# MX370073B DFS Radar Pattern Operation Manual

### **Second Edition**

- For safety and warning information, please read this manual before attempting to use the equipment.
- Additional safety and warning information is provided within the MG3710A Vector Signal Generator MG3740A Analog Signal Generator Operation Manual. Please also refer to it before using the equipment.
- Keep this manual with the equipment.

# **ANRITSU CORPORATION**

Document No.: M-W3986AE-2.0

# Safety Symbols

To prevent the risk of personal injury or loss related to equipment malfunction, Anritsu Corporation uses the following safety symbols to indicate safety-related information. Ensure that you clearly understand the meanings of the symbols BEFORE using the equipment. Some or all of the following symbols may be used on all Anritsu equipment. In addition, there may be other labels attached to products that are not shown in the diagrams in this manual.

### Symbols used in manual



### **DANGER**

This indicates a very dangerous procedure that could result in serious injury or death if not performed properly.



# WARNING

This indicates a hazardous procedure that could result in serious injury or death if not performed properly.



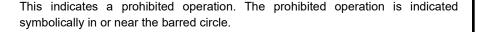
### **CAUTION**

This indicates a hazardous procedure or danger that could result in light-to-severe injury, or loss related to equipment malfunction, if proper precautions are not taken.

### Safety Symbols Used on Equipment and in Manual

The following safety symbols are used inside or on the equipment near operation locations to provide information about safety items and operation precautions. Ensure that you clearly understand the meanings of the symbols and take the necessary precautions BEFORE using the equipment.







This indicates an obligatory safety precaution. The obligatory operation is indicated symbolically in or near the circle.



This indicates a warning or caution. The contents are indicated symbolically in or near the triangle.







These indicate that the marked part should be recycled.

MX370073B **DFS Radar Pattern Operation Manual** 

13 December 2018 (First Edition)

31 October 2019 (Second Edition)

Copyright © 2018-2019, ANRITSU CORPORATION.

All rights reserved. No part of this manual may be reproduced without the prior written permission of the

The contents of this manual may be changed without prior notice.

Printed in Japan

# **Equipment Certificate**

Anritsu Corporation guarantees that this equipment was inspected at shipment and meets the published specifications.

# **Anritsu Warranty**

- During the warranty period, Anritsu Corporation will repair or exchange this software free-of-charge if it proves defective when used as described in the operation manual.
- The warranty period is 6 months from the purchase date.
- The warranty period after repair or exchange will remain 6 months from the original purchase date, or 30 days from the date of repair or exchange, depending on whichever is longer.
- This warranty does not cover damage to this software caused by Acts of God, natural disasters, and misuse or mishandling by the customer.

In addition, this warranty is valid only for the original equipment purchaser. It is not transferable if the equipment is resold.

Anritsu Corporation shall assume no liability for injury or financial loss of the customer due to the use of or a failure to be able to use this equipment.

# **Anritsu Corporation Contact**

In the event of this equipment malfunctions, contact an Anritsu Service and Sales office. Contact information can be found on the last page of the printed version of this manual, and is available in a separate file on the PDF version.

### Notes On Export Management

This product and its manuals may require an Export License/Approval by the Government of the product's country of origin for re-export from your country.

Before re-exporting the product or manuals, please contact us to confirm whether they are export-controlled items or not.

When you dispose of export-controlled items, the products/manuals need to be broken/shredded so as not to be unlawfully used for military purpose.

# Software End-User License Agreement (EULA)

Please read this Software End-User License Agreement (hereafter this EULA) carefully before using (includes executing, copying, registering, etc.) this software (includes programs, databases, scenarios, etc., used to operate, set, etc., Anritsu electronic equipment). By reading this EULA and using this software, you are agreeing to be bound by the terms of its contents and Anritsu Corporation (hereafter Anritsu) hereby grants you the right to use this Software with the Anritsu-specified equipment (hereafter Equipment) for the purposes set out in this EULA.

#### 1. Grant of License and Limitations

- 1. Regardless of whether this Software was purchased from or provided free-of-charge by Anritsu, you agree not to rent, lease, lend, or otherwise distribute this Software to third parties and further agree not to disassemble, recompile, reverse engineer, modify, or create derivative works of this Software.
- 2. You may make one copy of this Software for backup purposes only.
- 3. You are not permitted to reverse engineer this software.
- 4. This EULA allows you to install one copy of this Software on one piece of Equipment.

### 2. Disclaimers

To the extent not prohibited by law, in no event shall Anritsu be liable for personal injury, or any incidental, special, indirect or consequential damages whatsoever, including, without limitation, damages for loss of profits, loss of data, business interruption or any other commercial damages or losses, arising out of or related to your use or inability to use this Software.

### 3. Limitation of Liability

- a. If a fault (bug) is discovered in this Software, preventing operation as described in the operation manual or specifications whether or not the customer uses this software as described in the manual, Anritsu shall at its own discretion, fix the bug, or exchange the software, or suggest a workaround, free-of-charge. However, notwithstanding the above, the following items shall be excluded from repair and warranty.
  - If this Software is deemed to be used for purposes not described in the operation manual or specifications.
  - ii) If this Software is used in conjunction with other non-Anritsu-approved software.
  - iii) Recovery of lost or damaged data.
  - iv) If this Software or the Equipment has been modified, repaired, or otherwise altered without Anritsu's prior approval.
  - v) For any other reasons out of Anritsu's direct control and responsibility, such as but not limited to, natural disasters, software virus infections, etc.
- b. Expenses incurred for transport, hotel, daily allowance, etc., for on-site repairs by Anritsu engineers necessitated by the above faults shall be borne by you.
- c. The warranty period for faults listed in article 3a above covered by this EULA shall be either 6 months from the date of purchase of this Software or 30 days after the date of repair, whichever is longer.

### 4. Export Restrictions

You may not use or otherwise export or re-export directly or indirectly this Software except as authorized by Japanese and United States law. In particular, this software may not be exported or re-exported (a) into any Japanese or US embargoed countries or (b) to anyone on the Japanese or US Treasury Department's list of Specially Designated Nationals or the US Department of Commerce Denied Persons List or Entity List. By using this Software, you warrant that you are not located in any such country or on any such list. You also agree that you will not use this Software for any purposes prohibited by Japanese and US law, including, without limitation, the development, design and manufacture or production of missiles or nuclear, chemical or biological weapons of mass destruction.

#### 5. Termination

Anritsu shall deem this EULA terminated if you violate any conditions described herein. This EULA shall also be terminated if the conditions herein cannot be continued for any good reason, such as violation of copyrights, patents, or other laws and ordinances.

### 6. Reparations

If Anritsu suffers any loss, financial or otherwise, due to your violation of the terms of this EULA, Anritsu shall have the right to seek proportional damages from you.

### 7. Responsibility after Termination

Upon termination of this EULA in accordance with item 5, you shall cease all use of this Software immediately and shall as directed by Anritsu either destroy or return this Software and any backup copies, full or partial, to Anritsu.

#### 8. Dispute Resolution

If matters of dispute or items not covered by this EULA arise, they shall be resolved by negotiations in good faith between you and Anritsu.

#### 9. Court of Jurisdiction

This EULA shall be interpreted in accordance with Japanese law and any disputes that cannot be resolved by negotiation described in Article 8 shall be settled by the Japanese courts.

# Cautions Against Computer Virus Infection

- · Copying files and data
  - Only files that have been provided directly from Anritsu or generated using Anritsu equipment should be copied to the instrument.
  - All other required files should be transferred by means of USB or CompactFlash media after undergoing a thorough virus check.
- · Adding software
  - Do not download or install software that has not been specifically recommended or licensed by Anritsu.
- Network connections
  - Ensure that the network has sufficient anti-virus security protection in place.

## **About This Manual**

### ■ Associated Documents

The operation manual configuration of the MX370073B DFS Radar Pattern is shown below.

MG3710A/MG3710E Vector Signal Generator MG3740A Analog Signal Generator Operation Manual

MG3700A/MG3710A/MG3710E Vector Signal Generator MG3740A Analog Signal Generator Operation Manual (IQproducer™)

MX370073B DFS Radar Pattern Operation Manual

 MG3710A/MG3710E Vector Signal Generator MG3740A Analog Signal Generator Operation Manual

This describes basic operations, maintenance procedure, and remote functions.

 MG3700A/MG3710A/MG3710E Vector Signal Generator MG3740A Analog Signal Generator Operation Manual (IQproducer™)

This describes the functions and how to use the IQproducer, which is Windows software for the Signal Generator.

------

• MX370073B DFS Radar Pattern Operation Manual (This document)
This describes basic operations and functions of the DFS Radar Pattern.

### ■ Note about description

Long document names are shortened as below in this manual.

- MG3710A/MG3710E Vector Signal Generator MG3740A Analog Signal Generator Operation Manual
  - → MG3710A/MG3710E Operation Manual
- MG3700A/MG3710A/MG3710E Vector Signal Generator MG3740A
   Analog Signal Generator Operation Manual (IQproducer™)
  - → MG3710A/MG3710E IQproducer™

# **Table of Contents**

Chapter	1 Overview	1-1
1.1	Product overview	1-2
1.2	Product Composition	1-3
Chapter	2 How to Use Waveform Patterns	2-1
2.1	Preparing Waveform Pattern	2-2
2.2	Upgrading from MX370073A to MX370073B	2-7
Chapter	3 Normal Setup Screen	3-1
3.1	Waveform Pattern Type	3-2
3.2	Japan MIC standard DFS Waveform Pattern	3-7
3.3	FCC DFS Waveform Pattern	3-16
Append	ix A Waveform Pattern for	
	DFS Radar Test	<b>A-1</b>
Append	ix B Parameter of Waveform Patterr	n for
	DFS Radar Test	B-1

# Chapter 1 Overview

This chapter provides an overview of the MX370073B DFS Radar Pattern (hereafter "this waveform pattern").

1.1	Product Overview1-2	2
1.2	Product Composition1-3	3

### 1.1 Product Overview

MX370073B DFS Radar Pattern (hereafter "this waveform pattern") contains standard DFS waveform pattern conforming to the Japan MIC Standard (Reference: TELEC-T403 V14.0) and FCC06-96 (Released: June 30, 2006), FCC13-22 (Released: February 20, 2013) Dynamic Frequency Selection test.

Downloading this waveform pattern to the MG3710A/MG3710E Vector Signal Generator (hereafter MG3710A/MG3710E) supports generation of radar pattern signals used at Rx Dynamic Frequency Selection (DFS) tests.

Use of this waveform pattern requires a license corresponding to the serial number of the MG3710A/MG3710E using the pattern. When using this pattern on multiple MG3710A/MG3710E units, a license must be purchased for each MG3710A/MG3710E unit using this pattern.

# 1.2 Product Composition

Table 1.2-1 shows the composition of this waveform pattern product. At unpacking, check that all items listed in Table 1.2-1 are included. If any item is missing, contact your Anritsu sales representative immediately.

**Table 1.2-1 Product Composition** 

Items	Model/Symbol	Product name	Q'ty	Remarks
Main unit	MX370073B	DFS Radar Pattern	1	DVD-R Includes license file and operation manual

# Chapter 2 How to Use Waveform Patterns

The following operations are required to output MX370073B DFS Radar Pattern (hereafter "this waveform pattern") from the MG3710A/MG3710E:

- Transferring waveform pattern to internal hard disk
- Loading waveform patterns from the hard disk to the waveform memory
- Selecting a waveform pattern to be output from the MG3710A/MG3710E

This chapter explains the details of these operations.

2.1	Preparing Waveform Pattern		2-2
	2.1.1	Installing waveform license	2-2
	2.1.2	Transferring waveform pattern	
		to internal hard disk	2-3
	2.1.3	Loading to waveform memory	2-4
	2.1.4	Selecting waveform pattern	2-5
	2.1.5	Outputting waveform pattern again	2-6
2.2	Upgra	ding from MX370073A to MX370073B	2-7

# 2.1 Preparing Waveform Pattern

This section describes how to download a created waveform pattern to the hard disk of the MG3710A/MG3710E and output the pattern.

### 2.1.1 Installing waveform license

To load the waveform pattern to the memory, the license file corresponding to each pattern must be installed. Refer to the following for installation of the license file.

 MG3710A/MG3710E Operation Manual
 9.4.4 "Install", "Adding/deleting waveform licenses: Waveform Licenses"

### 2.1.2 Transferring waveform pattern to internal hard disk

There are two ways of transferring the waveform pattern created with this waveform pattern to the internal hard disk:

- LAN
- External device such as USB Memory
- $\blacksquare$  Transferring from PC to MG3710A/MG3710E via LAN Two IQproducer  $^{TM}$  tools can be used to transfer a waveform pattern to

#### • Transfer & Setting Wizard

the MG3710A/MG3710E via a LAN.

