2	11	1113.8	1399.8	462008
10	1	58.4	11			687000
11	2	75.6	11	1253.4		909259
12	2	72	11	1240		211897
13	1	57.6	11			435781

Radar Type 5_Trial 3

Trial Number:	3	VSG Freqency(MHz):	5500
Number of Bursts in Trial:	15	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	76.6	14	1083.4		570628
2	2	71	14	1356		763437
3	3	84.9	14	1333.1	1609.1	159379
4	2	67.9	14	975.1		353429
5	2	79.7	14	1051.3		546819
6	1	50.5	14			741113
7	1	53.6	14			136172
8	1	59.6	14			329765
9	1	66.5	14			523306
10	3	92.7	14	1566.3	1761.3	713583
11	3	97.9	14	1227.1	952.1	111937
12	2	75.9	14	1762.1		305154
13	1	54.4	14			499561
14	3	87.8	14	1494.2	1300.2	691134
15	3	92.7	14	1263.3	1112.3	88160

Radar Type 5_Trial 4

Trial Number:	4			VSG Freqency(MHz):	5500	
Number of Bursts in Trial:	12			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	85.8	10	1669.2	1410.2	351791
2	2	79.1	10	1699.9		594029
3	1	61.1	10			837158
4	1	54.1	10			80802
5	3	86.9	10	1127.1	923.1	322391
6	2	82.5	10	1687.5		563973
7	1	54.6	10			807675
8	3	88.1	10	1002.9	1691.9	50815
9	3	87.2	10	1736.8	1625.8	292220
10	2	71.4	10	1335.6		534558
11	2	69.2	10	1510.8		775987
12	1	66.4	10			21153

Radar Type 5_Trial 5

Trial Number:	5			VSG Freqency(MHz):		5500
Number of Bursts in Trial:	19			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	77.4	19	1011.6		165995
2	2	71	19	1222		318441
3	1	56.5	19			471624
4	1	57.7	19			624176
5	3	93.4	19	1545.6	1810.6	146546
6	2	75	19	953		299659
7	3	99.3	19	1336.7	1215.7	451332
8	3	92.8	19	1885.2	1205.2	602340
9	1	59.5	19			128500
10	2	81.3	19	1747.7		280671
11	2	77.6	19	1643.4		432946
12	3	87.6	19	1699.4	999.4	584139
13	3	88.2	19	1783.8	1110.8	109116
14	3	92.8	19	1199.2	1610.2	261386
15	3	86	19	1886	986	413437
16	3	91.4	19	1775.6	1318.6	565228
17	2	78.1	19	1597.9		90631
18	1	64.8	19			243625
19	1	55.2	19			396629

Radar Type 5_Trial 6

Trial Number:	6	VSG Freqency(MHz):	5500
Number of Bursts in Trial:	12	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	87.2	10	1563.8	1839.8	867122
2	3	89.6	10	1341.4	1512.4	113816
3	3	90	10	947	1541	355467
4	3	86.9	10	1057.1	1487.1	596574
5	1	66	10			840937
6	3	97.4	10	1336.6	1454.6	84105
7	2	71.5	10	1171.5		325946
8	3	85.2	10	996.8	948.8	567402
9	2	75.1	10	1758.9		809271
10	2	72	10	1085		54426
11	2	82.9	10	1306.1		296377
12	3	97.7	10	1308.3	1844.3	537126

Radar Type 5_Trial 7

Trial Number:	7	VSG Freqency(MHz):	5500
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.6	17	1302.4	999.4	518206
2	1	60.4	17			16439
3	3	84.2	17	1834.8	1597.8	176758
4	2	76.3	17	1217.7		338480
5	3	88.6	17	1289.4	1771.4	497794
6	1	59.9	17			661425
7	3	84.9	17	1261.1	1365.1	157222
8	1	54.5	17			319091
9	1	50.8	17			480828
10	1	55.1	17			641719
11	3	95.1	17	1675.9	1013.9	137485
12	2	83.2	17	1701.8		298500
13	1	54.5	17			460570
14	1	51.5	17			621845
15	2	73.6	17	1091.4		117946
16	1	65.9	17			279611
17	3	94.1	17	1105.9	1735.9	438645
18	3	96.5	17	903.5	1084.5	599717

Radar Type 5_Trial 8

Trial Number:	8	VSG Freqency(MHz):	5500
Number of Bursts in Trial:	20	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	63.3	19			88435
2	1	60	19			233755
3	2	72.4	19	996.6		377962
4	1	66.2	19			524214
5	2	82	19	933		70391
6	2	76.9	19	1208.1		215368
7	3	87.4	19	1497.6	1002.6	359056
8	3	84.1	19	1510.9	1010.9	503764
9	3	90.5	19	1691.5	1759.5	52367
10	1	60.4	19			197691
11	2	71.9	19	1077.1		342454
12	3	89.9	19	1776.1	1160.1	485224
13	2	74.1	19	1044.9		34745
14	2	70.7	19	932.3		179725
15	2	76.6	19	1715.4		324324
16	3	83.6	19	1448.4	917.4	468103
17	2	81.1	19	1598.9		16866
18	2	77.1	19	1244.9		161750
19	1	54	19			307173
20	1	66.5	19			452528

Radar Type 5_Trial 9

Trial Number:	9	VSG Freqency(MHz):	5500
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	97.5	19	918.5	1278.5	627010
2	2	81.4	19	1232.6		151499
3	3	93.2	19	1061.8	1784.8	303073
4	1	60.3	19			457641
5	1	54.3	19			609973
6	2	82.1	19	1142.9		132665
7	3	94.5	19	1324.5	1462.5	284456
8	1	56.8	19			438708
9	2	82.4	19	1103.6		590746
10	1	64.5	19			114107
11	2	73.8	19	1744.2		266070
12	1	55.5	19			419524
13	3	91.2	19	1458.8	988.8	570171
14	2	78.7	19	1877.3		94960
15	1	58.7	19			247970
16	2	72.9	19	1124.1		400470
17	2	75.3	19	935.7		553009
18	2	80.3	19	1882.7		76261
19	2	78.5	19	1258.5		228792

Radar Type 5_Trial 10

Trial Number:	10			VSG Freqency(MHz):		5500
Number of Bursts in Trial:	10			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.2	7			727000
2	3	88.9	7	1619.1	1067.1	1014862
3	1	54.5	7			109740
4	2	69.4	7	1546.6		399887
5	2	74.5	7	1172.5		690242
6	2	82.6	7	1539.4		980619
7	1	60.9	7			73901
8	2	81	7	1840		363866
9	2	74.4	7	1378.6		654563
10	1	56.5	7			946035

Radar Type 5_Trial 11

Trial Number:	11			VSG Freqency(MHz):		5496.096
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	70.9	11	1044.1		29261
2	2	70.5	11	1769.5		252311
3	3	96.5	11	1384.5	1247.5	474890
4	1	61.9	11			700112
5	2	77.5	11	1837.5		1761
6	3	99.1	11	1138.9	1158.9	224578
7	2	81.9	11	1813.1		448072
8	2	66.9	11	964.1		671896
9	1	62	11			895362
10	1	61.8	11			197821
11	3	100	11	1303	1697	419849
12	2	82.4	11	1740.6		643536
13	2	80.6	11	1276.4		867122

Radar Type 5_Trial 12

Trial Number:	12			VSG Freqency(MHz):		5495.296
Number of Bursts in Trial:	11			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	51.6	9			201180
2	2	76	9	1002		464941
3	3	86.7	9	1699.3	1592.3	727080
4	1	66.3	9			994255
5	3	98.8	9	1196.2	1814.2	168219
6	3	95.5	9	1724.5	1512.5	431449
7	1	61.9	9			697377
8	1	53.7	9			961212
9	1	58.2	9			136083
10	1	50.7	9			400380
11	3	98.7	9	1636.3	1586.3	662730

Radar Type 5_Trial 13

Trial Number:	13			VSG Freqency(MHz):		5497.296
Number of Bursts in Trial:	16			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.8	14	910.2	965.2	636157
2	2	77.7	14	1813.3		70943
3	3	92.9	14	1514.1	1790.1	251524
4	1	61.9	14			434008
5	2	68.6	14	1397.4		614910
6	2	77.7	14	1548.3		48726
7	3	93.5	14	1117.5	1233.5	229702
8	1	51	14			411980
9	2	70.1	14	1071.9		592107
10	1	50.2	14			26434
11	1	61.5	14			207894
12	3	94	14	1397	1332	387915
13	2	77.3	14	1159.7		570305
14	3	93.7	14	1350.3	1896.3	4064
15	1	63.7	14			185575
16	2	79.7	14	1764.3		366216

Radar Type 5_Trial 14

Trial Number:	14			VSG Freqency(MHz):		5498.896
Number of Bursts in Trial:	18			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	76.8	18	1816.2		486496
2	1	56	18			649127
3	1	63.3	18			145037
4	2	68.5	18	1680.5		305438
5	2	78.5	18	1824.5		466217
6	2	74.9	18	1822.1		627521
7	1	58.3	18			125290
8	1	52.8	18			286330
9	3	93.5	18	1653.5	1489.5	445360
10	3	87.9	18	1295.1	1248.1	606743
11	1	66.3	18			105370
12	1	62.2	18			266703
13	3	85.6	18	1885.4	1377.4	425493
14	1	62.4	18			589415
15	1	52.8	18			85503
16	1	62.7	18			246607
17	2	69.7	18	1876.3		406665
18	3	97.9	18	954.1	1546.1	566929

Radar Type 5_Trial 15

Trial Number:	15			VSG Freqency(MHz):	5496.896	
Number of Bursts in Trial:	15			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	65.1	13			78786
2	3	99.8	13	948.2	1779.2	271291
3	1	56.1	13			466238
4	2	70	13	1295		658425
5	3	98.3	13	1720.7	972.7	54697
6	3	84.4	13	1367.6	1238.6	247761
7	2	68.4	13	1740.6		441115
8	3	99	13	1639	1211	633835
9	1	62.2	13			31029
10	2	80.3	13	970.7		224448
11	3	90.2	13	1382.8	1677.8	416419
12	2	82	13	1490		610871
13	1	59.3	13			7180
14	2	72.6	13	1167.4		200518
15	3	85.1	13	1007.9	1162.9	393401