Start this wizard by clicking the **Transfer & Setting Wizard** button of IQproducer<sup>TM</sup> or by selecting **Simulation & Utility** tab  $\rightarrow$  **Transfer & Setting Wizard** from the IQproducer<sup>TM</sup> after creating a waveform pattern. For details, refer to 4.7 "File Transfer and Loading to Memory Using Transfer & Setting Wizard" in the *MG3710A/MG3710E IQproducer*<sup>TM</sup>.

Transferring a waveform pattern to the internal hard disk of the MG3710A/MG3710E, loading the waveform from the hard disk to the waveform memory, and then outputting the waveform pattern can be done using this wizard.

#### • Transfer & Setting Panel

This function is loaded by selecting **Transfer & Setting Panel** in the **Simulation & Utility** tab of the IQproducer<sup>TM</sup>. For details, refer to 5.2 "Transferring Waveform Pattern" in the MG3710A/MG3710E  $IQproducer^{TM}$ .

Specify the folder that contains the waveform pattern to transfer to the MG3710A/MG3710E in the PC-side tree of **Transfer & Setting Panel**.

Transferring via external device such as USB memory

For how to transfer a waveform pattern to the internal hard disk of the MG3710A/MG3710E, refer to 7.3.6 "Copying external waveform pattern: Copy" in the *MG3710A/MG3710E Operation Manual*.

### 2.1.3 Loading to waveform memory

To output a modulated signal using a waveform pattern, it is necessary to load the waveform pattern that was transferred to the internal hard disk of the MG3710A/MG3710E (described in 2.1.2 "Transferring waveform pattern to internal hard disk") to the waveform memory. A waveform pattern can be loaded into the waveform memory in the following two ways.

#### ■ Configuring using the MG3710A/MG3710E

A waveform pattern can be loaded into the waveform memory by using the instruction panel of the MG3710A/MG3710E or by using a remote command.

For operation using the front panel, refer below:

• MG3710A/MG3710E Operation Manual 7.3.4 "Loading waveform pattern: Load"

For operation using remote commands, refer below:

- MG3710A/MG3710E Operation Manual 7.3.4 "Loading waveform pattern: Load"
- Using Transfer & Setting Panel of IQproducer<sup>TM</sup>

A waveform pattern can be loaded from the LAN-connected PC to the memory by using **Transfer & Setting Panel**, which can be opened from the **Simulation & Utility** tab. For details, refer to 4.6 "File Transfer and Loading to Memory in Transfer & Setting Panel Screen" in the *MG3710A/MG3710E IQproducer<sup>TM</sup>*.

### 2.1.4 Selecting waveform pattern

Select a waveform pattern to use for modulation from the waveform patterns loaded into the waveform memory of the MG3710A/MG3710E according to 2.1.3 "Loading to waveform memory". A waveform pattern can be selected in the following two ways.

### ■ Configuring using the MG3710A/MG3710E

Waveform patterns to be used for modulation can be selected by using the instruction panel of the MG3710A/MG3710E or by using a remote command.

For operation using the front panel, refer below:

MG3710A/MG3710E Operation Manual
 7.3.5 "Selecting output waveform pattern: Select"

For operation using remote commands, refer below:

- MG3710A/MG3710E Operation Manual
   7.3.5 "Selecting output waveform pattern: Select"
- Using Transfer & Setting Panel of IQproducer<sup>TM</sup>

A waveform pattern can be loaded from the LAN-connected PC to the memory, and also selected for modulation. This is done by using Transfer & Setting Panel, which can be opened from the Simulation & Utility tab. For details, refer to 4.6 "File Transfer and Loading to Memory in Transfer & Setting Panel Screen" in the MG3710A/MG3710E  $IQproducer^{TM}$ .

# 2.1.5 Outputting waveform pattern again

Output starts as soon as a waveform pattern is selected. Use the following procedure to output the same waveform pattern again.

Press Restart (F8) in the ARB/Waveform function menu.

• Refer to "F8 Restart" in Table 7.3.1-2 in the MG3710A/MG3710E Operation Manual.

Waveform is also output by applying trigger.

• Refer to 7.3.8 "Start/Frame Trigger" in the MG3710A/MG3710E Operation Manual.

# 2.2 Upgrading from MX370073A to MX370073B

When installing the MX370073B DFS Radar Pattern on the MG3710A/MG3710E on which the MX370073A DFS Radar Pattern is installed, follow the procedure in 2.1 "Preparing Waveform Pattern". The common waveform patterns for the MX370073A and MX370073B are overwritten and saved. Also, the waveform patterns supplied only by the MX370073B are saved in a new file.

# Chapter 3 Details of Waveform Pattern

This chapter explains details of the MX370073B DFS Radar Pattern (hereafter this waveform pattern).

3.1	3.1 Waveform Pattern Type		
	3.1.1	Japan MIC standard DFS waveform pattern	. 3-3
	3.1.2	FCC DFS waveform pattern	. 3-5
3.2	Japan	MIC standard DFS Waveform Pattern	. 3-7
	3.2.1	Carrier Sense Function ②	
		(Dynamic Frequency Selectivity (DFS))	. 3-8
	3.2.2	Carrier Sense Function ③	
		(Dynamic Frequency Selectivity (DFS))	3-11
3.3	FCC D	FS Waveform Pattern	3-16

# 3.1 Waveform Pattern Type

The patterns recorded in this waveform pattern are explained in this section.

The standard DFS patterns for the Japan MIC standard (Reference: TELEC-T403) DFS test are listed in section 3.1.1 and the standard DFS patterns for the FCC 06-96, FCC 13-22 DFS test are listed in section 3.1.2.

#### Note:

Before testing, we recommend transferring all the waveform patterns to the MG3710A/MG3710E and loading them into waveform memory.

Each waveform pattern is composed of a combination file (.wvc extension) and corresponding waveform data file (.wvd extension) and waveform information file (.wvi extension). The combination file defines the waveform data file used by each waveform pattern, the waveform information file and the number of repetitions of each.

For how to use the combination file, refer to 7.3 "Baseband Mode" in the MG3710A/MG3710E Operation Manual.

### 3.1.1 Japan MIC standard DFS waveform pattern

The DFS waveform pattern used at the DFS test is standardized by the Japan MIC standard (Reference: TELEC-T403). Tables 3.1.1-1 to 3.1.1-6 lists the pattern.

The wvd/wvi file is a waveform file composed of a combination file. Download the wvd/wvi file along with the combination file.

Table 3.1.1-1 Waveform Pattern Described in Table 1 - Category 1 and Table 1 - Category 2

Category Combination file wvc		Catagory	wvd/wvi file
Category	Package	File	Related Package
1	DFS_behhyoudai1gou-1_2	behhyou_dai1gou-1	DFS_Pattern
2		behhyou_dai1gou-2	DFS_Pattern

Table 3.1.1-2 Waveform Patterns Described in Table 1 - Category 1 to 8\*

Cotogony	Combination file wvc		wvd/wvi file
Category	Package	Related Package	Related Package
1	W53_DFS_Radar_Pattern	CN_Vx_variable_W53	W53_DFS_Pattern
		x: integer 11 to 16	
2		CN_V21_variable_W53	
3		CN_Vx_chirp_W53	
		x: integer 31 to 37	
4		CN_Vx_chirp_W53	
		x: integer 41 to 46	
5		CN_F01_chirp_W53	
6		CN_F02_chirp_W53	
7		CN_F03_chirp_W53	
8		CN_F04_chirp_W53	

<sup>\*:</sup> The waveform pattern newly adopted according to the Japan MIC standard revised in July 2019

Table 3.1.1-3 Waveform Pattern Described in Table 2 - Category 1,

Table 2 - Category 2, and Table 2 - Category 3

Combination fi		on file wvc	wvd/wvi file
Category	Package File	File	Related Package
1	DFS_behhyoudai2gou-1_2_3	behhyou_dai2gou-1	DFS_Pattern
2		behhyou_dai2gou-2	DFS_Pattern
3		behhyou_dai2gou-3	DFS_Pattern

Table 3.1.1-4 Waveform Pattern Described in Table 2 - Category 4,

Table 2 - Category 5 and Table 2 - Category 6

Cotogomi	Combination file wvc		wvd/wvi file
Category	Package	File	Related Package
4	DFS_behhyoudai2gou-4	behhyou2-4-x x: integer 01 to 40	DFS_behhyou2-4
			DFS_Pattern
5	DFS_behhyoudai2gou-5	behhyou2-5-x x: integer 01 to 40	DFS_behhyou2-5
			DFS_Pattern
6	DFS_behhyoudai2gou-6	behhyou2-6-x x: integer 01 to 40	DFS_behhyou2-6
			DFS_Pattern

Table 3.1.1-5 Waveform Pattern Described in Table 3 - Category 1

Catagony	Combination file wvc		wvd/wvi file
Category	Package	File	Related Package
1	DFS_behhyoudai3gou	behhyou3-x	DFS_Pattern
		x: integer 01 to 40	

Table 3.1.1-6 Waveform Pattern Described in Table 4 - Category 1

Cotomomi	Combination file wvc		wvd/wvi file
Category	Package	File	Related Package
1	DFS_behhyoudai4gou	behhyou4-x	DFS_behhyou4
	Detection	x: integer 01 to 40	DFS_Pattern
	Bandwidth 20 MHz,		
	frequency hopping		
	DFS_behhyoudai4gou_40M	behhyou4-x_40M	DFS_behhyou4
	Detection	x: integer 01 to 40	DFS_Pattern
	Bandwidth 40 MHz,		
	frequency hopping		
	DFS_behhyoudai4gou_80M	behhyou4-x_80M	DFS_behhyou4_80M
	Detection	x: integer 01 to 40	Hz
	Bandwidth 80 MHz,		
	frequency hopping		
	DFS_behhyoudai4gou_160M	behhyou4-x_160M	DFS_behhyou4_160
	Detection	x: integer 01 to 40	MHz
	Bandwidth 160 MHz,		
	frequency hopping		

# 3.1.2 FCC DFS waveform pattern

The DFS waveform pattern used at the DFS test is standardized by FCC 06-96, FCC 13-22. Tables 3.1.2-1 to 3.1.2-7 lists the pattern.

The wvd/wvi file is a waveform file composed of a combination file. Download the wvd/wvi file along with the combination file.

Table 3.1.2-1 Radar Type 0 Waveform Pattern

Ī			Combination file wvc	
	Type	Package	File	Related Package
	0	RadarType0	ShortPulse0	DFS_Pattern

Table 3.1.2-2 Radar Type 1 Waveform Pattern

Type	Combination file wvc		wvd/wvi file
Type	Package	File	Related Package
1	RadarType1	ShortPulse1A-xx xx: integer 01 to 23	DFS_Pattern 01
		ShortPulse1B-xx xx: integer 01 to 15	

Table 3.1.2-3 Radar Type 2 Waveform Pattern

Type	Combin	Combination file wvc			
Type	Package	File	Related Package		
2	RadarType2	ShortPulse2-xx	DFS_behhyou2-4		
		xx: integer 01 to 40	DFS_Pattern		

Table 3.1.2-4 Radar Type 3 Waveform Pattern

Tymo	Combin	Combination file wvc				
Туре	Package	File	Related Package			
3	RadarType3	ShortPulse3-xx	DFS_behhyou2-5			
		xx: integer 01 to 40	DFS_Pattern			

Table 3.1.2-5 Radar Type 4 Waveform Pattern

Type	Combin	Combination file wvc				
Туре	Package	File	Related Package			
4	RadarType4	ShortPulse4-xx	DFS_behhyou2-6			
		xx: integer 01 to 40	DFS_Pattern			

Table 3.1.2-6 Radar Type 5 Waveform Pattern

Tymo	Combin	Combination file wvc				
Type	Package	File	Related Package			
5	RadarType5	LongPulse-xx	DFS_Pattern			
		xx: integer 01 to 40				

Table 3.1.2-7 Radar Type 6 Waveform Pattern

Tuma	Combir	wvd/wvi file	
Type	Package	Related Package	
6	RadarType6_20M	Hopping_20M-xx	DFS_behhyou4
		xx: integer 01 to 40	DFS_Pattern
	RadarType6_40M	Hopping-xx_40M-xx	DFS_behhyou4
		xx: integer 01 to 40	DFS_Pattern
	RadarType6_80M	Hopping_80M-xx	DFS_behhyou4_80M
		xx: integer 01 to 40	Hz
	RadarType6_160M	Hopping_160M-xx	DFS_behhyou4_160M
		xx: integer 01 to 40	Hz

# 3.2 Japan MIC standard DFS Waveform Pattern

The details of this waveform pattern are shown below.

### ■ Test Targets

The test targets for this waveform pattern are as follows:

Table 3.2-1 Test Targets

Test Item	Frequency Band	Test Signal	Spec. No.
Carrier Sense Function ②			Table 1 – Category 1
		Test Signal	Table 1 – Category 2
		Radio waves transmitted by	Table 1 – Category 1
		radar*1	Table 1 – Category 2
			Table 1 – Category 3
			Table 1 – Category 4
			Table 1 – Category 5
			Table 1 – Category 6
			Table 1 – Category 7
			Table 1 – Category 8
Carrier Sense Function 3	5.6 GHz	Fixed Pulse Radar Wave	Table 2 – Category 1
		Test Signal	Table 2 – Category 2
			Table 2 – Category 3
		Variable Pulse Radar Wave Test Signal	Table 2 – Category 4
			Table 2 – Category 5
			Table 2 – Category 6
		Chirp Radar Wave Test Signal	Table 3 – Category 1
		Frequency Hopping Radar	Table 4 – Category 1
		Wave Test Signal	(20 MHz)*2
			Table 4 – Category 1
			(40 MHz)*3
			Table 4 – Category 1
			(80 MHz)*4
			Table 4 – Category 1
			(160 MHz)*5

- \*1: The waveform pattern newly adopted according to the Japan MIC standard revised in July 2019
- \*2: Hopping frequency band is 20 MHz.
- \*3: Hopping frequency band is 40 MHz.
- \*4: Hopping frequency band is 80 MHz.
- \*5: Hopping frequency band is 160 MHz.

# 3.2.1 Carrier Sense Function ② (Dynamic Frequency Selectivity (DFS))

■ Fixed Pulse Radar Wave Test Signal
The Fixed Pulse Radar Wave Test Signal parameters are shown below.

Table 3.2.1-1 Fixed Pulse Radar Wave Test Signal

Spec. No.	Pulse Width (μs)	Pulse Repetition Frequency (Hz)	Continuous Pulse Count	Repetition Frequency (s)
Table 1 – Category 1	1.0	700	18	15.0
Table 1 – Category 2	2.5	260	18	15.0

An image of the Fixed Pulse Radar Wave Test Signal is shown in the following diagram.

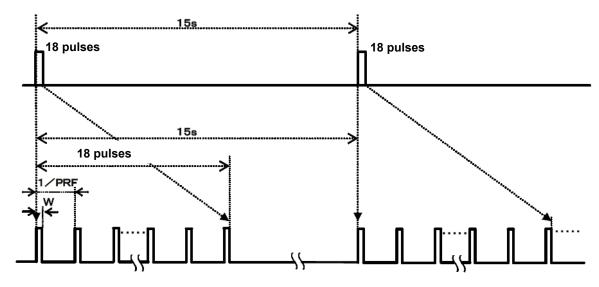


Figure 3.2.1-1 Diagram of Fixed Pulse Radar Wave Test Signal (from TELEC-T403)

### ■ Radio waves transmitted by Radar

The parameters of radio waves transmitted by radar are shown in the table below.

Table 3.2.1-2 Radio waves transmitted by Radar

仕様書項番	Code No.	Short Pulse (µs)	Blank 1 (µs)	Long Pulse (µs)	Blank 2 (µs)	Pulse Repetition Frequency (Hz)	Continuous Pulse Count	Repetition Frequency (s)
Table 1 – Category 1	V11	1.0	0.0	0.0	1062.8	940	27	15.0
	V12	1.0	0.0	0.0	1328.8	752	21	15.0
	V13	1.0	0.0	0.0	1189.5	840	24	15.0
	V14	2.0	0.0	0.0	3844.2	260	10	15.0
	V15	2.0	0.0	0.0	2379.0	420	15	15.0
	V16	2.5	0.0	0.0	3027.8	330	10	15.0
Table 1 – Category 2	V21	1.0	0.0	0.0	891.9	1120	32	15.0
Table 1 – Category 3	V31	0.5	80.0	64.0	875.9	980	26	15.0
	V32	1.0	72.0	64.0	1064.9	832	23	15.0
	V33	1.0	108.0	100.0	2116.6	430	23	15.0
	V34	1.0	108.0	100.0	2568.8	360	28	15.0
	V35	1.0	108.0	100.0	3263.2	288	22	15.0
	V36	2.0	74.0	69.0	1521.7	600	22	15.0
	V37	5.0	120.0	110.0	4765.0	200	22	15.0
Table 1 – Category 4	V41	0.5	70.0	20.0	534.5	1600	30	15.0
	V42	1.0	72.0	64.0	824.5	1040	28	15.0
	V43	2.0	75.0	64.0	525.7	1500	30	15.0
	V44	5.0	75.0	64.0	588.6	1365	30	15.0
	V45	10.0	100.0	80.0	790.4	1020	27	15.0
	V46	15.0	120.0	110.0	4755.0	200	22	15.0
Table 1 – Category 5	F01	1.1	56.2	30.5	808.7	1116	30	15.0
Table 1 – Category 6	F02	1.1	235.2	30.5	808.7	930	25	15.0
Table 1 – Category 7	F03	1.0	61.0	32.0	1032.0	888	24	15.0
Table 1 – Category 8	F04	1.0	61.0	32.0	1257.0	740	20	15.0

An image of a radio wave transmitted by radar is shown in the following diagram.

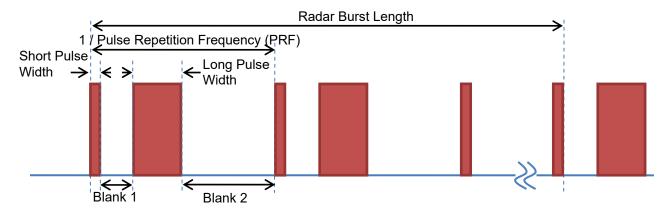


Figure 3.2.1-2 Image of Radio Wave Transmitted by Radar

### 3.2.2 Carrier Sense Function ③ (Dynamic Frequency Selectivity (DFS))

■ Fixed Pulse Radar Wave Test Signal
The Fixed Pulse Radar Wave Test Signal parameters are shown below.

Table 3.2.2-1 Fixed Pulse Radar Wave Test Signal

Spec. No.	Pulse Width (μs)	Pulse Repetition Frequency (Hz)	Continuous Pulse Count	Repetition Frequency (s)
Table 2 – Category 1	0.5	720	18	15.0
Table 2 – Category 2	1.0	700	18	15.0
Table 2 – Category 3	2.0	250	18	15.0

An image of the Fixed Pulse Radar Wave Test Signal is shown in Figure 3.2.1-1 above.

### ■ Variable Pulse Radar Wave Test Signal

The Variable Pulse Radar Wave Test Signal parameters are shown below.

A combination is used that is extracted randomly from the combination of pulse width, pulse repetition frequency, and continuous pulse count for each repetition cycle.

Table 3.2.2-2 Variable Pulse Radar Wave Test Signal Parameters

Spec. No.	Pulse Width (μs)	Pulse Repetition Frequency (Hz)	Continuous Pulse Count	Repetition Frequency (s)
Table 2 – Category 4	1 μs or 1 μs plus an integer multiple of 1 μs within the width of 1 to 5 μs.	Any one frequency between 4347 and 6667 Hz	Any one integer between 23 and 29	15.0
Table 2 – Category 5	6 μs or 6 μs plus an integer multiple of 1 μs within the width of 6 to 10 μs.	Any one frequency between 2000 and 5000 Hz	Any one integer between 16 and 18	15.0
Table 2 – Category 6	11 μs or 11 μs plus an integer multiple of 1 μs within the width of 11 to 20 μs.	Any one frequency between 2000 and 5000 Hz	Any one integer between 12 and 16	15.0

An image of the Variable Pulse Radar Wave Test Signal is shown below.

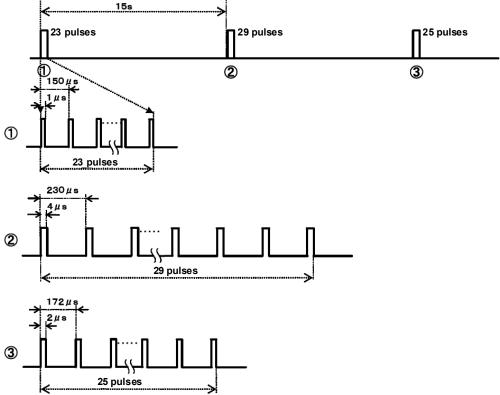


Figure 3.2.2-1 Image of Variable Pulse Radar Test Signal (from TELEC-T403)

### ■ Chirp Radar Wave Test Signal

The Chirp Radar Wave Test Signal parameters are shown below.

A combination is used that is extracted randomly from the combination of pulse width, chirp width pulse repetition frequency, continuous pulse count, and burst count for each repetition cycle. In addition, the chirp frequency range is within the occupied frequency bandwidth.

Table 3.2.2-3 Chirp Radar Wave Test Signal Parameters

Spec. No.	Pulse Width	Pulse Repetition	Continuous Pulse	Repetition
	(μs)	Frequency (Hz)	Count	Frequency (s)
Table 3 – Category 1	50 μs or 50 μs plus an integer multiple of 1 μs within the width of 50 to 100 μs.	Any one frequency between 500 and 1000 Hz	Any one integer between 1 and 3	12.0

An image of the Chirp Radar Wave Test Signal is shown below.

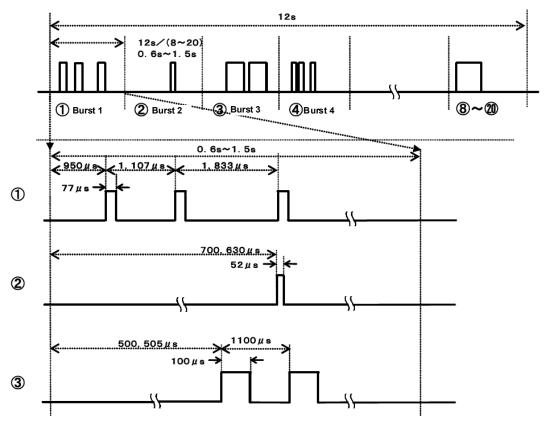


Figure 3.2.2-2 Image of Chirp Radar Wave Test Signal (from TELEC-T403)

#### ■ Frequency Hopping Radar Wave Test Signal

The Frequency Hopping Radar Wave Test Signal parameters are shown below.

Frequency hopping is performed at each 3-ms hopping time interval. The hopping frequency can be selected randomly from 475 waves at 1-MHz intervals between 5250 and 5724 MHz. The 9 pulses output during 3 ms are all the same frequency. However, a pulse pattern for the 20, 40, 80 or 160 MHz frequency band detected by the Rx module within the frequency hopping band is output as the test signal as shown in Figure 3.2.2-4.

Spec. No.	Pulse Width	Pulse Repetition	Continuous Pulse	Repetition
	(μs)	Frequency (Hz)	Count	Frequency (s)
Table 4 – Category 1	1.0	3,000	9	10.0

Table 3.2.2-4 Frequency Hopping Radar Wave Test Signal

An image of the Frequency Hopping Radar Wave Test Signal is shown below.

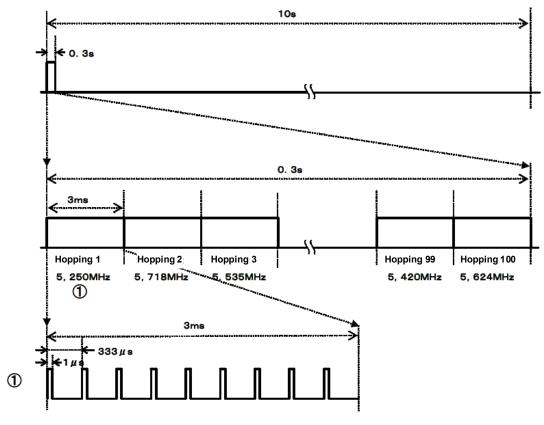


Figure 3.2.2-3 Image of Frequency Hopping Radar Wave Test Signal (from TELEC-T403)

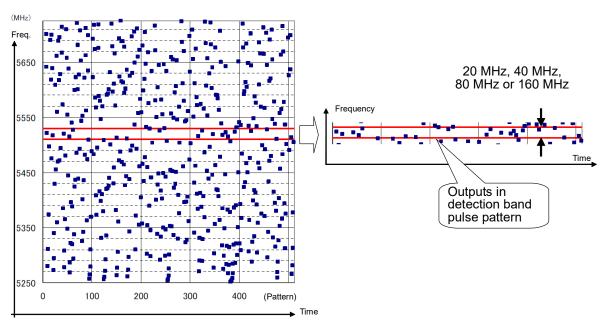


Figure 3.2.2-4 Image of Frequency Hopping Pattern (from TELEC-T403)

### 3.3 FCC DFS Waveform Pattern

#### ■ Test Targets

The test targets for this waveform pattern are as follows:

Table 3.3-1 Test Targets

Test Signal	Radar Type	Spec. No.
Short Pulse Radar	0	6.1
	1	6.1
	2	6.1
	3	6.1
	4	6.1
Long Pulse Radar	5	6.2
Frequency Hopping Radar	6	6.3
		(20 MHz)*1
		6.3 (40 MHz)*2
		6.3 (80 MHz)* <sub>3</sub>
		6.3 (160 MHz)* <sub>4</sub>

<sup>\*1:</sup> Hopping frequency band is 20 MHz.