Radar Type 5_Trial 16

Trial Number:	16			VSG Freqency(MHz):	5497.696	
Number of Bursts in Trial:	16			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	65.8	15			551501
2	3	85.2	15	1543.8	1265.8	729923
3	3	97.7	15	1813.3	1408.3	165204
4	3	95	15	932	1770	346186
5	2	82.2	15	1407.8		527759
6	2	70.1	15	1101.9		709276
7	2	71.8	15	1694.2		143143
8	2	69.4	15	1890.6		324158
9	3	90	15	1562	1234	504798
10	2	68.5	15	1811.5		686164
11	2	80.8	15	1500.2		120866
12	1	61.3	15			302644
13	2	81.2	15	1400.8		483304
14	1	65.5	15			666028
15	1	57.7	15			98815
16	3	97.4	15	1367.6	1804.6	279081

Radar Type 5_Trial 17

Trial Number:	17			VSG Freqency(MHz):		5496.496
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	98.8	12	1222.2	1169.2	566865
2	2	74.2	12	1148.8		790881
3	2	79.5	12	1027.5		94028
4	2	78.5	12	923.5		317465
5	1	63.9	12			541217
6	2	73.5	12	1543.5		763013
7	1	56.7	12			66625
8	1	57.7	12			290248
9	2	78.9	12	1056.1		513091
10	1	50.1	12			737158
11	2	79.6	12	1435.4		38997
12	1	62.7	12			262629
13	2	78	12	1102		485451

Radar Type 5_Trial 18

Trial Number:	18			VSG Freqency(MHz):		5499.296
Number of Bursts in Trial:	19			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	62.7	19			485076
2	1	61.4	19			7893
3	2	78.5	19	1360.5		160344
4	3	93.7	19	983.3	1774.3	312049
5	2	77.2	19	1132.8		465338
6	2	69.8	19	1789.2		617300
7	2	77.2	19	1023.8		141660
8	1	55.1	19			294589
9	2	67.7	19	1072.3		446586
10	3	87.5	19	1642.5	965.5	597492
11	2	77.7	19	1869.3		122596
12	3	93.3	19	1517.7	910.7	274853
13	2	80.4	19	1336.6		427416
14	1	66.2	19			581583
15	1	51.5	19			104303
16	2	67.5	19	1352.5		256366
17	2	73	19	1732		408672
18	3	87.2	19	1189.8	1836.8	559548
19	3	83.4	19	983.6	1446.6	85113

Radar Type 5_Trial 19

Trial Number:	19			VSG Freqency(MHz):		5494.496
Number of Bursts in Trial:	10			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	54.4	7			453323
2	2	83	7	1637		742838
3	3	91.4	7	1474.6	1186.6	1032362
4	1	57.8	7			126692
5	2	79.9	7	1592.1		416647
6	3	94.1	7	1905.9	1184.9	706212
7	2	71.1	7	1878.9		997026
8	3	92.3	7	1799.7	1292.7	90626
9	2	78.4	7	1408.6		381140
10	3	90	7	1670	1701	670238

Radar Type 5_Trial 20

Trial Number:	20			VSG Freqency(MHz):		5496.896
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	66.1	13			687291
2	2	82.1	13	1857.9		39223
3	3	90.6	13	1673.4	1210.4	245904
4	1	59.1	13			454178
5	3	91.4	13	1138.6	1647.6	659373
6	2	77.3	13	1791.7		13715
7	1	57.1	13			221198
8	1	52.2	13			428848
9	2	67.6	13	1154.4		635505
10	1	53.9	13			844207
11	3	95.8	13	1093.2	1780.2	194888
12	2	80.5	13	1915.5		402287
13	3	92.2	13	1013.8	1830.8	608896
14	2	81.1	13	1744.9		816285

Radar Type 5_Trial 21

Trial Number:	21			VSG Freqency(MHz):		5503.504
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	86.7	12	1675.3	1844.3	182467
2	1	51.7	12			406544
3	3	85.3	12	1456.7	1037.7	628364
4	3	83.5	12	1556.5	1046.5	851151
5	1	57.3	12			155687
6	1	55.2	12			379167
7	3	90.3	12	1895.7	1522.7	600387
8	1	55.8	12			826085
9	1	62.9	12			128160
10	3	96.2	12	1545.8	1209.8	350547
11	1	58.2	12			574984
12	3	95.1	12	1656.9	1458.9	795566
13	2	71.3	12	1877.7		100491

Radar Type 5_Trial 22

Trial Number:	22			VSG Freqency(MHz):		5505.504
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	53.6	7			468582
2	3	98.7	7	1889.3	1143.3	789407
3	3	99.6	7	1343.4	1312.4	1111748
4	1	56	7			105687
5	2	77.5	7	1293.5		428293
6	3	98.9	7	1274.1	1004.1	750482
7	1	65.2	7			1074354
8	1	51.6	7			65890
9	1	55.4	7			388998

Radar Type 5_Trial 23

Trial Number:	23			VSG Freqency(MHz):		5503.104
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	87.2	13	976.8	1182.8	456222
2	3	84.1	13	1371.9	1726.9	662502
3	3	89	13	967	1039	16717
4	3	88.9	13	1357.1	1738.1	223331
5	3	94.5	13	986.5	1466.5	430680
6	1	65.2	13			639436
7	1	55.4	13			846981
8	2	83.2	13	1070.8		198521
9	3	87.7	13	1173.3	1039.3	404915
10	2	74	13	1161		612568
11	3	90.8	13	1506.2	1882.2	817524
12	1	60.3	13			173201
13	2	71.1	13	1801.9		379951
14	2	78.1	13	1777.9		587132

Radar Type 5_Trial 24

Trial Number:	24			VSG Freqency(MHz):	5503.904	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	58.8	11			856587
2	3	87.7	11	1491.3	1450.3	158431
3	3	85	11	1345	1336	381373
4	2	73.1	11	1582.9		604827
5	3	99.7	11	949.3	1372.3	827314
6	1	60.2	11			131379
7	2	69.2	11	1913.8		354215
8	3	94.4	11	1898.6	1169.6	576540
9	1	50.9	11			802360
10	3	96.4	11	1332.6	1767.6	103505
11	1	56	11			327585
12	1	53.5	11			550800
13	1	53.5	11			774253

Radar Type 5_Trial 25

Trial Number:	25			VSG Freqency(MHz):	5501.904	
Number of Bursts in Trial:	17			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	68	16	1699		58267
2	3	98	16	981	1380	228326
3	2	68.2	16	1687.8		398813
4	2	81.7	16	1280.3		570087
5	2	76.9	16	1744.1		37258
6	2	79.5	16	1206.5		207709
7	2	81.3	16	1084.7		378378
8	1	64.6	16			549911
9	1	51.1	16			16288
10	3	94.6	16	1633.4	1154.4	186405
11	2	68.5	16	1641.5		357224
12	1	60.8	16			528866
13	2	75	16	1493		697742
14	1	50.4	16			166097
15	2	79.7	16	1539.3		336250
16	1	58.4	16			507802
17	3	84.2	16	1458.8	1431.8	676043

Radar Type 5_Trial 26

Trial Number:	26			VSG Freqency(MHz):	5504.304	
Number of Bursts in Trial:	12			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	54.2	10			205511
2	1	61	10			447775
3	2	82.5	10	1009.5		689367
4	2	70.6	10	1232.4		931205
5	3	90.8	10	1674.2	1636.2	175168
6	2	68.4	10	1916.6		417080
7	3	92.6	10	1744.4	1784.4	657633
8	2	75.7	10	1291.3		900689
9	1	65.6	10			145963
10	3	91.4	10	1473.6	1019.6	387034
11	3	86.2	10	1224.8	1531.8	628615
12	3	92.8	10	1855.2	1312.2	869468

Radar Type 5_Trial 27

Trial Number:	27			VSG Freqency(MHz):	5502.704	
Number of Bursts in Trial:	15			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	83.1	14	1483.9		92710
2	3	92.6	14	1705.4	1506.4	285381
3	2	82.9	14	1601.1		478875
4	3	91	14	935	1252	671881
5	1	61.7	14			68990
6	3	87.4	14	931.6	936.6	261939
7	3	85.3	14	1581.7	958.7	454720
8	2	69.4	14	1080.6		649017
9	3	92.3	14	1066.7	1366.7	45024
10	1	63.8	14			238778
11	2	80.9	14	1766.1		431503
12	3	89.8	14	1884.2	1616.2	623037
13	1	63.4	14			21285
14	1	57.7	14			215068
15	3	93.2	14	1870.8	1865.8	406865

Radar Type 5_Trial 28

Trial Number:	28			VSG Freqency(MHz):	5506.304	
Number of Bursts in Trial:	8			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	66.5	5			1130152
2	1	62.3	5			1493868
3	2	74.6	5	1573.4		358181
4	1	59.8	5			721861
5	3	89.5	5	1555.5	1249.5	1083093
6	3	85.9	5	1311.1	1756.1	1446033
7	2	66.7	5	1397.3		313511
8	3	92.1	5	1374.9	1126.9	676008

Radar Type 5_Trial 29

Trial Number:	29			VSG Freqency(MHz):	5505.904	
Number of Bursts in Trial:	8			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	95	6	1799	1886	1038009
2	2	71	6	1447		1402462
3	2	83	6	1262		268919
4	2	77.3	6	940.7		632072
5	2	79.5	6	1108.5		995039
6	2	75.7	6	966.3		1358052
7	1	55.9	6			224291
8	1	61.3	6			587763

Radar Type 5_Trial 30

Trial Number:	30			VSG Freqency(MHz):	5505.104	
Number of Bursts in Trial:	10			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	88.1	8	1827.9	1810.9	758285
2	3	95.2	8	1441.8	1525.8	1048432
3	2	71.9	8	1067.1		143532
4	2	68	8	1477		433771
5	1	51.9	8			725019
6	3	85.6	8	1159.4	1500.4	1013071
7	2	69.9	8	1077.1		107668
8	1	63.3	8			398642
9	1	63.1	8			689270
10	3	94.4	8	1609.6	1429.6	977450