<sup>\*2:</sup> Hopping frequency band is 40 MHz.

<sup>\*3:</sup> Hopping frequency band is 80 MHz.

<sup>\*4:</sup> Hopping frequency band is 160 MHz.

#### ■ Short Pulse Radar Test Waveform

The Short Pulse Radar Test Wave parameters are shown below.

The image of the Radar Type 0, 1 timing is the same as shown in Figure 3.2.1-1.

The image of the Radar Type 2 to 4 timing is the same as shown in Figure  $3.2.2 \hbox{-} 1.$ 

A combination is used that is extracted randomly from the combination of pulse width, pulse repetition frequency, and continuous pulse count for each repetition cycle.

Table 3.3-2 Short Pulse Radar Test Waveform Parameters

Radar Type	Pulse Width (μs)	Pulse Repetition Frequency (μs)	Continuous Pulse Count
0	1	1428	18
1	1	Test A: Any one frequency between 518 and 3066 in Table 3.3-3 Pulse Repetition Frequency	Pulse number calculated by the formula below with pulse repetition frequency as RPI. $\left[\left(\frac{1}{360}\right)\right]$
		Test B: Any one frequency between 518 and 3066 except pulse repetition frequency selected in Test A.	Roundup $\left\{ \frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{ssc}}} \right\}$ "Roundup" is a value with digits below the decimal point rounded up.
2	1 μs or 1 μs plus an integer multiple of 1 μs within the width of 1 to 5 μs.	Any one frequency between 150 and 230 μs	Any one integer between 23 and 29
3	6 μs or 6 μs plus an integer multiple of 1 μs within the width of 6 to 10 μs.	Any one frequency between 200 and 500 μs	Any one integer between 16 and 18
4	11 μs or 11 μs plus an integer multiple of 1 μs within the width of 11 to 20 μs.	Any one frequency between 200 and 500 μs	Any one integer between 12 and 16

Table 3.3-3 Pulse Repetition Frequency for Radar Type 1 Test A

	1	
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

#### ■ Long Pulse Radar Test Waveform

The Long Pulse Radar Test Waveform parameters are shown below.

The image of the Radar Type 5 timing is the same as shown in Figure 3.2.2-2.

A combination is used that is extracted randomly from the combination of pulse width, chirp width pulse repetition frequency, continuous pulse count, and burst count for each repetition cycle. In addition, the chirp frequency range is within the occupied frequency bandwidth.

Table 3.3-4 Chirp Radar Wave Test Signal Parameters

Radar Type	Pulse Width (μs)	Pulse Repetition Frequency (μs)	Continuous Pulse Count
5	50 μs or 50 μs plus an integer multiple of 1 μs within the range of 50 to 100 μs.	Any one frequency between 1000 and 2000 µs	Any one integer between 1 and 3

#### ■ Frequency Hopping Radar Test Waveform

The Frequency Hopping Radar Wave Test Signal parameters are shown below.

The image of the Radar Type 6 timing is the same as shown in Figure 3.2.2-3.

Frequency hopping is performed at each 0.333-kHz hopping time interval. The hopping frequency can be selected randomly from 475 waves at 1-MHz intervals between 5250 and 5724 MHz. The 9 pulses output during 3 ms are all the same frequency. However, a pulse pattern for the 20, 40, 80 or 160 MHz frequency band detected by the Rx module within the frequency hopping band is output as the test signal as shown in Figure 3.2.2-4.

Table 3.3-5 Frequency Hopping Radar Wave Test Signal

Radar Type	Pulse Width (μs)	Pulse Repetition Frequency (μs)	Continuous Pulse Count
6	1.0	333	9

# Appendix A Waveform Pattern for DFS Radar Test

Table A-1 Waveform Pattern List for DFS Radar Test (Japan MIC standard, Reference: TELEC-T403)

Specification	Combin	ation file	Wa	veform pattern
items	Package name	File name	Package name	File name
Table 1 – Category 1	DFS_behhyoudai1gou-1_2	behhyou_dai1gou-1.wvc*	DFS_Pattern	behhyou1_1.wvd,wvi
(No. of patterns: 1)				_behhyou_dai1gou_1.wvd,wvi
Table 1 – Category 2	DFS_behhyoudai1gou-1_2	behhyou_dai1gou-2.wvc*	DFS_Pattern	behhyou1_2.wvd,wvi
(No. of patterns: 1)				_behhyou_dai1gou_2.wvd,wvi
Table 1 – Category 1	W53_DFS_Radar_Pattern	CN_V11_variable_W53.wvc	W53_DFS_Pattern	CN_V11_variable.wvd,wvi
(No. of patterns: 6)		to		to CN_V16_variable.wvd,wvi
		CN_V16_variable_W53.wvc		CN_V11_variable_G.wvd,wvi
				to CN_V16_variable_G.wvd,wvi
				Gap_010ms_01.wvd,wvi
				to Gap_010ms_04.wvd,wvi
				Gap_100us_01.wvd,wvi
				to Gap_100us_04.wvd,wvi
Table 1 – Category 2	W53_DFS_Radar_Pattern	CN_V21_variable_W53.wvc	W53_DFS_Pattern	CN_V21_variable.wvd,wvi
(No. of patterns: 1)				CN_V21_variable_G.wvd,wvi
				Gap_010ms_05.wvd,wvi
				Gap_100us_05.wvd,wvi
Table 1 – Category 3	W53_DFS_Radar_Pattern	CN_V31_chirp_W53.wvc	W53_DFS_Pattern	CN_V31_chirp.wvd,wvi
(No. of patterns: 7)		to		to CN_V37_chirp.wvd,wvi
		CN_V37_chirp_W53.wvc		CN_V31_chirp_G.wvd,wvi
				to CN_V37_chirp_G.wvd,wvi
				Gap_010ms_03.wvd,wvi
				Gap_010ms_06.wvd,wvi
				Gap_010ms_10.wvd,wvi
				Gap_010ms_15.wvd,wvi
				to Gap_010ms_17.wvd,wvi
				Gap_100us_03.wvd,wvi
				Gap_100us_06.wvd,wvi
				Gap_100us_10.wvd,wvi
				Gap_100us_15.wvd,wvi
				to Gap_100us_17.wvd,wvi

Table A-1 Waveform Pattern List for DFS Radar Test (Japan MIC standard, Reference: TELEC-T403) (Cont'd)

Specification	Combin	ation file	Wa	veform pattern
items	Package name	File name	Package name	File name
Table 1 – Category 4 (No. of patterns: 6)	W53_DFS_Radar_Pattern	CN_V41_chirp_W53.wvc to CN_V46_chirp_W53.wvc	W53_DFS_Pattern	CN_V41_chirp.wvd,wvi to CN_V46_chirp.wvd,wvi CN_V41_chirp_G.wvd,wvi to CN_V46_chirp_G.wvd,wvi Gap_010ms_03.wvd,wvi Gap_010ms_10.wvd,wvi Gap_010ms_17.wvd,wvi Gap_010ms_18.wvd,wvi Gap_100us_03.wvd,wvi Gap_100us_03.wvd,wvi Gap_100us_05.wvd,wvi Gap_100us_10.wvd,wvi Gap_100us_10.wvd,wvi Gap_100us_110.wvd,wvi Gap_100us_110.wvd,wvi Gap_100us_110.wvd,wvi
Table 1 – Category 5 (No. of patterns: 1)	W53_DFS_Radar_Pattern	CN_F01_chirp_W53.wvc	W53_DFS_Pattern	CN_F01_chirp.wvd,wvi CN_F01_chirp_G.wvd,wvi Gap_010ms_11.wvd,wvi Gap_100us_11.wvd,wvi
Table 1 – Category 6 (No. of patterns: 1)	W53_DFS_Radar_Pattern	CN_F02_chirp_W53.wvc	W53_DFS_Pattern	CN_F02_chirp.wvd,wvi CN_F02_chirp_G.wvd,wvi Gap_010ms_12.wvd,wvi Gap_100us_12.wvd,wvi
Table 1 – Category 7 (No. of patterns: 1)	W53_DFS_Radar_Pattern	CN_F03_chirp_W53.wvc	W53_DFS_Pattern	CN_F03_chirp.wvd,wvi CN_F03_chirp_G.wvd,wvi Gap_010ms_13.wvd,wvi Gap_100us_13.wvd,wvi
Table 1 – Category 8 (No. of patterns: 1)	W53_DFS_Radar_Pattern	CN_F04_chirp_W53.wvc	W53_DFS_Pattern	CN_F04_chirp.wvd,wvi CN_F04_chirp_G.wvd,wvi Gap_010ms_14.wvd,wvi Gap_100us_14.wvd,wvi
Table 2 – Category 1 (No. of patterns: 1)	DFS_behhyoudai2gou-1_2_3	behhyou_dai2gou-1.wvc*	DFS_Pattern	behhyou2_1.wvd,wvi _behhyou_dai2gou_1.wvd,wvi
$ \begin{array}{l} {\rm Table} \ 2 - {\rm Category} \ 2 \\ {\rm (No. \ of \ patterns: \ 1)} \end{array} $	DFS_behhyoudai2gou-1_2_3	behhyou_dai2gou-2.wvc*	DFS_Pattern	behhyou2_2.wvd,wvi _behhyou_dai2gou_2.wvd,wvi
Table $2$ – Category $3$ (No. of patterns: 1)	DFS_behhyoudai2gou-1_2_3	behhyou_dai2gou-3.wvc*	DFS_Pattern	behhyou2_3.wvd,wvi _behhyou_dai2gou_3.wvd,wvi

Table A-1 Waveform Pattern List for DFS Radar Test (Japan MIC standard, Reference: TELEC-T403) (Cont'd)

Specification	Combination file		Wa	veform pattern
Items	Package name	File name	Package name	File name
Table 2 – Category 4 (No. of patterns: 40)	DFS_behhyoudai2gou-4	behhyou2-4-1.wvc to behhyou2-4-40.wvc*	DFS_behhyou2-4	behhyou2-4-1.wvd to behhyou2-4-40.wvd behhyou2-4-1.wvi to behhyou2-4-40.wvi
			DFS_Pattern	Burst-1000_1M.wvd,wvi Burst-1001_1M.wvd,wvi Burst-1010_1M.wvd,wvi Burst-1100_1M.wvd,wvi Burst-10000_1M.wvd,wvi
Table 2 – Category 5 (No. of patterns: 40)	DFS_behhyoudai2gou-5	behhyou2-5-1.wvc to behhyou2-5-40.wvc*	DFS_behhyou2-5	behhyou2-5-1.wvd to behhyou2-5-40.wvd behhyou2-5-1.wvi to behhyou2-5-40.wvi
			DFS_Pattern	Burst-1000_1M.wvd,wvi Burst-1001_1M.wvd,wvi Burst-1010_1M.wvd,wvi Burst-1100_1M.wvd,wvi Burst-10000_1M.wvd,wvi
Table 2 – Category 6 (No. of patterns: 40)	DFS_behhyoudai2gou-6	behhyou2-6-1.wvc to behhyou2-6-40.wvc*	DFS_behhyou2-6	behhyou2-6-1.wvd to behhyou2-6-40.wvd behhyou2-6-1.wvi to behhyou2-6-40.wvi
			DFS_Pattern	Burst-1000_1M.wvd,wvi Burst-1001_1M.wvd,wvi Burst-1010_1M.wvd,wvi Burst-1100_1M.wvd,wvi Burst-10000_1M.wvd,wvi

Table A-1 Waveform Pattern List for DFS Radar Test (Japan MIC standard, Reference: TELEC-T403) (Cont'd)