Frequency Hopping Radar Test Waveforms

Radar Type 6

Trial	Pulse Width	PRI	Pulses per Hop	Hopping Rate	Hopping Sequence Length	Successful Detection
	(µsec)	(µsec)		(kHz)	(msec)	(Yes/No)
1	1	333	9	0.333	300	No
2	1	333	9	0.333	300	Yes
3	1	333	9	0.333	300	Yes
4	1	333	9	0.333	300	Yes
5	1	333	9	0.333	300	Yes
6	1	333	9	0.333	300	Yes
7	1	333	9	0.333	300	Yes
8	1	333	9	0.333	300	Yes
9	1	333	9	0.333	300	No
10	1	333	9	0.333	300	Yes
11	1	333	9	0.333	300	Yes
12	1	333	9	0.333	300	No
13	1	333	9	0.333	300	Yes
14	1	333	9	0.333	300	Yes
15	1	333	9	0.333	300	Yes
16	1	333	9	0.333	300	No
17	1	333	9	0.333	300	No
18	1	333	9	0.333	300	Yes
19	1	333	9	0.333	300	Yes
20	1	333	9	0.333	300	Yes
21	1	333	9	0.333	300	Yes
22	1	333	9	0.333	300	Yes
23	1	333	9	0.333	300	No
24	1	333	9	0.333	300	No
25	1	333	9	0.333	300	Yes
26	1	333	9	0.333	300	Yes
27	1	333	9	0.333	300	Yes
28	1	333	9	0.333	300	Yes
29	1	333	9	0.333	300	No
30	1	333	9	0.333	300	Yes

< Channel Bandwidth 40MHz / 5510MHz >

Short Pulse Radar Test Waveforms

Radar Type 1

Trial	VSG Freqency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	PRI (msec)	Test A/B A/B	Successful Detection (Yes/No)
1	5510	18	1165.5	858	A	Yes
2	5510	5	1672.2	598	A	Yes
3	5510	10	1432.7	698	A	Yes
4	5510	12	1355	738	A	Yes
5	5510	4	1730.1	578	A	Yes
6	5510	3	1792.1	558	A	Yes
7	5510	19	1139	878	A	Yes
8	5510	13	1319.3	758	A	Yes
9	5510	17	1193.3	838	A	Yes
10	5510	2	1858.7	538	A	Yes
11	5510	20	1113.6	898	A	Yes
12	5510	11	1392.8	718	A	Yes
13	5510	9	1474.9	678	A	Yes
14	5510	1	1930.5	518	A	Yes
15	5510	7	1567.4	638	A	Yes
16	5510	-	813	1230	B	Yes
17	5510	-	585.1	1709	B	Yes
18	5510	-	684.5	1461	B	Yes
19	5510	-	795.5	1257	B	Yes
20	5510	-	1029.9	971	B	Yes
21	5510	-	784.9	1274	B	Yes
22	5510	-	489.7	2042	B	Yes
23	5510	-	401.8	2489	B	Yes
24	5510	-	428.4	2334	B	Yes
25	5510	-	686.3	1457	B	Yes
26	5510	-	1538.5	650	B	Yes
27	5510	-	377.4	2650	B	Yes
28	5510	-	1201.9	832	B	Yes
29	5510	-	456	2193	B	Yes
30	5510	-	555.9	1799	B	Yes

Radar Type 2

Trial	VSG Freqency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5510	23	1.5	220	Yes
2	5510	25	2.5	155	No
3	5510	27	3.5	210	No
4	5510	25	2.3	156	Yes
5	5510	29	4.7	153	Yes
6	5510	25	2.4	165	Yes
7	5510	28	4.1	218	Yes
8	5510	29	4.8	212	Yes
9	5510	29	4.7	199	Yes
10	5510	24	1.6	205	Yes
11	5510	25	2.6	186	Yes
12	5510	24	2	208	Yes
13	5510	27	3.5	188	Yes
14	5510	28	4.4	179	Yes
15	5510	26	3.2	229	Yes
16	5510	27	3.6	183	Yes
17	5510	26	2.8	181	Yes
18	5510	29	4.7	180	Yes
19	5510	24	1.6	226	No
20	5510	26	3.1	184	Yes
21	5510	26	2.8	189	Yes
22	5510	24	1.6	167	Yes
23	5510	26	3.1	157	No
24	5510	25	2.7	227	Yes
25	5510	27	3.8	221	Yes
26	5510	25	2.4	202	Yes
27	5510	27	3.4	171	Yes
28	5510	23	1	182	No
29	5510	23	1.3	197	Yes
30	5510	24	1.7	194	Yes

Radar Type 3

Trial	VSG Freqency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5510	16	6.5	232	No
2	5510	17	7.5	239	No
3	5510	17	8.5	372	Yes
4	5510	16	7.3	382	Yes
5	5510	18	9.7	489	Yes
6	5510	17	7.4	451	Yes
7	5510	18	9.1	204	Yes
8	5510	18	9.8	314	Yes
9	5510	18	9.7	225	No
10	5510	16	6.6	228	Yes
11	5510	17	7.6	463	No
12	5510	16	7	365	Yes
13	5510	17	8.5	211	Yes
14	5510	18	9.4	325	Yes
15	5510	17	8.2	474	Yes
16	5510	17	8.6	400	Yes
17	5510	17	7.8	468	Yes
18	5510	18	9.7	202	Yes
19	5510	16	6.6	410	No
20	5510	17	8.1	439	Yes
21	5510	17	7.8	409	No
22	5510	16	6.6	261	Yes
23	5510	17	8.1	475	Yes
24	5510	17	7.7	333	Yes
25	5510	18	8.8	216	Yes
26	5510	17	7.4	260	Yes
27	5510	17	8.4	363	Yes
28	5510	16	6	452	Yes
29	5510	16	6.3	272	Yes
30	5510	16	6.7	268	No

Radar Type 4

Trial	VSG Freqency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5510	12	12.2	232	Yes
2	5510	13	14.5	239	No
3	5510	15	16.5	372	Yes
4	5510	13	13.9	382	Yes
5	5510	16	19.2	489	Yes
6	5510	13	14.1	451	Yes
7	5510	15	18	204	No
8	5510	16	19.4	314	Yes
9	5510	16	19.3	225	No
10	5510	12	12.4	228	Yes
11	5510	14	14.7	463	Yes
12	5510	13	13.3	365	Yes
13	5510	15	16.6	211	Yes
14	5510	16	18.5	325	Yes
15	5510	14	15.9	474	Yes
16	5510	15	16.9	400	Yes
17	5510	14	15.1	468	Yes
18	5510	16	19.2	202	Yes
19	5510	12	12.5	410	Yes
20	5510	14	15.6	439	Yes
21	5510	14	15	409	Yes
22	5510	12	12.3	261	No
23	5510	14	15.8	475	Yes
24	5510	14	14.8	333	Yes
25	5510	15	17.3	216	No
26	5510	13	14.2	260	Yes
27	5510	14	16.3	363	Yes
28	5510	12	11	452	Yes
29	5510	12	11.6	272	No
30	5510	12	12.7	268	No

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	56.8	7			505791
2	2	69.3	7	1325.7		827892
3	2	80.5	7	1003.5		1150939
4	1	66.1	7			142835
5	3	95.5	7	1398.5	1176.5	464917
6	2	67.2	7	1488.8		787881
7	3	88.7	7	1674.3	1078.3	1109444
8	3	96.5	7	1157.5	1705.5	102804
9	3	95.7	7	1814.3	1790.3	424833

Radar Type 5_Trial 2

Trial Number:	2	VSG Freqency(MHz):	5510
Number of Bursts in Trial:	13	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.8	11			518559
2	2	70.7	11	1260.3		740770
3	1	62.7	11			43804
4	2	81.1	11	1853.9		266682
5	3	91.6	11	1182.4	1597.4	489248
6	2	77.3	11	1722.7		712574
7	2	82.7	11	1825.3		16221
8	2	72.7	11	1514.3		239312
9	3	95.2	11	1113.8	1399.8	462008
10	1	58.4	11			687000
11	2	75.6	11	1253.4		909259
12	2	72	11	1240		211897
13	1	57.6	11			435781

Radar Type 5_Trial 3

Trial Number:	3	VSG Freqency(MHz):	5510
Number of Bursts in Trial:	15	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	76.6	14	1083.4		570628
2	2	71	14	1356		763437
3	3	84.9	14	1333.1	1609.1	159379
4	2	67.9	14	975.1		353429
5	2	79.7	14	1051.3		546819
6	1	50.5	14			741113
7	1	53.6	14			136172
8	1	59.6	14			329765
9	1	66.5	14			523306
10	3	92.7	14	1566.3	1761.3	713583
11	3	97.9	14	1227.1	952.1	111937
12	2	75.9	14	1762.1		305154
13	1	54.4	14			499561
14	3	87.8	14	1494.2	1300.2	691134
15	3	92.7	14	1263.3	1112.3	88160

Radar Type 5_Trial 4

Trial Number:	4			VSG Freqency(MHz):		5510
Number of Bursts in Trial:	12			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	85.8	10	1669.2	1410.2	351791
2	2	79.1	10	1699.9		594029
3	1	61.1	10			837158
4	1	54.1	10			80802
5	3	86.9	10	1127.1	923.1	322391
6	2	82.5	10	1687.5		563973
7	1	54.6	10			807675
8	3	88.1	10	1002.9	1691.9	50815
9	3	87.2	10	1736.8	1625.8	292220
10	2	71.4	10	1335.6		534558
11	2	69.2	10	1510.8		775987
12	1	66.4	10			21153