Specification	Combin	ation file	Wa	veform pattern
Items	Package name	File name	Package name	File name
Table 3 (No. of patterns: 40)	DFS_behhyoudai3gou	behhyou3-1.wvc to behhyou3-40.wvc*	DFS_Pattern	Pulse_Width-50.wvd to Pulse_Width-100.wvd
				Pulse_Width-50.wvi to Pulse_Width-100.wvi
				Burst-10.wvd, Burst-10.wvi
				Burst-11.wvd, Burst-11.wvi
				Burst-1000.wvd, Burst-1000.wvi
Table 4 (No. of patterns: 40)	DFS_behhyoudai4gou	behhyou4-01.wvc to behhyou4-40.wvc*	DFS_behhyou4	Freq10M.wvd to Freq_+10M.wvd Freq10M.wvd to Freq_+10M.wvd
Detection Bandwidth 20MHz, frequency hopping			DFS_Pattern	Burst-3ms.wvd,wvi Burst-100ms.wvd,wvi
Table 4 (No. of patterns: 40)	DFS_behhyoudai4gou_40M	behhyou4-01_40M.wvc to behhyou4-40_40M.wvc*	DFS_behhyou4	Freq20M.wvd to Freq_+20M.wvd Freq20M.wvd to Freq_+20M.wvd
Detection Bandwidth 40MHz, frequency hopping			DFS_Pattern	Burst-3ms.wvd,wvi Burst-100ms.wvd,wvi
Table 4 (No. of patterns: 40)	DFS_behhyoudai4gou_80M	behhyou4-01_80M.wvc to behhyou4-40_80M.wvc*	DFS_behhyou4_80 MHz	DFS80MHzFreq_40MHz.wvd to DFS80MHzFreq_+40MHz.wvd DFS80MHzFreq40MHz.wvi to DFS80MHzFreq_+40MHz.wvi
Detection Bandwidth 80MHz, frequency hopping			DFS_behhyou4_80 MHz	Gap_3ms_80M.wvd,wvi Gap_100ms_80M.wvd,wvi

Table A-1 Waveform Pattern List for DFS Radar Test (Japan MIC standard, Reference: TELEC-T403) (Cont'd)

Specification	Combination file		Waveform pattern	
Items	Package name	File name	Package name	File name
Table 4	DFS_behhyoudai4gou_16	behhyou4-01_160M.wvc	DFS_behhyou4_16	DFS160MHzFreq80MHz.wvd
(No. of patterns: 40)	0M	to	0 MHz	to
		behhyou4-40_160M.wvc*		DFS160MHzFreq_+80MHz.wvd
				DFS160MHzFreq80MHz.wvi
				to
				DFS160MHzFreq_+80MHz.wvi
Detection			DFS_behhyou4_16	Gap_3ms_160M.wvd,wvi
Bandwidth 160MHz,			0MHz	Gap_100ms_160M.wvd,wvi
frequency hopping				·

<sup>\*:</sup> All required files can be downloaded to the main frame by transferring files indicated with \* mark using IQproducer.

Table A-2 Waveform Pattern List for DFS Radar Test (FCC)

Dada T	Combi	nation file	Wa	veform pattern
Radar Type	Package name	File name	Package name	File name
0	RadarType0	ShortPulse0.wvc	DFS_Pattern	behhyou2_2.wvd,wvi
				_behhyou_dai2gou_2.wvd,wvi
1	RadarType1	Test A: ShortPulse1A-01 to ShortPulse1A-23	DFS_Pattern_01	Pulse1AElement-01.wvd,wvi to Pulse1AElement-23.wvd,wvi Gap_1A-01.wvd,wvi to Gap_1A-23.wvd,wvi
		Test B: ShortPulse1B-01 to ShortPulse1B-15		Gap_1A_1ms.wvd,wvi Pulse1BElement-01.wvd,wvi to Pulse1BElement-15.wvd,wvi Gap_1B-01.wvd,wvi to Gap_1B-15.wvd,wvi
2	RadarType2	ShortPulse2-01.wvc to ShortPulse2-40.wvc	DFS_behhyou2-4	behhyou2-4-1.wvd to behhyou2-4-40.wvd behhyou2-4-1.wvi to behhyou2-4-40.wvi
			DFS_Pattern	Burst-1000_1M.wvd,wvi Burst-1001_1M.wvd,wvi Burst-1010_1M.wvd,wvi Burst-1100_1M.wvd,wvi Burst-10000_1M.wvd,wvi
3	RadarType3	ShortPulse3-01.wvc to ShortPulse3-40.wvc	DFS_behhyou2-5 DFS_Pattern	behhyou2-5-1.wvd to behhyou2-5-40.wvd behhyou2-5-1.wvi to behhyou2-5-40.wvi Burst-1000_1M.wvd,wvi Burst-1001_1M.wvd,wvi
4	RadarType4	ShortPulse4-01.wvc to ShortPulse4-40.wvc	DFS_behhyou2-6	Burst-1100_1M.wvd,wvi Burst-10000_1M.wvd,wvi behhyou2-6-1.wvd to behhyou2-6-40.wvd
			DFS_Pattern	behhyou2-6-1.wvi to behhyou2-6-40.wvi  Burst-1000_1M.wvd,wvi Burst-1010_1M.wvd,wvi Burst-1100_1M.wvd,wvi Burst-1100_1M.wvd,wvi

Table A-2 Waveform Pattern List for DFS Radar Test (FCC) (Cont'd)

Dodou T	Combir	nation file	Wa	veform pattern
Radar Type	Package name	File name	Package name	File name
5	RadarType5	LongPulse-01.wvc to LongPulse-40.wvc	DFS_Pattern	Pulse_Width-50.wvd to Pulse_Width-100.wvd Pulse_Width-50.wvi to Pulse_Width-100.wvi Burst-10.wvd, Burst-10.wvi Burst-11.wvd, Burst-11.wvi Burst-1000.wvd, Burst-1000.wvi
6	RadarType6_20M	Hopping_20M-01.wvc to Hopping_20M-40.wvc	DFS_behhyou4	Freq10M.wvd to Freq_+10M.wvd Freq10M.wvi to Freq_+10M.wvi
			DFS_Pattern	Burst-3ms.wvd,wvi Burst-100ms.wvd,wvi
	RadarType6_40M	Hopping_40-01M.wvc to Hopping_40M-40.wvc	DFS_behhyou4	Freq20M.wvd to Freq_+20M.wvd Freq20M.wvi to Freq_+20M.wvi
			DFS_Pattern	Burst-3ms.wvd,wvi Burst-100ms.wvd,wvi
	RadarType6_80M	Hopping_80M-01.wvc to Hopping_80M-40.wvc	DFS_behhyou4_8 0MHz	DFS80MHzFreq40M.wvd to DFS80MHzFreq_+40M.wvd DFS80MHzFreq40M.wvi to DFS80MHzFreq_+40M.wvi
			DFS_behhyou4_8 0MHz	Gap_3ms_80M.wvd,wvi Gap_100ms_80M.wvd,wvi
	RadarType6_160M	Hopping_160M-01.wvc to Hopping_160M-40.wvc	DFS_behhyou4_1 60MHz	DFS160MHz80M.wvd to DFS160MHz_+80M.wvd DFS160MHz80M.wvi to DFS160MHz_+80M.wvi
			DFS_behhyou4_1 60MHz	Gap_3ms_160M.wvd,wvi Gap_100ms_160M.wvd,wvi

## Appendix B Parameter of Waveform Pattern for DFS Radar Test

Table B-1 Attached Table 1

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
behhyou1-1	1	700	18
behhyou1-2	2.5	260	18

Table B-2 Attached Table 1 Radio wave transmitted by Radar

Tubic D 2 Actuation Tubic I Rudio Wave transmitted by Rudai							
Pattern	Short Pulse Width (µs)	Long Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count			
CN_V11_variable	1.0	0.0	940	27			
CN_V12_variable	1.0	0.0	752	21			
CN_V13_variable	1.0	0.0	840	24			
CN_V14_variable	2.0	0.0	260	10			
CN_V15_variable	2.0	0.0	420	15			
CN_V16_variable	2.5	0.0	330	10			
CN_V21_variable	1.0	0.0	1120	32			
CN_V31_chirp	0.5	64.0	980	26			
CN_V32_chirp	1.0	64.0	832	23			
CN_V33_chirp	1.0	100.0	430	23			
CN_V34_chirp	1.0	100.0	360	28			
CN_V35_chirp	1.0	100.0	288	22			
CN_V36_chirp	2.0	69.0	600	22			
CN_V37_chirp	5.0	110.0	200	22			
CN_V41_chirp	0.5	20.0	1600	30			
CN_V42_chirp	1.0	64.0	1040	28			
CN_V43_chirp	2.0	64.0	1500	30			
CN_V44_chirp	5.0	64.0	1365	30			
CN_V45_chirp	10.0	80.0	1020	27			
CN_V46_chirp	15.0	110.0	200	22			
CN_F01_chirp	1.1	30.5	1116	30			
CN_F02_chirp	1.1	30.5	930	25			
CN_F03_chirp	1.0	32.0	888	24			
CN_F04_chirp	1.0	32.0	740	20			

Table B-3 Attached Table 2

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count	
behhyou2-1	0.5	720	18	
behhyou2-2	1	700	18	
behhyou2-3	2	250	18	

Table B-4 Attached Table 2-4

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
behhyou2-4-1	3	4504	29
behhyou2-4-2	3	5235	25
behhyou2-4-3	3	4739	24
behhyou2-4-4	1	5714	29
behhyou2-4-5	5	5102	28
behhyou2-4-6	5	4587	27
behhyou2-4-7	3	5291	25
behhyou2-4-8	3	4784	25
behhyou2-4-9	1	5747	23
behhyou2-4-10	1	5235	29
behhyou2-4-11	1	4716	27
behhyou2-4-12	5	6329	27
behhyou2-4-13	5	5847	25
behhyou2-4-14	3	4566	24
behhyou2-4-15	3	6329	23
behhyou2-4-16	3	5813	29
behhyou2-4-17	3	5319	28
behhyou2-4-18	1	6289	26
behhyou2-4-19	1	5780	25
behhyou2-4-20	4	6329	24

Table B-4 Attached Table 2-4 (Cont'd)

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
behhyou2-4-21	3	5847	29
behhyou2-4-22	2	6451	26
behhyou2-4-23	3	5405	24
behhyou2-4-24	2	6369	29
behhyou2-4-25	1	5882	28
behhyou2-4-26	1	5376	27
behhyou2-4-27	4	6172	25
behhyou2-4-28	4	5681	24
behhyou2-4-29	4	5181	23
behhyou2-4-30	5	4975	28
behhyou2-4-31	3	6172	28
behhyou2-4-32	3	5154	26
behhyou2-4-33	1	6134	24
behhyou2-4-34	4	4424	23
behhyou2-4-35	2	5405	28
behhyou2-4-36	5	6211	26
behhyou2-4-37	3	4950	25
behhyou2-4-38	3	4424	24
behhyou2-4-39	1	5128	29
behhyou2-4-40	3	5154	27

Table B-5 Attached Table 2-5

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
behhyou2-5-1	9	2881	18
behhyou2-5-2	10	2849	16
behhyou2-5-3	10	2347	18
behhyou2-5-4	10	4672	17
behhyou2-5-5	8	3030	16
behhyou2-5-6	7	2538	16
behhyou2-5-7	10	3891	17
behhyou2-5-8	10	3412	17
behhyou2-5-9	10	2906	18
behhyou2-5-10	10	2421	18
behhyou2-5-11	8	3597	17
behhyou2-5-12	8	3105	16
behhyou2-5-13	7	2610	18
behhyou2-5-14	7	2100	17
behhyou2-5-15	7	4484	17
behhyou2-5-16	7	3984	18
behhyou2-5-17	7	3484	18
behhyou2-5-18	10	4587	16
behhyou2-5-19	8	3174	18
behhyou2-5-20	6	4366	17

Table B-5 Attached Table 2-5 (Cont'd)

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
behhyou2-5-21	9	2631	16
behhyou2-5-22	9	2132	18
behhyou2-5-23	9	4464	17
behhyou2-5-24	8	4000	16
behhyou2-5-25	8	3508	18
behhyou2-5-26	8	3012	18
behhyou2-5-27	8	2512	16
behhyou2-5-28	7	2008	16
behhyou2-5-29	7	4385	18
behhyou2-5-30	10	2666	17
behhyou2-5-31	10	2808	17
behhyou2-5-32	8	3039	16
behhyou2-5-33	6	2538	17
behhyou2-5-34	10	2012	17
behhyou2-5-35	8	2232	18
behhyou2-5-36	8	3649	18
behhyou2-5-37	8	3154	18
behhyou2-5-38	6	3378	16
behhyou2-5-39	6	2881	18
behhyou2-5-40	7	3076	17

Table B-6 Attached Table 2-6

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
behhyou2-6-1	11	2036	15
behhyou2-6-2	17	3289	15
behhyou2-6-3	13	3521	16
behhyou2-6-4	16	4566	12
behhyou2-6-5	12	2070	12
behhyou2-6-6	15	3184	15
behhyou2-6-7	15	2222	16
behhyou2-6-8	11	2444	13
behhyou2-6-9	11	4739	12
behhyou2-6-10	14	3076	13
behhyou2-6-11	14	2590	14
behhyou2-6-12	17	3676	15
behhyou2-6-13	17	3205	16
behhyou2-6-14	20	4219	12
behhyou2-6-15	13	2958	13
behhyou2-6-16	13	2469	14
behhyou2-6-17	16	3558	15
behhyou2-6-18	16	3095	12
behhyou2-6-19	16	2617	16
behhyou2-6-20	12	2840	13

Table B-6 Attached Table 2-6 (Cont'd)

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
behhyou2-6-21	15	3921	14
behhyou2-6-22	15	3448	15
behhyou2-6-23	18	4484	16
behhyou2-6-24	18	4032	12
behhyou2-6-25	17	3584	12
behhyou2-6-26	20	2183	15
behhyou2-6-27	20	4347	14
behhyou2-6-28	13	2873	15
behhyou2-6-29	13	2380	16
behhyou2-6-30	16	3484	12
behhyou2-6-31	11	2710	13
behhyou2-6-32	14	2188	13
behhyou2-6-33	17	2375	14
behhyou2-6-34	17	3717	16
behhyou2-6-35	16	3257	15
behhyou2-6-36	20	3412	13
behhyou2-6-37	19	2958	17
behhyou2-6-38	19	2487	14
behhyou2-6-39	19	2004	13
behhyou2-6-40	15	2222	15

Table B-7 Attached Table 3

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-1	9	3	61	20	1551
					1102
					1386
		3	76	12	1180
					1981
				18	1267
		3	52		1426
					1115
					1194
		1	85	9	1930
		3	72	12	1478
					1922
					1763
		3	63	6	1530
					1029
					1129
		1	65	15	1512
		1	98	6	1859
		1	71	11	1345

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-2	18	1	97	6	1725
		3	64	19	1961
					1831
					1230
		3	51	8	1606
					1120
					1767
		1	52	18	1849
		1	76	12	1998
		2	56	19	1230
					1544
		3	91	16	1987
					1359
					1126
		1	100	8	1166
		3	78	19	1072
					1619
					1453
		1	55	5	1447
		3	98	6	1702
					1528
					1867
		2	82	17	1465
					1568
		2	90	13	1136
					1584
		3	3 64 19	19	1067
					1093
					1825
		1	77	10	1628
		3	53	16	1733
				[	1592
					1696
		1	84	10	1626
		1	100	8	1899

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-3	19	1	56	19	1428
		3	60	11	1619
					1680
					1713
		2	100	8	1634
					1577
		2	93	15	1233
					1199
		2	58	10	1964
					1355
		1	97	6	1548
		3	59	11	1126
					1971
					1143
		3	86	8	1046
					1176
					1933
		3	68	11	1324
					1011
					1293
		1	63	6	1271
		3	73	16	1680
					1321
					1260
		1	71	11	1244
		1	61	20	1507
		3	86	8	1622
					1040
					1539
		1	100	8	1495
		1	86	8	1581
		1	70	17	1782
		1	53	16	1455
		2	91	16	1832
					1301

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-4	18	2	99	11	1426
					1244
		1	87	9	1765
		1	76	12	1286
		1	73	16	1525
		3	65	15	1834
					1043
					1378
		3	66	6	1285
					1128
					1419
		3	99	11	1490
					1364
					1586
		2	61	20	1530
					1952
		2	78	19	1113
					1113 1620
		2	60	11	1414
					1415
		1	63	6	1533
		1	82	17	1269
		3	87	9	1433
					1432
					1207
		1	51	8	1657
		3	51	8	1255
					1809
					1314
		2	99	11	1496
					1817
		3	92	7	1777
					1782
					1381
		1	81	15	1434

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-5	16	2	57	5	1500
					1716
		2	66	6	1250
					1990
		3	50	20	1991
					1251
					1184
		2	56	19	1132
					1066
		3	97	6	1828
					1814
					1521
		1	61	20	1103
		3	64	19	1443
					1875
					1610
		3	66	6	1960
					1991
					1035
		3	91	16	1109
					1660
					1688
		2	54	18	1254
					1609
		3	53	16	1297
					1245
					1204
		3	84	10	1536
					1205
					1629
		2	71	11	1884
					1682
		1	53	16	1394
		1	74	14	1302
		1	100	8	1239

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-6	8	1	84	10	1911
		3	69	6	1999
					1815
					1124
		3	69	6	1389
					1515
					1710
		3	68	11	1936
					1928
					1799
		3	75	20	1314
					1396
					1618
		3	77	10	1581
					1950
					1491
		3	90	13	1384
					1949
					1918
		3	57	5	1882
					1323
					1354

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-7	15	1	88	11	1148
		1	68	11	1085
		1	65	15	1775
		2	80	18	1280
					1716
		3	91	16	1262
					1666
					1853
		3	83	14	1113
					1336
					1560
		3	52	18	1407
					1805
					1206
		1	99	11	1091
		2 67	67	18	1169
					1094
		3	90	13	1765
					1349
					1268
		3	73	16	1250
				-	1931
					1400
		3	52	18	1122
					1234
					1207
		3	100	8	1739
					1926
					1776
		2	84	10	1598
					1582
		1	74	14	1314
		1	61	20	1821

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-8	15	1	80	18	1303
		1	53	16	1382
		3	97	6	1892
					1793
					1281
		1	83	14	1815
		1	63	6	1301
		1	65	15	1369
		1	73	16	1729
		1	80	18	1827
		3	75	20	1410
					1439
					1108
		3	86	8	1025
					1145
					1308
		1	91	16	1846
		1	68	11	1635
		3	71	11	1373
					1803
					1290
		1	71	11	1852

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-9	14	1	50	20	1290
		3	76	12	1245
					1889
					1233
		2	52	18	1075
					1140
		2	73	16	1500
					1599
		1	94	10	1479
		3	75	20	1499
					1501
					1411
		2	63	6	1668
					1742
		1	89	7	1960
		1	82	17	1850
		2	73	16	1023
					1154
		3	91	16	1192
					1359
					1113
		2	57	5	1251
					1656
		3	98	6	1911
					1099
					1643
		2	76	12	1921
					1633

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-10	15	2	76	12	1191
					1352
		3	69	6	1520
					1183
					1061
		1	52	18	1953
		2	88	11	1456
					1013
		2	92	7	1316
					1435
		3	80	18	1228
					1837
					1540
		2	75	20	1717
					1532
		1	85	9	1345
		2	90	13	1393
					1304
		2	77	10	1612
					1056
		3	81	15	1278
					1735
					1055
		1	83	14	1940
		2	71	11	1170
					1470
		3	96	19	1511
					1437
					1157
		1	51	8	1639

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-11	19	3	79	12	1477
					1772
					1905
		3	55	5	1365
					1806
					1289
		2	98	6	1119
					1347
		2	54	18	1089
					1317
		3	86	8	1590
					1260
					1155
		2	75	20	1352
					1064
		2	63	6	1892
					1303
		3	85	9	1341
					1473
					1116
		2	79	12	1187
					1528
		3	94	10	1102
					1836
					1867
		2	65	15	1359
					1173
		3	98	6	1669
					1027
					1550
		2	66	6	1731
					1891
		1	85	9	1892
		1	80	18	1611
		1	60	11	1172
		1	52	18	1136
		1	85	9	1800
		2	56	19	1579
				[	1965

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-12	20	1	77	10	1897
		2	90	13	1267
					1970
		3	60	11	1607
					1131
					1761
		1	51	8	1279
		2	79	12	1937
					1214
		1	95	18	1114
		2	73	16	1641
					1104
		1	96	19	1492
		3	64	19	1816
					1568
					1815
		3	77	10	1485
					1002
					1142
		3	58	10	1564
					1648
					1088
		3	53	16	1097
					1635
					1410
		1	100	8	1655
		2	96	19	1630
					1003
		3	71	11	1965
					1023
					1152
		3	64	19	1295
					1245
					1731

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-12	20	3	93	15	1903
					1617
					1384
		3	74	14	1888
					1519
					1083
		3	70	17	1557
					1271
					1663
		3	65	15	1352
					1969
					1115

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-13	13	2	51	8	1838
					1048
		1	91	16	1189
		1	84	10	1314
		3	82	17	1084
					1134
					1118
		2	50	20	1477
					1576
		1	77	10	1230
		2	56	19	1104
					1357
		2	90	13	1268
					1142
		2	76	12	1627
					1654
		1	60	11	1490
		2	81	15	1125
					1185
		1	56	19	1578
		3	59	11	1722
					1268
					1275

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-14	17	1	84	10	1376
		3	91	16	1284
					1207
					1874
		1	72	12	1004
		1	55	5	1537
		3	70	17	1801
					1594
					1642
		2	95	18	1129
					1265
		1	61	20	1884
		1	50	20	1585
		1	91	16	1265
		1	70	17	1148
		3	73	16	1339
					1365
					1160
		2	87	9	1657
					1186
		2	76	12	1236
					1356
		2	57	5	1813
					1932
		1	90	13	1417
		2	92	7	1093
					1761
		2	76	12	1428
					1494

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-15	9	2	82	17	1534
					1194
		2	80	18	1695
					1992
		1	78	19	1081
		1	100	8	1991
		2	54	18	1490
					1110
		3 87	9	1906	
					1376
					1085
		2	73	16	1166
					1873
		3	66	6	1210
					1769
					1858
		2	64	19	1063
					1567

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-16	12	1	79	12	1909
		3	91	16	1682
					1015
					1682
		3	92	7	1467
					1698
					1290
		1	56	19	1377
		2	51	8	1154
					1232
		1	53	16	1198
		2	55	5	1184
					1931
		1	64	19	1082
		3	91	16	1975
					1199
					1550
		2	64	19	1891
					1580
		1	100	8	1498
		1	71	11	1588

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-17	17	2	65	15	1707
					1348
		1	64	19	1561
		2	67	18	1085
					1142
		3	51	8	1779
					1379
					1167
		1	81	15	1418
		2	82	17	1488
					1621
		2	59	11	1307
					1688
		1	83	14	1891
		2	70	17	1529
					1087
		3 57	5	1472	
					1187
					1478
		2	54	18	1127
					1224
		3	63	6	1423
					1065
					1445
		2	64	19	1640
					1353
		2	81	15	1803
					1902
		2	83	14	1390
					1987
		3	77	10	1323
					1588
					1739
		1	71	11	1776

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-18	17	1	84	10	1820
		1	72	12	1951
		1	51	8	1860
		1	99	11	1327
		2	83	14	1406
					1483
		2	55	5	1149
					1937
		2	66	6	1945
					1402
		1	89	7	1898
		1	81	15	1611
		3	66	6	1729
					1993
					1500
		1	62	12	1838
		3	67	18	1111
					1713
					1884
		2	80	18	1954
					1624
	1	1	82	17	1896
		1	99	11	1973
		2	93	15	1731
					1189
		3	61	20	1079
					1202
					1287

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-19	12	1	51	8	1875
		1	88	11	1338
		1	88	11	1549
		2	58	10	1150
					1165
		3	54	18	1180
					1115
					1637
		1	56	19	1330
		1	73	16	1037
		1	64	19	1873
		1	66	6	1486
		2	87	9	1992
					1318
		3	81	15	1686
					1299
					1478
		1	85	9	1484

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
oehhyou3-20	18	1	96	19	1097
		2	74	14	1542
					1376
		2	96	19	1136
					1286
		3	62	12	1900
					1215
					1105
		2	94	10	1494
					1953
		3	73	16	1257
					1542
					1769
		3	55	5	1840
					1637
					1342
		3	59	11	1348
					1552
					1771
	1 90	90	13	1039	
		1	84	10	1043
		3	77	10	1017
					1887
					1788
		3	67	18	1909
					1180
					1425
		2	52	18	1183
					1789
		1	79	12	1001
		3	96	19	1914
					1250
					1520
		3	90	13	1778
					1816
					1825
		1	87	9	1025
		1	96	19	1679