Radar Type 5_Trial 5

Trial Number:	5			VSG Freqency(MHz):		5510
Number of Bursts in Trial:	19			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	77.4	19	1011.6		165995
2	2	71	19	1222		318441
3	1	56.5	19			471624
4	1	57.7	19			624176
5	3	93.4	19	1545.6	1810.6	146546
6	2	75	19	953		299659
7	3	99.3	19	1336.7	1215.7	451332
8	3	92.8	19	1885.2	1205.2	602340
9	1	59.5	19			128500
10	2	81.3	19	1747.7		280671
11	2	77.6	19	1643.4		432946
12	3	87.6	19	1699.4	999.4	584139
13	3	88.2	19	1783.8	1110.8	109116
14	3	92.8	19	1199.2	1610.2	261386
15	3	86	19	1886	986	413437
16	3	91.4	19	1775.6	1318.6	565228
17	2	78.1	19	1597.9		90631
18	1	64.8	19			243625
19	1	55.2	19			396629

Radar Type 5_Trial 6

Trial Number:	6	VSG Freqency(MHz):	5510
Number of Bursts in Trial:	12	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	87.2	10	1563.8	1839.8	867122
2	3	89.6	10	1341.4	1512.4	113816
3	3	90	10	947	1541	355467
4	3	86.9	10	1057.1	1487.1	596574
5	1	66	10			840937
6	3	97.4	10	1336.6	1454.6	84105
7	2	71.5	10	1171.5		325946
8	3	85.2	10	996.8	948.8	567402
9	2	75.1	10	1758.9		809271
10	2	72	10	1085		54426
11	2	82.9	10	1306.1		296377
12	3	97.7	10	1308.3	1844.3	537126

Radar Type 5_Trial 7

Trial Number:	7	VSG Freqency(MHz):	5510
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.6	17	1302.4	999.4	518206
2	1	60.4	17			16439
3	3	84.2	17	1834.8	1597.8	176758
4	2	76.3	17	1217.7		338480
5	3	88.6	17	1289.4	1771.4	497794
6	1	59.9	17			661425
7	3	84.9	17	1261.1	1365.1	157222
8	1	54.5	17			319091
9	1	50.8	17			480828
10	1	55.1	17			641719
11	3	95.1	17	1675.9	1013.9	137485
12	2	83.2	17	1701.8		298500
13	1	54.5	17			460570
14	1	51.5	17			621845
15	2	73.6	17	1091.4		117946
16	1	65.9	17			279611
17	3	94.1	17	1105.9	1735.9	438645
18	3	96.5	17	903.5	1084.5	599717

Radar Type 5_Trial 8

Trial Number:	8	VSG Freqency(MHz):	5510
Number of Bursts in Trial:	20	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	63.3	19			88435
2	1	60	19			233755
3	2	72.4	19	996.6		377962
4	1	66.2	19			524214
5	2	82	19	933		70391
6	2	76.9	19	1208.1		215368
7	3	87.4	19	1497.6	1002.6	359056
8	3	84.1	19	1510.9	1010.9	503764
9	3	90.5	19	1691.5	1759.5	52367
10	1	60.4	19			197691
11	2	71.9	19	1077.1		342454
12	3	89.9	19	1776.1	1160.1	485224
13	2	74.1	19	1044.9		34745
14	2	70.7	19	932.3		179725
15	2	76.6	19	1715.4		324324
16	3	83.6	19	1448.4	917.4	468103
17	2	81.1	19	1598.9		16866
18	2	77.1	19	1244.9		161750
19	1	54	19			307173
20	1	66.5	19			452528

Radar Type 5_Trial 9

Trial Number:	9	VSG Freqency(MHz):	5510
Number of Bursts in Trial:	19	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	97.5	19	918.5	1278.5	627010
2	2	81.4	19	1232.6		151499
3	3	93.2	19	1061.8	1784.8	303073
4	1	60.3	19			457641
5	1	54.3	19			609973
6	2	82.1	19	1142.9		132665
7	3	94.5	19	1324.5	1462.5	284456
8	1	56.8	19			438708
9	2	82.4	19	1103.6		590746
10	1	64.5	19			114107
11	2	73.8	19	1744.2		266070
12	1	55.5	19			419524
13	3	91.2	19	1458.8	988.8	570171
14	2	78.7	19	1877.3		94960
15	1	58.7	19			247970
16	2	72.9	19	1124.1		400470
17	2	75.3	19	935.7		553009
18	2	80.3	19	1882.7		76261
19	2	78.5	19	1258.5		228792

Radar Type 5_Trial 10

Trial Number:	10			VSG Freqency(MHz):		5510
Number of Bursts in Trial:	10			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	57.2	7			727000
2	3	88.9	7	1619.1	1067.1	1014862
3	1	54.5	7			109740
4	2	69.4	7	1546.6		399887
5	2	74.5	7	1172.5		690242
6	2	82.6	7	1539.4		980619
7	1	60.9	7			73901
8	2	81	7	1840		363866
9	2	74.4	7	1378.6		654563
10	1	56.5	7			946035

Radar Type 5_Trial 11

Trial Number:	11			VSG Freqency(MHz):		5496.1915
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	70.9	11	1044.1		29261
2	2	70.5	11	1769.5		252311
3	3	96.5	11	1384.5	1247.5	474890
4	1	61.9	11			700112
5	2	77.5	11	1837.5		1761
6	3	99.1	11	1138.9	1158.9	224578
7	2	81.9	11	1813.1		448072
8	2	66.9	11	964.1		671896
9	1	62	11			895362
10	1	61.8	11			197821
11	3	100	11	1303	1697	419849
12	2	82.4	11	1740.6		643536
13	2	80.6	11	1276.4		867122

Radar Type 5_Trial 12

Trial Number:	12			VSG Freqency(MHz):	5495.3915	
Number of Bursts in Trial:	11			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	51.6	9			201180
2	2	76	9	1002		464941
3	3	86.7	9	1699.3	1592.3	727080
4	1	66.3	9			994255
5	3	98.8	9	1196.2	1814.2	168219
6	3	95.5	9	1724.5	1512.5	431449
7	1	61.9	9			697377
8	1	53.7	9			961212
9	1	58.2	9			136083
10	1	50.7	9			400380
11	3	98.7	9	1636.3	1586.3	662730

Radar Type 5_Trial 13

Trial Number:	13			VSG Freqency(MHz):	5497.3915	
Number of Bursts in Trial:	16			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	96.8	14	910.2	965.2	636157
2	2	77.7	14	1813.3		70943
3	3	92.9	14	1514.1	1790.1	251524
4	1	61.9	14			434008
5	2	68.6	14	1397.4		614910
6	2	77.7	14	1548.3		48726
7	3	93.5	14	1117.5	1233.5	229702
8	1	51	14			411980
9	2	70.1	14	1071.9		592107
10	1	50.2	14			26434
11	1	61.5	14			207894
12	3	94	14	1397	1332	387915
13	2	77.3	14	1159.7		570305
14	3	93.7	14	1350.3	1896.3	4064
15	1	63.7	14			185575
16	2	79.7	14	1764.3		366216

Radar Type 5_Trial 14

Trial Number:	14			VSG Freqency(MHz):		5498.9915
Number of Bursts in Trial:	18			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	76.8	18	1816.2		486496
2	1	56	18			649127
3	1	63.3	18			145037
4	2	68.5	18	1680.5		305438
5	2	78.5	18	1824.5		466217
6	2	74.9	18	1822.1		627521
7	1	58.3	18			125290
8	1	52.8	18			286330
9	3	93.5	18	1653.5	1489.5	445360
10	3	87.9	18	1295.1	1248.1	606743
11	1	66.3	18			105370
12	1	62.2	18			266703
13	3	85.6	18	1885.4	1377.4	425493
14	1	62.4	18			589415
15	1	52.8	18			85503
16	1	62.7	18			246607
17	2	69.7	18	1876.3		406665
18	3	97.9	18	954.1	1546.1	566929

Radar Type 5_Trial 15

Trial Number:	15			VSG Freqency(MHz):	5496.9915	
Number of Bursts in Trial:	15			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	65.1	13			78786
2	3	99.8	13	948.2	1779.2	271291
3	1	56.1	13			466238
4	2	70	13	1295		658425
5	3	98.3	13	1720.7	972.7	54697
6	3	84.4	13	1367.6	1238.6	247761
7	2	68.4	13	1740.6		441115
8	3	99	13	1639	1211	633835
9	1	62.2	13			31029
10	2	80.3	13	970.7		224448
11	3	90.2	13	1382.8	1677.8	416419
12	2	82	13	1490		610871
13	1	59.3	13			7180
14	2	72.6	13	1167.4		200518
15	3	85.1	13	1007.9	1162.9	393401

Radar Type 5_Trial 16

Trial Number:	16			VSG Freqency(MHz):		5497.7915
Number of Bursts in Trial:	16			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	65.8	15			551501
2	3	85.2	15	1543.8	1265.8	729923
3	3	97.7	15	1813.3	1408.3	165204
4	3	95	15	932	1770	346186
5	2	82.2	15	1407.8		527759
6	2	70.1	15	1101.9		709276
7	2	71.8	15	1694.2		143143
8	2	69.4	15	1890.6		324158
9	3	90	15	1562	1234	504798
10	2	68.5	15	1811.5		686164
11	2	80.8	15	1500.2		120866
12	1	61.3	15			302644
13	2	81.2	15	1400.8		483304
14	1	65.5	15			666028
15	1	57.7	15			98815
16	3	97.4	15	1367.6	1804.6	279081

Radar Type 5_Trial 17

Trial Number:	17			VSG Freqency(MHz):		5496.5915
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	98.8	12	1222.2	1169.2	566865
2	2	74.2	12	1148.8		790881
3	2	79.5	12	1027.5		94028
4	2	78.5	12	923.5		317465
5	1	63.9	12			541217
6	2	73.5	12	1543.5		763013
7	1	56.7	12			66625
8	1	57.7	12			290248
9	2	78.9	12	1056.1		513091
10	1	50.1	12			737158
11	2	79.6	12	1435.4		38997
12	1	62.7	12			262629
13	2	78	12	1102		485451

Radar Type 5_Trial 18

Trial Number:	18			VSG Freqency(MHz):		5499.3915
Number of Bursts in Trial:	19			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	62.7	19			485076
2	1	61.4	19			7893
3	2	78.5	19	1360.5		160344
4	3	93.7	19	983.3	1774.3	312049
5	2	77.2	19	1132.8		465338
6	2	69.8	19	1789.2		617300
7	2	77.2	19	1023.8		141660
8	1	55.1	19			294589
9	2	67.7	19	1072.3		446586
10	3	87.5	19	1642.5	965.5	597492
11	2	77.7	19	1869.3		122596
12	3	93.3	19	1517.7	910.7	274853
13	2	80.4	19	1336.6		427416
14	1	66.2	19			581583
15	1	51.5	19			104303
16	2	67.5	19	1352.5		256366
17	2	73	19	1732		408672
18	3	87.2	19	1189.8	1836.8	559548
19	3	83.4	19	983.6	1446.6	85113

Radar Type 5_Trial 19

Trial Number:	19			VSG Freqency(MHz):		5494.5915
Number of Bursts in Trial:	10			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	54.4	7			453323
2	2	83	7	1637		742838
3	3	91.4	7	1474.6	1186.6	1032362
4	1	57.8	7			126692
5	2	79.9	7	1592.1		416647
6	3	94.1	7	1905.9	1184.9	706212
7	2	71.1	7	1878.9		997026
8	3	92.3	7	1799.7	1292.7	90626
9	2	78.4	7	1408.6		381140
10	3	90	7	1670	1701	670238

Radar Type 5_Trial 20

Trial Number:	20			VSG Freqency(MHz):		5496.9915
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	66.1	13			687291
2	2	82.1	13	1857.9		39223
3	3	90.6	13	1673.4	1210.4	245904
4	1	59.1	13			454178
5	3	91.4	13	1138.6	1647.6	659373
6	2	77.3	13	1791.7		13715
7	1	57.1	13			221198
8	1	52.2	13			428848
9	2	67.6	13	1154.4		635505
10	1	53.9	13			844207
11	3	95.8	13	1093.2	1780.2	194888
12	2	80.5	13	1915.5		402287
13	3	92.2	13	1013.8	1830.8	608896
14	2	81.1	13	1744.9		816285

Radar Type 5_Trial 21

Trial Number:	21			VSG Freqency(MHz):		5523.4085
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	86.7	12	1675.3	1844.3	182467
2	1	51.7	12			406544
3	3	85.3	12	1456.7	1037.7	628364
4	3	83.5	12	1556.5	1046.5	851151
5	1	57.3	12			155687
6	1	55.2	12			379167
7	3	90.3	12	1895.7	1522.7	600387
8	1	55.8	12			826085
9	1	62.9	12			128160
10	3	96.2	12	1545.8	1209.8	350547
11	1	58.2	12			574984
12	3	95.1	12	1656.9	1458.9	795566
13	2	71.3	12	1877.7		100491

Radar Type 5_Trial 22

Trial Number:	22			VSG Freqency(MHz):		5525.4085
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	53.6	7			468582
2	3	98.7	7	1889.3	1143.3	789407
3	3	99.6	7	1343.4	1312.4	1111748
4	1	56	7			105687
5	2	77.5	7	1293.5		428293
6	3	98.9	7	1274.1	1004.1	750482
7	1	65.2	7			1074354
8	1	51.6	7			65890
9	1	55.4	7			388998

Radar Type 5_Trial 23

Trial Number:	23			VSG Freqency(MHz):		5523.0085
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	87.2	13	976.8	1182.8	456222
2	3	84.1	13	1371.9	1726.9	662502
3	3	89	13	967	1039	16717
4	3	88.9	13	1357.1	1738.1	223331
5	3	94.5	13	986.5	1466.5	430680
6	1	65.2	13			639436
7	1	55.4	13			846981
8	2	83.2	13	1070.8		198521
9	3	87.7	13	1173.3	1039.3	404915
10	2	74	13	1161		612568
11	3	90.8	13	1506.2	1882.2	817524
12	1	60.3	13			173201
13	2	71.1	13	1801.9		379951
14	2	78.1	13	1777.9		587132

Radar Type 5_Trial 24

Trial Number:	24			VSG Freqency(MHz):	5523.8085	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	58.8	11			856587
2	3	87.7	11	1491.3	1450.3	158431
3	3	85	11	1345	1336	381373
4	2	73.1	11	1582.9		604827
5	3	99.7	11	949.3	1372.3	827314
6	1	60.2	11			131379
7	2	69.2	11	1913.8		354215
8	3	94.4	11	1898.6	1169.6	576540
9	1	50.9	11			802360
10	3	96.4	11	1332.6	1767.6	103505
11	1	56	11			327585
12	1	53.5	11			550800
13	1	53.5	11			774253

Radar Type 5_Trial 25

Trial Number:	25			VSG Freqency(MHz):	5521.8085	
Number of Bursts in Trial:	17			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	68	16	1699		58267
2	3	98	16	981	1380	228326
3	2	68.2	16	1687.8		398813
4	2	81.7	16	1280.3		570087
5	2	76.9	16	1744.1		37258
6	2	79.5	16	1206.5		207709
7	2	81.3	16	1084.7		378378
8	1	64.6	16			549911
9	1	51.1	16			16288
10	3	94.6	16	1633.4	1154.4	186405
11	2	68.5	16	1641.5		357224
12	1	60.8	16			528866
13	2	75	16	1493		697742
14	1	50.4	16			166097
15	2	79.7	16	1539.3		336250
16	1	58.4	16			507802
17	3	84.2	16	1458.8	1431.8	676043

Radar Type 5_Trial 26

Trial Number:	26			VSG Freqency(MHz):	5524.2085	
Number of Bursts in Trial:	12			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	54.2	10			205511
2	1	61	10			447775
3	2	82.5	10	1009.5		689367
4	2	70.6	10	1232.4		931205
5	3	90.8	10	1674.2	1636.2	175168
6	2	68.4	10	1916.6		417080
7	3	92.6	10	1744.4	1784.4	657633
8	2	75.7	10	1291.3		900689
9	1	65.6	10			145963
10	3	91.4	10	1473.6	1019.6	387034
11	3	86.2	10	1224.8	1531.8	628615
12	3	92.8	10	1855.2	1312.2	869468

Radar Type 5_Trial 27

Trial Number:	27			VSG Freqency(MHz):		5522.6085
Number of Bursts in Trial:	15			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	83.1	14	1483.9		92710
2	3	92.6	14	1705.4	1506.4	285381
3	2	82.9	14	1601.1		478875
4	3	91	14	935	1252	671881
5	1	61.7	14			68990
6	3	87.4	14	931.6	936.6	261939
7	3	85.3	14	1581.7	958.7	454720
8	2	69.4	14	1080.6		649017
9	3	92.3	14	1066.7	1366.7	45024
10	1	63.8	14			238778
11	2	80.9	14	1766.1		431503
12	3	89.8	14	1884.2	1616.2	623037
13	1	63.4	14			21285
14	1	57.7	14			215068
15	3	93.2	14	1870.8	1865.8	406865

Radar Type 5_Trial 28

Trial Number:	28			VSG Freqency(MHz):		5526.2085
Number of Bursts in Trial:	8			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	66.5	5			1130152
2	1	62.3	5			1493868
3	2	74.6	5	1573.4		358181
4	1	59.8	5			721861
5	3	89.5	5	1555.5	1249.5	1083093
6	3	85.9	5	1311.1	1756.1	1446033
7	2	66.7	5	1397.3		313511
8	3	92.1	5	1374.9	1126.9	676008

Radar Type 5_Trial 29

Trial Number:	29			VSG Freqency(MHz):		5525.8085
Number of Bursts in Trial:	8			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	95	6	1799	1886	1038009
2	2	71	6	1447		1402462
3	2	83	6	1262		268919
4	2	77.3	6	940.7		632072
5	2	79.5	6	1108.5		995039
6	2	75.7	6	966.3		1358052
7	1	55.9	6			224291
8	1	61.3	6			587763

Radar Type 5_Trial 30

Trial Number:	30			VSG Freqency(MHz):		5525.0085
Number of Bursts in Trial:	10			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	88.1	8	1827.9	1810.9	758285
2	3	95.2	8	1441.8	1525.8	1048432
3	2	71.9	8	1067.1		143532
4	2	68	8	1477		433771
5	1	51.9	8			725019
6	3	85.6	8	1159.4	1500.4	1013071
7	2	69.9	8	1077.1		107668
8	1	63.3	8			398642
9	1	63.1	8			689270
10	3	94.4	8	1609.6	1429.6	977450

Frequency Hopping Radar Test Waveforms

Radar Type 6

Trial	Pulse Width	PRI	Pulses per Hop	Hopping Rate	Hopping Sequence Length	Successful Detection
	(µsec)	(µsec)		(kHz)	(msec)	(Yes/No)
1	1	333	9	0.333	300	No
2	1	333	9	0.333	300	Yes
3	1	333	9	0.333	300	No
4	1	333	9	0.333	300	Yes
5	1	333	9	0.333	300	Yes
6	1	333	9	0.333	300	Yes
7	1	333	9	0.333	300	Yes
8	1	333	9	0.333	300	Yes
9	1	333	9	0.333	300	No
10	1	333	9	0.333	300	Yes
11	1	333	9	0.333	300	Yes
12	1	333	9	0.333	300	Yes
13	1	333	9	0.333	300	Yes
14	1	333	9	0.333	300	Yes
15	1	333	9	0.333	300	Yes
16	1	333	9	0.333	300	No
17	1	333	9	0.333	300	No
18	1	333	9	0.333	300	Yes
19	1	333	9	0.333	300	Yes
20	1	333	9	0.333	300	Yes
21	1	333	9	0.333	300	Yes
22	1	333	9	0.333	300	Yes
23	1	333	9	0.333	300	No
24	1	333	9	0.333	300	No
25	1	333	9	0.333	300	No
26	1	333	9	0.333	300	Yes
27	1	333	9	0.333	300	Yes
28	1	333	9	0.333	300	Yes
29	1	333	9	0.333	300	Yes
30	1	333	9	0.333	300	Yes