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-21	14	1	62	12	1967
		1	92	7	1157
		3	95	18	1738
					1052
					1973
		2	100	8	1231
					1130
		3	87	9	1823
					1962
					1380
		2	84	10	1090
					1877
		3	53	16	1711
					1339
					1951
		2	90	13	1061
					1334
		1	81	15	1703
		2	51	8	1019
					1212
		1	65	15	1709
		3	99	11	1604
					1356
					1950
		2	87	9	1295
					1361
		1	67	18	1267

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)			
behhyou3-22	9	1	70	17	1420			
		3	89	7	1785			
					1703			
					1532			
		3	76	12	1433			
					1321			
					1876			
		2	87	9	1297			
					1667			
		1	78	19	1748			
		3	67	18	1883			
					1214			
					1113			
			l		1	82	17	1093
		1	66	6	1488			
		2	52	18	1537			
					1744			

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-23	13	2	96	19	1234
					1043
		2	51	8	1422
					1924
		3	91	16	1406
					1025
					1915
		2	72	12	1063
					1991
		2	83	14	1024
					1504
		3	99	11	1252
					1823
					1741
		3 58	58 10	10	1191
					1794
					1433
		1	88	11	1657
		3	93	15	1549
					1874
					1431
		2	52	18	1696
					1618
		1	62	12	1317
		2	87	9	1501
					1614
		2	92	7	1943
					1860

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-24	13	3	61	20	1508
					1614
					1503
		3	81	15	1330
					1714
					1009
		2	56	19	1817
					1713
		2	63	6	1092
					1268
		1	98	6	1201
		3	86	8	1584
					1161
					1192
		3	95	18	1175
					1095
					1697
		1	53	16	1359
		2	70	17	1866
					1915
		3	73	16	1423
					1205
					1328
		3	99	11	1504
					1484
					1461
		1	100	8	1693
		1	62	12	1156

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-25	13	2	63	6	1126
					1231
		2	84	10	1007
					1613
		3	58	10	1867
					1471
					1912
		3	90	13	1137
					1821
					1036
		2	88	11	1368
					1612
		3	90	13	1162
					1629
					1154
		2	77	10	1651
					1798
		1	74	14	1465
		3	98	6	1344
					1784
					1105
		2	92	7	1857
					1842
		1	63	6	1582
		3	55	5	1329
					1783
					1310
		1	57	5	1458

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)			
behhyou3-26	10	2	66	6	1638			
					1558			
		2	88	11	1092			
					1868			
		1	88	11	1853			
		1	55	5	1402			
		3	86	8	1406			
					1702			
					1826			
		2	95	18	1985			
					1440			
		3	73	16	1670			
					1204			
					1539			
		3	63	6	1355			
					1129			
								1643
					1	67	18	1208
		3	73	16	1447			
					1573			
					1070			

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-27	16	3	90	13	1556
					1381
					1073
		3	61	20	1832
					1426
					1372
		2	88	11	1695
					1248
		1	79	12	1945
		2	81	15	1067
					1997
		2	86	8	1841
					1694
		3	81	15	1442
					1249
					1025
		1	52	18	1959
		3	87	9	1873
					1470
					1493
		1	80	18	1470
		1	68	11	1805
		3	95	18	1220
					1701
					1957
		2	62	12	1596
					1279
		3	83	14	1072
					1840
					1706
		2	94	10	1767
		_			1393
		2	99	11	1379
		_			1665

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-28	19	3	62	12	1358
					1912
					1678
		3	57	5	1405
					1409
					1208
		3	86	8	1283
					1830
					1592
		3	53	16	1101
					1928
					1422
		1	96	19	1648
		2	65	15	1418
					1019
		3	84	10	1118
					1854
					1565
		1	94	10	1524
		2	93	15	1964
					1595
		3	51	8	1891
					1206
					1366
		3	92	7	1854
					1982
					1962
		3	91	16	1263
				1376	
					1188
		1	62	12	1604
		3	51	8	1250
					1059
					1020
		1	61	20	1494

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
behhyou3-28	19	3	56	19	1114
					1979
					1177
		1	94	10	1459
		1	58	10	1927
		1	58	10	1598

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-29	15	3	96	19	1442
					1651
					1370
		3	70	17	1014
					1837
					1329
		3	90	13	1200
					1978
					1278
		1	87	9	1463
		2	77	10	1847
					1101
		2	70	17	1208
					1788
		2	91	16	1609
					1600
		3	68	11	1798
					1877
					1008
		1	86	8	1309
		1	79	12	1311
		2	80	18	1423
					1938
		3	50	20	1603
					1053
					1406
		1	70	17	1612
		2	71	11	1599
					1773
		3	52	18	1347
					1991
				[	1629

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-30	14	1	63	6	1753
		2	65	15	1142
					1339
		2	99	11	1143
					1869
		1	91	16	1474
		3	86	8	1144
					1449
					1903
		2	79	12	1160
					1577
		2	83	14	1103
					1053
		2	99	11	1027
					1071
		3	87	9	1836
					1178
					1962
		2	84	10	1723
					1408
		1	98	6	1782
		3	100	8	1580
					1885
					1129
		1	98	6	1695
		1	50	20	1148

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-31	11	3	59	11	1825
					1663
					1090
		1	97	6	1669
		3	70	17	1486
					1432
					1001
		1	77	10	1054
		3	72	12	1230
					1232
					1830
		3	99	11	1187
					1339
					1043
		3	59	11	1864
					1264
					1582
		2	67	18	1153
					1910
		2	51	8	1365
					1151
		2	80	18	1212
					1727
		2	65	15	1368
					1024

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-32	10	2	81	15	1425
					1783
		1	90	13	1217
		3	93	15	1603
					1500
					1767
		2	94	10	1938
					1823
		3	66	6	1631
					1296
					1019
		2	75	20	1196
					1448
		1	99	11	1859
		1	74	14	1549
		3	80	18	1481
					1705
					1030
		2	54	18	1322
					1313

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)		
behhyou3-33	12	3	57	5	1329		
					1397		
					1308		
		1	66	6	1000		
		1	71	11	1412		
		3	95	18	1561		
					1269		
					1791		
		3	76	12	1522		
					1438		
						1163	
		1	65	15	1062		
		1	66	6	1079		
		1	74	14	1817		
		2	76	12	1536		
					1516		
				2	77	10	1671
					1452		
		1	89	7	1843		
		2	67	18	1935		
					1134		

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-34	9	2	91	16	1593
					1619
		1	76	12	1552
		1	70	17	1990
		3	77	10	1299
					1397
					1407
		1	67	18	1857
		1	52	18	1416
		1	89	7	1399
		1	99	11	1304
		2	67	18	1323
					1604

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-35	15	1	50	20	1056
		2	93	15	1058
					1137
		1	84	10	1856
		3	95	18	1210
					1209
					1606
		1	56	19	1776
		1	98	6	1720
		1	68	11	1251
		3	95	18	1195
					1503
					1309
		2	57	5	1562
					1915
		2	92	7	1972
					1719
		3	51	8	1866
					1381
					1648
		2	64	19	1331
					1065
		3	86	8	1899
					1454
					1859
		3	77	10	1023
					1588
					1650
		3	77	10	1720
					1112
					1365

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-36	8	1	83	14	1547
		3	64	19	1346
					1124
					1150
		3	98	6	1513
					1364
				1451	
		3	98	6	1028
					1336
					1370
		1	78	19	1502
		1	94	10	1554
		3	50	20	1103
					1263
					1901
		2	94	10	1898
					1493

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)	
behhyou3-37	18	3	94	10	1802	
					1425	
					1217	
		3	97	6	1327	
					1573	
					1223	
		1	70	17	1991	
		1	79	12	1868	
		2	75	20	1921	
					1407	
		3	58	10	1738	
					1000	
					1901	
		2	92	7	1012	
					1353	
		1	92	7	1338	
		2	58	10	1246	
					1356	
		2	79	12	1659	
					1568	
		2	96	19	1067	
					1192	
		1	62	12	1941	
		2	71	11	1764	
					1670	
		2	52	18	1508	
					1101	
			1	78	19	1956
		2	62	12	1830	
					1291	
		3	78	19	1789	
					1450	
					1717	
		1	85	9	1953	

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-38	14	1	72	12	1233
		1	93	15	1304
		1	53	16	1505
		3	75	20	1598
					1817
					1812
		3	68	11	1260
					1734
					1545
		1	96	19	1718
		2	71	11	1760
					1919
		1	60	11	1482
		3	89	7	1305
					1284
					1476
		3	51	8	1563
					1651
					1200
		1	66	6	1068
		3	68	11	1561
					1948
					1119
		1	53	16	1988
		1	52	18	1715

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-39	16	3	84	10	1554
					1339
					1330
		1	93	15	1773
		1	67	18	1087
		3	90	13	107
					1257
					1402
		3	73	16	1590
					1120
					1559
		1	95	18	1948
		3	56	19	1081
					1117
					1947
		3	68	11	1682
					1979
					1917
		3	80	18	1150
					1788
					1040
		2	56	19	1593
					1365
		2	92	7	1910
					1663
		2	74	14	1105
					1416
		1	87	9	1995
		2	96	19	1881
					1151
		2	79	12	1134
					1938
		3	83	14	1538
					1779
					1324

Table B-7 Attached Table 3 (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
behhyou3-40	18	1	68	11	1739
		1	76	12	1065
		1	74	14	1849
		1	57	5	1047
		1	76	12	1073
		2	93	15	1764
					1807
		3	69	6	1411
					1802
					1149
		1	74	14	1325
		1	72	12	1068
		1	51	8	1890
		1	86	8	1001
		2	87	9	1878
					1132
		1	82	17	1246
		2	77	10	1123
					1452
		3	89	7	1021
					1271
					1052
		2	61	20	1536
					1983
		3	59	11	1726
					1092
					1266
		2	88	11	1503
					1201

Table B-8 Attached Table 4

				145.0 5	7 / ((100))	eu labie <del>-</del>			
behhyou4-01	behhyou4-02	behhyou4-03	behhyou4-04	behhyou4-05	behhyou4-06	behhyou4-07	behhyou4-08	behhyou4-09	behhyou4-10
-4									
			-10						
	-9 								
								10	
				-6					
			-2					2	
								-3	
			9						
							9		
					-1				
					-1				
					3				
2			-3						
						4			
		4							
	-1								
					0			-9	
								-6	
				6					
				0			-7		
7									
								-2	-7
								-2	-7
		5				5			
1						-4			
								1	
						-8			
			8		-10				
	1								
	     -7					8	  7		
	      					8	  7		
						8 	7 		
	      					8 	  7		

behhyou4-01	behhyou4-02	behhyou4-03	behhyou4-04	behhyou4-05	behhyou4-06	behhyou4-07	behhyou4-08	behhyou4-09	behhyou4-10
	-5	3							
						-5		6	
		10							

Table B-8 Attached Table 4 (Cont'd)

behhyou4-11	behhyou4-12	behhyou4-13	behhyou4-14	behhyou4-15	behhyou4-16	behhyou4-17	behhyou4-18	behhyou4-19	behhyou4-20
6	1								
-2									
			-3						
				8				-5	-3
			2						
				-8					
				-8					
						1			
-9					5				
				-6					
								9	
-6									
				-10					
			7						
			4						-7
								3	
							7		
				-3	-2				
			0						
-4			-5			10			
		10							
								-8	
								-8	
							6		
							-4		
		9							
								-9 	
				-1 			2		
		5					2		
		. 5							

behhyou4-11	behhyou4-12	behhyou4-13	behhyou4-14	behhyou4-15	behhyou4-16	behhyou4-17	behhyou4-18	behhyou4-19	behhyou4-20
			-1						
							0		
					8				
3		-10					4		
					-7				

Table B-8 Attached Table 4 (Cont'd)

behhyou4-21	behhyou4-22	behhyou4-23	behhyou4-24	behhyou4-25	behhyou4-26	behhyou4-27	behhyou4-28	behhyou4-29	behhyou4-30
				-1					
		8			10				
								8	
								7	
	-6								
	-9 								
								6	-2
***			9						
								-3	
-4 									
		1							
							-8	0	
									-1
									-8
				-7					
			7						
	6								
								-10	
-1	2								
					2				
***									
	-5								
	-2							-6	
1					3		1		
		4							
					1				
			10						
			10						
-8					9				
								-7	
							1		
						-5			
							4		
							-		
						-9			
	3								
		5							
							1		
			5						
							-4		
								9	
	0								
		•	•	•	•	•		•	•

behhyou4-21	behhyou4-22	behhyou4-23	behhyou4-24	behhyou4-25	behhyou4-26	behhyou4-27	behhyou4-28	behhyou4-29	behhyou4-30
DeriffyOu4-21	Defiliyou4-22	DerittyOu4-23	DeriffyOu4-24	Deririyou4-23	Dennyou4-20	DerittyOu4-27	DeriffyOu4-26	DeriffyOu4-29	berniyou4-30
						-2			
	-10								7