< Channel Bandwidth 80MHz / 5530 MHz >

Short Pulse Radar Test Waveforms

Radar Type 1

Trial	VSG Freqency (MHz)	Pulse Repetition Frequency Number (1 to 23)	Pulse Repetition Frequency (Pulses Per Second)	PRI (msec)	Test A/B A/B	Successful Detection (Yes/No)
1	5530	18	1165.5	858	A	Yes
2	5530	5	1672.2	598	A	Yes
3	5530	10	1432.7	698	A	Yes
4	5530	12	1355	738	A	Yes
5	5530	4	1730.1	578	A	Yes
6	5530	3	1792.1	558	A	Yes
7	5530	19	1139	878	A	Yes
8	5530	13	1319.3	758	A	Yes
9	5530	17	1193.3	838	A	Yes
10	5530	2	1858.7	538	A	Yes
11	5530	20	1113.6	898	A	Yes
12	5530	11	1392.8	718	A	Yes
13	5530	9	1474.9	678	A	Yes
14	5530	1	1930.5	518	A	Yes
15	5530	7	1567.4	638	A	Yes
16	5530	-	813	1230	B	Yes
17	5530	-	585.1	1709	B	Yes
18	5530	-	684.5	1461	B	Yes
19	5530	-	795.5	1257	B	Yes
20	5530	-	1029.9	971	B	Yes
21	5530	-	784.9	1274	B	Yes
22	5530	-	489.7	2042	B	Yes
23	5530	-	401.8	2489	B	Yes
24	5530	-	428.4	2334	B	Yes
25	5530	-	686.3	1457	B	Yes
26	5530	-	1538.5	650	B	Yes
27	5530	-	377.4	2650	B	Yes
28	5530	-	1201.9	832	B	Yes
29	5530	-	456	2193	B	Yes
30	5530	-	555.9	1799	B	Yes

Radar Type 2

Trial	VSG Freqency (MHz)	Number Pulses per Burst (23-29)	Pulse Width (1-5)	PRI (150-230)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5530	27	3.3	163	Yes
2	5530	28	4.3	204	Yes
3	5530	28	4	225	Yes
4	5530	26	2.9	156	Yes
5	5530	23	1	205	Yes
6	5530	23	1	188	Yes
7	5530	26	3	189	Yes
8	5530	28	4.3	217	Yes
9	5530	25	2.2	190	Yes
10	5530	29	4.6	187	Yes
11	5530	27	3.6	186	Yes
12	5530	29	4.7	179	Yes
13	5530	26	2.8	167	Yes
14	5530	28	4	151	Yes
15	5530	26	2.9	202	Yes
16	5530	29	5	213	Yes
17	5530	28	4.3	164	Yes
18	5530	25	2.6	150	Yes
19	5530	26	3.1	159	Yes
20	5530	29	4.8	154	Yes
21	5530	23	1.3	210	Yes
22	5530	26	2.9	169	Yes
23	5530	25	2.4	175	Yes
24	5530	25	2.5	185	Yes
25	5530	26	3.3	218	Yes
26	5530	23	1.3	212	No
27	5530	25	2.6	158	Yes
28	5530	23	1.4	181	Yes
29	5530	23	1.3	201	No
30	5530	28	4.4	166	Yes

Radar Type 3

Trial	VSG Freqency (MHz)	Number Pulses per Burst (16-18)	Pulse Width (6-10)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5530	17	8.3	251	No
2	5530	18	9.3	297	No
3	5530	18	9	428	Yes
4	5530	17	7.9	223	Yes
5	5530	16	6	252	Yes
6	5530	16	6	476	Yes
7	5530	17	8	484	Yes
8	5530	18	9.3	446	Yes
9	5530	16	7.2	442	No
10	5530	18	9.6	221	Yes
11	5530	17	8.6	334	No
12	5530	18	9.7	471	Yes
13	5530	17	7.8	423	Yes
14	5530	18	9	211	Yes
15	5530	17	7.9	239	Yes
16	5530	18	10	410	Yes
17	5530	18	9.3	318	Yes
18	5530	17	7.6	411	Yes
19	5530	17	8.1	288	Yes
20	5530	18	9.8	393	Yes
21	5530	16	6.3	309	Yes
22	5530	17	7.9	257	No
23	5530	17	7.4	314	Yes
24	5530	17	7.5	396	Yes
25	5530	17	8.3	384	No
26	5530	16	6.3	230	Yes
27	5530	17	7.6	360	No
28	5530	16	6.4	482	No
29	5530	16	6.3	317	Yes
30	5530	18	9.4	217	Yes

Radar Type 4

Trial	VSG Freqency (MHz)	Number Pulses per Burst (12-16)	Pulse Width (11-20)	PRI (200-500)	Successful Detection
			(µs)	(µs)	(Yes/No)
1	5530	14	16.2	251	Yes
2	5530	16	18.5	297	Yes
3	5530	15	17.6	428	Yes
4	5530	14	15.3	223	Yes
5	5530	12	11	252	Yes
6	5530	12	11.1	476	Yes
7	5530	14	15.6	484	Yes
8	5530	16	18.3	446	No
9	5530	13	13.7	442	No
10	5530	16	19.1	221	Yes
11	5530	15	16.9	334	Yes
12	5530	16	19.2	471	No
13	5530	14	15	423	Yes
14	5530	15	17.7	211	Yes
15	5530	14	15.2	239	Yes
16	5530	16	20	410	No
17	5530	16	18.5	318	No
18	5530	14	14.7	411	Yes
19	5530	14	15.7	288	Yes
20	5530	16	19.6	393	Yes
21	5530	12	11.7	309	Yes
22	5530	14	15.2	257	No
23	5530	13	14.2	314	Yes
24	5530	13	14.4	396	Yes
25	5530	14	16.1	384	Yes
26	5530	12	11.7	230	Yes
27	5530	13	14.6	360	Yes
28	5530	12	12	482	Yes
29	5530	12	11.8	317	Yes
30	5530	16	18.5	217	Yes

Long Pulse Radar Test Waveforms

Radar Type 5_Trial 1

Trial Number:	1	VSG Freqency(MHz):	5530
Number of Bursts in Trial:	15	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	78.9	14	1792.1		653527
2	3	91.5	14	1682.5	1223.5	50203
3	3	86.8	14	1267.2	1878.2	242923
4	2	73.8	14	1356.2		437159
5	1	50.4	14			631625
6	1	50.6	14			26565
7	2	75.4	14	1045.6		220040
8	3	90.7	14	1892.3	1810.3	411732
9	1	64.8	14			607579
10	3	95.1	14	1801.9	1246.9	2691
11	2	82.5	14	1694.5		196025
12	3	95.4	14	952.6	1580.6	388505
13	2	72.3	14	1691.7		582383
14	3	87	14	933	1656	775144
15	2	73.4	14	1691.6		172074

Radar Type 5_Trial 2

Trial Number:	2	VSG Freqency(MHz):	5530
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	99.8	18	1452.2	1703.2	303452
2	3	91.3	18	925.7	1150.7	464689
3	2	70.5	18	1383.5		625913
4	2	76.1	18	1162.9		123690
5	3	97.4	18	1459.6	1871.6	283450
6	1	54	18			446297
7	2	73.3	18	1130.7		606454
8	2	67.9	18	1368.1		103793
9	2	69.2	18	1441.8		264732
10	2	78.1	18	1670.9		425747
11	1	54.3	18			587817
12	2	69.9	18	1656.1		83821
13	1	55.6	18			245571
14	1	54.5	18			406526
15	3	91.7	18	1353.3	1830.3	565512
16	1	53.7	18			64223
17	1	57.2	18			225458
18	3	96.4	18	1727.6	1125.6	385003

Radar Type 5_Trial 3

Trial Number:	3	VSG Freqency(MHz):	5530
Number of Bursts in Trial:	17	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	77.7	16	1806.3		578941
2	3	85.8	16	1005.2	1610.2	46780
3	3	95.5	16	1499.5	910.5	216888
4	2	72.4	16	1673.6		387413
5	3	85.7	16	1103.3	1908.3	556883
6	3	94	16	1408	1213	25814
7	2	77	16	1728		196190
8	2	73.5	16	1219.5		366859
9	2	78.4	16	1715.6		536773
10	3	94.6	16	1373.4	1477.4	4857
11	3	98	16	1305	1011	175089
12	2	75.9	16	1052.1		345965
13	3	88.3	16	1053.7	1831.7	515278
14	3	98.5	16	969.5	1097.5	686094
15	1	58	16			154702
16	2	81.2	16	1716.8		324794
17	1	56.3	16			496031

Radar Type 5_Trial 4

Trial Number:	4			VSG Freqency(MHz):		5530
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	56.8	12			810107
2	2	76	12	1053		162071
3	3	88.7	12	911.3	1854.3	368621
4	1	58.2	12			577684
5	1	57.5	12			784633
6	1	55.6	12			136742
7	2	73.5	12	1094.5		343897
8	2	67.5	12	1858.5		550467
9	3	95.7	12	1391.3	965.3	757106
10	3	96.1	12	1263.9	1292.9	110813
11	2	80.7	12	1097.3		318220
12	2	69.8	12	1298.2		525607
13	3	86.1	12	1226.9	1584.9	730844
14	2	73.2	12	937.8		85523

Radar Type 5_Trial 5

Trial Number:	5			VSG Freqency(MHz):		5530
Number of Bursts in Trial:	8			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	91.4	5	1357.6	1329.6	512556
2	2	75.3	5	1286.7		876312
3	3	99	5	998	1454	1238489
4	3	94.7	5	1141.3	1289.3	105025
5	1	51.1	5			468600
6	2	77.9	5	1773.1		831072
7	2	77.4	5	1745.6		1194122
8	1	55.6	5			60452

Radar Type 5_Trial 6

Trial Number:	6			VSG Freqency(MHz):		5530
Number of Bursts in Trial:	8			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	76.6	5	1422.4		423536
2	3	99.1	5	1404.9	1095.9	785821
3	2	73.9	5	1326.1		1149639
4	2	75.6	5	1676.4		15650
5	2	78.7	5	995.3		378863
6	2	70	5	1660		741913
7	3	93.4	5	1375.6	1544.6	1103343
8	3	89.9	5	1572.1	1085.1	1466319

Radar Type 5_Trial 7

Trial Number:	7			VSG Freqency(MHz):		5530
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	55.9	13			190875
2	1	61.9	13			398509
3	2	74.4	13	1123.6		604894
4	3	98.2	13	1618.8	1125.8	810572
5	3	84.9	13	1650.1	1756.1	164659
6	2	77.7	13	1841.3		371850
7	2	68.5	13	1225.5		579660
8	3	88.1	13	1164.9	1073.9	785348
9	2	70.2	13	936.8		139596
10	2	80.2	13	981.8		346695
11	2	71.9	13	1434.1		554098
12	1	54.8	13			762023
13	3	90	13	1160	1266	113938
14	3	97.9	13	969.1	1430.1	320841

Radar Type 5_Trial 8

Trial Number:	8	VSG Freqency(MHz):	5530
Number of Bursts in Trial:	18	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	96.4	18	1375.6	1796.6	409181
2	1	53.7	18			573170
3	3	92.3	18	1463.7	1638.7	68612
4	2	71.4	18	953.6		229759
5	1	56.6	18			391402
6	1	50.6	18			552989
7	3	89.3	18	1127.7	1457.7	48860
8	1	53.7	18			210371
9	1	56.8	18			371690
10	1	53.3	18			533266
11	2	79	18	1336		29119
12	1	51.2	18			190402
13	3	99.5	18	1700.5	1235.5	349990
14	3	89.7	18	1779.3	1032.3	510722
15	3	84.4	18	1806.6	1356.6	9265
16	2	81.9	18	1379.1		170199
17	2	76.9	18	983.1		331442
18	1	53.5	18			493624

Radar Type 5_Trial 9

Trial Number:	9	VSG Freqency(MHz):	5530
Number of Bursts in Trial:	11	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	74.2	9	1261.8		1070959
2	1	55.8	9			246823
3	3	90.1	9	1886.9	1883.9	509052
4	2	68.8	9	1574.2		774177
5	3	95.4	9	1069.6	1089.6	1037016
6	3	88	9	1899	1278	213794
7	3	88.3	9	1781.7	1257.7	477193
8	1	63.6	9			743012
9	1	56.7	9			1007181
10	1	60.9	9			181812
11	2	74.5	9	1530.5		445456

Radar Type 5_Trial 10

Trial Number:	10			VSG Freqency(MHz):		5530
Number of Bursts in Trial:	19			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	71	19	1590		409766
2	1	55.9	19			563947
3	2	72.5	19	1222.5		86147
4	1	65.6	19			239281
5	2	78.7	19	1921.3		390525
6	1	52.7	19			545098
7	2	70.1	19	1292.9		67331
8	3	83.4	19	1142.6	1537.6	219493
9	1	57.2	19			373138
10	1	63.3	19			525781
11	3	92.8	19	1521.2	982.2	48522
12	1	50.6	19			201356
13	1	52.2	19			354405
14	1	55	19			506806
15	2	71.1	19	1189.9		29817
16	2	69.1	19	1068.9		182294
17	3	83.7	19	1490.3	965.3	334058
18	2	78.2	19	1909.8		486742
19	2	78.9	19	1186.1		11020

Radar Type 5_Trial 11

Trial Number:	11			VSG Freqency(MHz):		5498.0455
Number of Bursts in Trial:	16			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	53.6	15			194565
2	3	88.3	15	1248.7	1627.7	374615
3	1	53.2	15			557990
4	2	68.4	15	1783.6		737153
5	2	80.7	15	1199.3		171969
6	3	84.1	15	980.9	1398.9	352745
7	1	57.8	15			535693
8	2	77.5	15	1460.5		715670
9	1	58.3	15			149840
10	1	54.3	15			331382
11	2	83.2	15	1414.8		511682
12	3	93	15	1708	984	691782
13	3	93.9	15	1435.1	1830.1	126963
14	2	78.3	15	1767.7		308271
15	2	79.3	15	976.7		489748
16	3	85.9	15	1472.1	1441.1	669750

Radar Type 5_Trial 12

Trial Number:	12			VSG Freqency(MHz):	5499.6455	
Number of Bursts in Trial:	19			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	97.4	19	1678.6	1094.6	88101
2	1	56.5	19			241230
3	3	85.6	19	1377.4	1698.4	392012
4	2	70.8	19	1742.2		545321
5	3	86.9	19	965.1	1636.1	69461
6	1	64.3	19			222415
7	3	98.5	19	1248.5	1124.5	373713
8	2	69.7	19	1372.3		526587
9	3	90.2	19	1267.8	1169.8	50715
10	2	81.4	19	1311.6		203226
11	1	55.2	19			356583
12	3	87.9	19	1398.1	1580.1	506859
13	1	63.7	19			32080
14	2	74.3	19	1814.7		184213
15	2	68.8	19	1137.2		337293
16	1	54.6	19			490784
17	3	85.5	19	1632.5	1671.5	13202
18	2	77.8	19	1265.2		165774
19	1	57.3	19			318944

Radar Type 5_Trial 13

Trial Number:	13	VSG Freqency(MHz):	5496.8455
Number of Bursts in Trial:	13	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	86.2	12	1582.8	1236.8	687817
2	2	67.7	12	1234.3		912342
3	3	87.6	12	1128.4	953.4	214860
4	3	91.9	12	1649.1	1905.1	437096
5	2	81.5	12	1833.5		661118
6	2	70.8	12	1443.2		884543
7	2	75.2	12	1191.8		187504
8	1	61.8	12			411333
9	2	79.1	12	1830.9		633546
10	2	74.1	12	1653.9		857161
11	2	70.3	12	1488.7		160138
12	3	98.9	12	1693.1	1611.1	382366
13	2	72.3	12	1478.7		606405

Radar Type 5_Trial 14

Trial Number:	14			VSG Freqency(MHz):	5498.4455	
Number of Bursts in Trial:	17			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	72.9	16	1257.1		633588
2	2	69.2	16	1817.8		101295
3	2	73.7	16	1170.3		272023
4	1	62.6	16			443059
5	3	98.2	16	1102.8	1717.8	611506
6	1	57.3	16			80431
7	3	92	16	1310	1303	250125
8	3	89.4	16	1215.6	1497.6	420437
9	3	89.9	16	1369.1	915.1	591222
10	3	83.6	16	1722.4	979.4	59158
11	2	78.3	16	961.7		229752
12	3	99.3	16	1790.7	1602.7	399016
13	2	78.9	16	1126.1		571312
14	2	69.9	16	1438.1		38290
15	1	63.8	16			209184
16	3	84.1	16	1603.9	1305.9	378347
17	3	85.5	16	1253.5	1503.5	548427

Radar Type 5_Trial 15

Trial Number:	15			VSG Freqency(MHz):		5496.8455
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	78.5	12	1290.5		21024
2	1	57.5	12			228609
3	1	66.1	12			435956
4	2	71	12	1342		642677
5	3	93.2	12	1053.8	1138.8	848462
6	2	68.2	12	1398.8		202726
7	1	59.8	12			410648
8	1	64.6	12			618124
9	1	54	12			825395
10	3	100	12	1081	1683	176744
11	1	61.7	12			385011
12	1	52.4	12			592150
13	2	69.4	12	1102.6		799036
14	3	95.6	12	1327.4	1780.4	151364

Radar Type 5_Trial 16

Trial Number:	16	VSG Freqency(MHz):	5500.0455
Number of Bursts in Trial:	20	Successful Detection:	Yes

Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	69.8	20	1745.2		250638
2	2	82.6	20	1044.4		395765
3	2	82.9	20	1171.1		540217
4	1	65	20			88377
5	3	94.6	20	1209.4	949.4	232549
6	1	50.5	20			378666
7	1	56.2	20			523603
8	1	56.5	20			70428
9	2	78.1	20	1900.9		214762
10	3	85.9	20	1751.1	997.1	358956
11	2	67.9	20	1629.1		504247
12	3	96.4	20	979.6	1641.6	52374
13	3	84.1	20	1891.9	1408.9	196707
14	1	59.2	20			342980
15	3	92.7	20	1685.3	1292.3	485584
16	1	52.6	20			34715
17	1	50.8	20			179777
18	1	61.4	20			325155
19	2	77.7	20	1167.3		469082
20	3	93.7	20	1677.3	1780.3	16737

Radar Type 5_Trial 17

Trial Number:	17			VSG Freqency(MHz):		5499.2455
Number of Bursts in Trial:	18			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	95.7	18	1615.3	1789.3	179146
2	1	62.8	18			341288
3	2	82.8	18	1412.2		501326
4	1	51.3	18			663629
5	2	79.8	18	1565.2		159766
6	1	50.9	18			321318
7	1	63.9	18			483084
8	3	98	18	1360	1402	640865
9	3	94.1	18	1521.9	1724.9	139635
10	1	57.3	18			301770
11	2	80.2	18	1148.8		462349
12	3	86.9	18	1018.1	1162.1	622458
13	2	70.4	18	1834.6		120024
14	3	88.1	18	1699.9	1194.9	280331
15	1	58.4	18			443001
16	2	66.7	18	1585.3		602657
17	3	96.1	18	1009.9	1849.9	100111
18	1	54.9	18			261981

Radar Type 5_Trial 18

Trial Number:	18			VSG Freqency(MHz):	5496.4455	
Number of Bursts in Trial:	13			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	69.2	11	1186.8		585557
2	3	83.5	11	1338.5	1157.5	807113
3	2	79.2	11	1296.8		111635
4	2	71.9	11	1355.1		334897
5	2	79.4	11	1110.6		558001
6	2	80.2	11	1171.8		781275
7	1	53	11			84250
8	3	96.8	11	1115.2	1776.2	306634
9	3	84.2	11	1456.8	1007.8	529715
10	1	50.5	11			754756
11	2	72	11	1512		56647
12	1	51.4	11			280213
13	3	99.1	11	1544.9	1025.9	502430

Radar Type 5_Trial 19

Trial Number:	19			VSG Freqency(MHz):		5497.2455
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	1	50.3	13			675111
2	2	74.8	13	1869.2		27037
3	2	75.8	13	1922.2		234029
4	3	100	13	1695	1517	440310
5	1	57	13			649379
6	3	99.8	13	972.2	1216.2	1539
7	2	81.5	13	1101.5		208670
8	3	85.2	13	1022.8	1885.8	415106
9	3	93.7	13	995.3	1534.3	622328
10	3	86.6	13	1373.4	1501.4	828647
11	1	58.2	13			183492
12	1	62.4	13			391012
13	2	70.7	13	993.3		597745
14	1	55.6	13			806285

Radar Type 5_Trial 20

Trial Number:	20			VSG Freqency(MHz):	5500.0455	
Number of Bursts in Trial:	20			Successful Detection:	Yes	
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	81	20	1086		110183
2	2	75.9	20	1785.1		254716
3	3	96	20	1252	1571	398846
4	1	50.8	20			546206
5	2	75.9	20	1773.1		92251
6	1	56.5	20			237599
7	3	96	20	1603	1075	381147
8	3	92.3	20	1745.7	1252.7	524877
9	3	94.3	20	1854.7	1304.7	74325
10	1	64.4	20			219750
11	2	73.7	20	1089.3		364490
12	3	83.5	20	946.5	1340.5	507697
13	1	52.5	20			56869
14	3	98.3	20	970.7	1848.7	200916
15	2	83	20	975		346550
16	2	66.8	20	1423.2		490677
17	1	63.4	20			38928
18	2	76	20	1349		183748
19	3	92.7	20	1571.3	1533.3	327620
20	1	58.2	20			474583

Radar Type 5_Trial 21

Trial Number:	21			VSG Freqency(MHz):		5565.5545
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	79.9	6	1595.1		46826
2	1	62.1	6			369988
3	3	94.6	6	955.4	1826.4	691302
4	3	88.2	6	1142.8	1602.8	1013799
5	1	51.4	6			7115
6	2	66.9	6	1082.1		329768
7	1	64.5	6			653210
8	2	69.8	6	1732.2		974535
9	2	75.5	6	1205.5		1297914

Radar Type 5_Trial 22

Trial Number:	22			VSG Freqency(MHz):		5563.1545
Number of Bursts in Trial:	14			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	3	96.9	12	1514.1	1091.1	185857
2	2	71	12	1251		393484
3	1	59.5	12			601558
4	1	58.6	12			808773
5	2	74.6	12	1305.4		160668
6	2	72	12	952		368053
7	2	70.9	12	1250.1		575160
8	3	88.2	12	1839.8	1125.8	780315
9	3	99.7	12	1506.3	1725.3	134922
10	3	96.1	12	984.9	1027.9	341861
11	3	94.9	12	1752.1	1357.1	548004
12	1	53.1	12			757907
13	1	58.1	12			109906
14	2	80.5	12	1799.5		316654

Radar Type 5_Trial 23

Trial Number:	23			VSG Freqency(MHz):		5563.9545
Number of Bursts in Trial:	12			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	1	61.4	10			612517
2	2	76.3	10	1532.7		853585
3	2	73.6	10	1662.4		98227
4	3	97.3	10	1130.7	1467.7	339738
5	2	83.3	10	1581.7		581764
6	1	52.2	10			825081
7	2	76.9	10	1290.1		68412
8	2	73.1	10	1013.9		310277
9	2	82.3	10	1725.7		551634
10	2	69.8	10	1716.2		793794
11	1	62.5	10			38710
12	2	75.7	10	1010.3		280644

Radar Type 5_Trial 24

Trial Number:	24			VSG Freqency(MHz):		5563.5545
Number of Bursts in Trial:	12			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	68.9	11	1854.1		521865
2	2	81.3	11	1279.7		764308
3	1	57.8	11			8867
4	3	99.5	11	1510.5	1585.5	250188
5	1	59	11			493150
6	3	92.1	11	1047.9	1893.9	733284
7	2	76.2	11	1467.8		975804
8	2	66.7	11	1261.3		220991
9	3	97.4	11	1665.6	1165.6	461867
10	3	93.5	11	990.5	1080.5	704281
11	1	64.2	11			947596
12	2	74.8	11	1884.2		190960

Radar Type 5_Trial 25

Trial Number:	25			VSG Freqency(MHz):		5562.7545
Number of Bursts in Trial:	15			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	78	13	1092		346364
2	2	76.2	13	1912.8		539337
3	1	62.1	13			734004
4	2	78.6	13	1128.4		128987
5	1	63.8	13			322992
6	2	79.9	13	1875.1		515372
7	3	97.9	13	1289.1	1869.1	707622
8	1	55.1	13			105282
9	2	71.8	13	1112.2		298621
10	2	81.6	13	1657.4		491723
11	2	83.2	13	967.8		685785
12	1	61.9	13			81521
13	2	77.9	13	1036.1		274834
14	2	69.7	13	1911.3		467646
15	2	81.3	13	1226.7		661559

Radar Type 5_Trial 26

Trial Number:	26			VSG Freqency(MHz):		5565.5545
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	67.5	6	1246.5		96006
2	3	98.7	6	1463.3	1759.3	418078
3	2	73.7	6	1481.3		741337
4	3	88.7	6	1203.3	1565.3	1062958
5	3	89.7	6	1013.3	1597.3	56204
6	3	96.2	6	1532.8	1072.8	378515
7	3	98.9	6	1519.1	1719.1	700394
8	1	53.1	6			1025049
9	3	89.6	6	1576.4	953.4	16500

Radar Type 5_Trial 27

Trial Number:	27			VSG Freqency(MHz):		5563.5545
Number of Bursts in Trial:	13			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	80.4	11	1085.6		234538
2	1	50.2	11			458575
3	3	87.1	11	1510.9	1071.9	679747
4	1	52.7	11			905139
5	2	77	11	1011		207123
6	3	91.5	11	1397.5	1888.5	429490
7	2	83.2	11	1748.8		652857
8	2	68	11	1030		877359
9	1	62	11			179918
10	3	98.8	11	1879.2	996.2	402059
11	2	69.2	11	1078.8		626176
12	1	57	11			850121
13	3	90.1	11	1346.9	994.9	152001

Radar Type 5_Trial 28

Trial Number:	28			VSG Freqency(MHz):		5565.5545
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	3	98.3	6	1005.7	1051.7	542105
2	1	59.3	6			866090
3	1	52.3	6			1189301
4	2	71.9	6	1248.1		180263
5	1	57.3	6			503522
6	1	53.9	6			826142
7	3	87.3	6	1185.7	1567.7	1146840
8	3	98.2	6	1170.8	1232.8	140330
9	3	96	6	1490	1214	462520

Radar Type 5_Trial 29

Trial Number:	29			VSG Freqency(MHz):		5565.5545
Number of Bursts in Trial:	9			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100) (µsec)	Chirp Width (5-20) (MHz)	Pulse 1-to-2 Spacing (µsec)	Pulse 2-to-3 Spacing (µsec)	Starting Location Within Interval (µsec)
1	2	71.6	6	1162.4		785881
2	3	89.4	6	1532.6	1714.6	1106617
3	1	60.7	6			100838
4	1	58.6	6			423987
5	2	68	6	1216		746103
6	2	73.6	6	1352.4		1068547
7	1	54.7	6			61047
8	2	74.5	6	1402.5		383483
9	2	78.7	6	1261.3		706410

Radar Type 5_Trial 30

Trial Number:	30			VSG Freqency(MHz):		5560.7545
Number of Bursts in Trial:	18			Successful Detection:		Yes
Burst (8-20)	Number Pulses per Burst (1-3)	Pulse Width (50-100)	Chirp Width (5-20)	Pulse 1-to-2 Spacing	Pulse 2-to-3 Spacing	Starting Location Within Interval
		(µsec)	(MHz)	(µsec)	(µsec)	(µsec)
1	2	79.1	18	1527.9		512995
2	2	73.1	18	1770.9		10578
3	2	72.5	18	1448.5		171439
4	3	98.3	18	1595.7	1192.7	331513
5	1	63.5	18			494600
6	3	92.9	18	944.1	1750.1	653072
7	3	95.1	18	1629.9	1772.9	151294
8	2	78.1	18	1100.9		313052
9	2	80.3	18	1518.7		473457
10	3	98.5	18	1808.5	1065.5	633336
11	1	65.2	18			132109
12	3	99.9	18	1765.1	1206.1	292335
13	2	79.1	18	1340.9		453620
14	1	50.4	18			615793
15	2	74.3	18	1607.7		111992
16	2	77.5	18	1334.5		272884
17	1	50.4	18			435260
18	1	64.3	18			596480

Frequency Hopping Radar Test Waveforms

Radar Type 6

Trial	Pulse Width	PRI	Pulses per Hop	Hopping Rate	Hopping Sequence Length	Successful Detection
	(µsec)	(µsec)		(kHz)	(msec)	(Yes/No)
1	1	333	9	0.333	300	Yes
2	1	333	9	0.333	300	Yes
3	1	333	9	0.333	300	Yes
4	1	333	9	0.333	300	Yes
5	1	333	9	0.333	300	Yes
6	1	333	9	0.333	300	Yes
7	1	333	9	0.333	300	No
8	1	333	9	0.333	300	No
9	1	333	9	0.333	300	Yes
10	1	333	9	0.333	300	Yes
11	1	333	9	0.333	300	Yes
12	1	333	9	0.333	300	Yes
13	1	333	9	0.333	300	No
14	1	333	9	0.333	300	Yes
15	1	333	9	0.333	300	Yes
16	1	333	9	0.333	300	No
17	1	333	9	0.333	300	Yes
18	1	333	9	0.333	300	Yes
19	1	333	9	0.333	300	Yes
20	1	333	9	0.333	300	Yes
21	1	333	9	0.333	300	Yes
22	1	333	9	0.333	300	Yes
23	1	333	9	0.333	300	Yes
24	1	333	9	0.333	300	No
25	1	333	9	0.333	300	Yes
26	1	333	9	0.333	300	Yes
27	1	333	9	0.333	300	Yes
28	1	333	9	0.333	300	No
29	1	333	9	0.333	300	No
30	1	333	9	0.333	300	Yes