Table B-8 Attached Table 4 (Cont'd)

behhyou4-31	behhyou4-32	behhyou4-33	behhyou4-34	behhyou4-35	behhyou4-36	behhyou4-37	behhyou4-38	behhyou4-39	behhyou4-40
			-3				4		
				10					
-5									
						0			
								-3	
			-10						
			5						
								-6	
			10						
		-6							
						3			
					-7				
					-7				
0									
								-7	
						-3			
-4 									
8									
					5				
							-9		
3				-1					
					-6				
							2		
						-2			
	2		7						
				-8					-9
									5
								7	1
							8		
						-10 			
									3
									4
									4
						-5			
								9	
						6			
	4	6							
					-4				
					4				
								-5	
								-4	
		-9							
				1					
	1	1				1		l	

behhyou4-31	behhyou4-32	behhyou4-33	behhyou4-34	behhyou4-35	behhyou4-36	behhyou4-37	behhyou4-38	behhyou4-39	behhyou4-40
***									
1									-2
				9					

Table B-8 Attached Table 4 (Cont'd)

hehhvou4-01_40M	behhyou4-02_40M	behhvou4-03_40M	hehhvou4-04_40M	hehhvou4-05 40M	hehhvou4-06 40M	hehhvou4-07 40M	hehhvou4-08 40M	hehhvou4-09 40M	hehhvou4-10 40M
	19		-5		-14				
		8		16					
						8			
-9									
	8								
	-0								
		14							
								7	
									16
		1		18					
		-18				-17			
				9					
		-20	6						
		10							
-2									
13				-6 					
	0			i				-15	:
					10				-11
				-1	12 4	-12			18 14
								2	
						-2			
				-10 	3	-1 9			
					19				-13
							-4		
							-8		
	-11				11				
15									
				-7 					
	11						15		
		-4	-14	-12			10	-20	
	-3						-9		-3
				-					-
				20					
									1
								-7	
									-9
	7						5		
		4				17	-18		
	-15 	12				-19			
		12				20			
				-19					7
				-			-5		-
				10					
		-19							
		-13 							
							0		
			-16					-10	
			5						
								-3	
	17								
						•			

behhyou4-01_40N	behhyou4-02_40M	behhyou4-03_40M	behhyou4-04_40M	behhyou4-05_40M	behhyou4-06_40M	behhyou4-07_40M	behhyou4-08_40M	behhyou4-09_40M	behhyou4-10_40M
	3								
	-17								
								13	
				1				-6	
			2						
						-16	6		

Table B-8 Attached Table 4 (Cont'd)

habbygud 11 40M	habbuau4 12 40M	habbuau4 12 40M	habbuau4 14 40M	habbuau4 1E 40M	habbugud 16, 40M	habbugud 17 40M	habbuaud 10 40M	habbugud 10, 40M	habbuau4 20 40N
bennyou4-11_40lvl	6		-13	bennyou4-15_40W	bennyou4-16_40lvi	behhyou4-17_40M	bennyou4-18_40IVI	bennyou4-19_40M	bennyou4-20_40N
11					-19				
-5					11	14			
	-7		15	***					
				1					
									11
					15				
						4			-16
									7
			0	***					
		9				8			
						-3 			
5									
		3							
		19		-					
			-15						-5
						1			19
	-10								
	-12 -14								
	-14								
									-2
					-10				4
-1 		14							
			17		-8				
							***		
***							***		
					-4				
				13					
								-9	
4									
								20	
***							***		
	8				16		10		
						-2	12		
						-2			
		-20			2				
					-17				
						0			-10
	18		20						
-16									
				-11	5	18			
					17	-16			
							-10		
							-18		
13									
						-5			
			10						
						-7		-20	
		-4		1					
		2							
									-7
						3			
	-11	-17			9				
	-11	-17			9				
								7	
						-14			
				6					
	12		-10	-1 					

behhyou4-11_40M	behhyou4-12_40M	behhyou4-13_40M	behhyou4-14_40M	behhyou4-15_40M	behhyou4-16_40M	behhyou4-17_40M	behhyou4-18_40M	behhyou4-19_40M	behhyou4-20_40M
16			-18		-12				
						10			
	-6	-2						-13	
		-19	-8		-15				
						19		-6	

Table B-8 Attached Table 4 (Cont'd)

h-hh4 04 40M	h - h h 4 00 40M	h-hh4 00 40M	h-hh4 04 40M	h - h h 4 0 5 4 0 M	h-hh1 00, 40M	h-hh4 07 40M		h-hh4 00 40M	h - h h 4 20 40M
bennyou4-21_40M	bennyou4-22_40M	behhyou4-23_40M	bennyou4-24_40M	-13	bennyou4-26_40M	bennyou4-27_40M	bennyou4-28_40M	bennyou4-29_40M	bennyou4-30_40M
				5			20		
5		-3							
-13					9				-8
2						-9 		10	
								18	11
							-6		
						-5			
									1
-1 							15		
	16								
								2	
						4			
				-19					
	0								
	1	15					10		
	-19	10							
			-14						-18
							-17		
		-11							
								-14	-15
				17		7			
		18					-11	6	
		8							
	-9			3	-4				
								-16	
		13							
						14			5
	14							-15 	
				0	-10				-10
				1					
	17								
		20							
					-12			-5	
			10				12		
	-10		10				-2 		19
	-18								12
				-1					
				-1				-17	
			-15						
9				13					
		-8							
6									
				-3		-8 		17	
				-3			19	17	
				8					
12						-18			
12						-18			
12  									
12 									

behhyou4-21_40M	behhyou4-22_40N	behhyou4-23_40M	behhyou4-24_40M	behhyou4-25_40M	behhyou4-26_40M	behhyou4-27_40M	behhyou4-28_40M	behhyou4-29_40M	behhyou4-30_40M
	-20								
	-17								
		3			-20	-7			
			11						
	-4								
									19
				16					

Table B-8 Attached Table 4 (Cont'd)

hobbyou4 21 40M	hobbyoud 32 40M	hobbyoud 22 40M	hobbyoud 24, 40M	hobbyou4 25, 40M	hobbyou4 26 40M	hobbyoud 27 40M		hobbyoud 30, 40M	hobbyoud 40, 40M
					dennyou4-36_40M	behhyou4-37_40M			bennyou4-40_40iv
							-14		
			-3						
-7									
	9		4						-4
			4						
					1			0	
-11					-				
						-6 			
3									
					1				
								-16	16
							14		
			1.4						-6
			14	17			-5		-6 
				-10					13
		-9							-14
	16				-3				
		-20							
							8		
15			5		13				
15					13				
				-16					
2				***					
						19	-19		
			-20	-4					
			10						
			10						
				-13					
20									
18				18	1				
									2
						1			
						8			
				-17		-8			
				0					
							7	-12	
				20					
									14
			15		-12				
		-14		10					
				12					
					9				
								-8	
		-6							
-13				-7			-1		
			2	11					
-1							-10		
-1 							-18		
		1						7	
-12									
	 8								
-12 	8  -2						4 6		
-12  	 8  -2 						4 6 		
-12  	 8  -2 	   0					4 6 		
-12   	 8  -2  	   0					4 6 	      	
-12        	 8     	0 					4 6	    -13	     17
-12    -16	 8  -2   	0 					4 6 	      	     17
-12        	 8     	0 					4 6	    -13	
-12		0 					4 6	-13	     17
-12	 8 -2  	   0  -4 			        		4 6 	-13	

behhvou4-31 40M	behhvou4-32 40M	behhvou4-33 40M	behhvou4-34 40M	behhvou4-35 40M	behhvou4-36 40M	behhvou4-37 40M	behhvou4-38 40M	behhvou4-39 40M	behhyou4-40 40M
		6							
				-11					
10									15
						-15	3		

Table B-8 Attached Table 4 (Cont'd)

h-hh4 04 00M	h-hh4 00 00M	h-hh4 02 00M	h-hh4 04 00M	h-hh4 OF 00M	h-hh4 00 00M	h-hh4 07 00M	h-hh4 00 00M	h-hh4 00 00M	h - h h
bennyou4-01 80M	bennyou4-02 80M	bennyou4-03 80M	bennyou4-04 80M	bennyou4-05 80M	bennyou4-06 80M	behhyou4-07 80M	bennyou4-08 80M	bennyou4-09 80M	bennyou4-10 80M
			37	-18	4				
	23	-37					-17		9
			0			-34			
				i					
			***	***					***
							34		-27
							-2		
					-20				
					-39			26	
			6						
		-8			-7				
								-38	
-2	8	26		34		-29			
-12		-30	***						
			-35						
					23				
								12	
-5 				5				24	
			16						
				2				37	-25
						-35			
							29		
-13						36	15		
		-10			3	-5			
17							-36		
-14								-20	22
	-38								
		-9		38					
		-29						-40	-8
		-29				21		-40	
	-19								-19
									-21
		-40			16			30	
		1				10			
	-16								
					-18	1			28
	-11					-3			
				11					
	-15 -20		22						
	20		39	-31			5		
	13	-39		15					-13
		-21							
					17		40		
					39			-37	
			-32				-14		
	-27			-					-30
		14	35 19						
					6				34
	-24								
					-16			-33	
-36		20		28					
	-17		•••	9					
							-1		
	21	-4		31					-32
				29				35	
				30		27	-32	19	-8 25
				30		27	-32		-22
					-12				
32									
		-25					-26		
		-1			20		-28		
			27	•••				-15	
		-23						-24	
		-22	-3						8
			3						1
				18				8	-16
4				14					
				13				-10	
		-33							-33
		7							
		24		18		-31			
			•••						
				-9					
36					7				
			10					-22	
			10	-23					
		-26	33			31			
	•							•	

behhyou4-01 80	M behhyou4-02 80M	behhyou4-03 80M	behhyou4-04 80M	behhyou4-05 80M	behhyou4-06 80M	behhyou4-07 80M	behhyou4-08 80M	behhyou4-09 80M	behhyou4-10 80M
							2		
		-7		0				-6	
				11			32		
									-29
40	12		-6				38		
			-34						3
25			-28		25		33	-4	

Table B-8 Attached Table 4 (Cont'd)

Semigraphy   1   100   Semigraphy   1   100		1 11 4 40 0014	1 11 4 10 0014			1 11 440 0014		1 11 4 10 0014		
100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100										
10										
1		40								
The color of the			-36						6	
The color of the										-3
1										
The color   The										
The color of the										
Color										
The color   The										
The column   The										
The color of the										
Total										
The column   The						-17				
1										
1										
The color of the										
1		36			-19			-15		
10				28					14	
1				20						
1										
10										
1										
								-34		
1										
1										
10										
10										
10										
	10									
13						31				
13									-27	
	-13	-31					-6			
14										
1										
1										
1										
18										
18										
18						-24			-33	
1	18	-14		22				38		
							-20	34		
1										
9 12 14										
18										
31										
10										
30										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
13										
27										
			13							
11										
35 39										
15 18										
	15					18				

behhyou4-11 801	behhyou4-12 80M	behhyou4-13 80M	behhyou4-14 80M	behhyou4-15 80M	behhyou4-16 80M	behhyou4-17 80M	behhyou4-18 80M	behhyou4-19 80M	behhyou4-20 80M
			23	40		-30			
		-12							
-24									
								-21	
-18									
	-15						29		
	37		-17					3	
			-23				21		***

Table B-8 Attached Table 4 (Cont'd)

behhyou4-21 80M beh	40  -17	-34	38 -23		behhyou4-26 80M	behhyou4-27 80M	behhyou4-28 80M	behhyou4-29 80M	behhyou4-30 80M
		-34							
				17					
		-22				-30			
					-9		-20		
				-5		11			
									-9
-8	-36			32					
			26			-16 		38	
	39		26	28					15 13
	28	-40		12					
					-31				-40
				-24					
									27
			22						
	5				7				
			8			-7			
				-29		19	-4 	-40 	
						27			
		-9							
		3							-12
					-38				
						-27			-4
-12			-25		34				
29							91	-95	
						-22	31	-25 	
			14	30	-6	-22		-3	
18								-23	34
	23		-21	-2					
	-29	-37				13			6
						21	37		
-38									-5 
			-33 				22		
						5			
								26	
					-17		-11		
			2			-32			19
	10	-27		16	6		-36		30
							-35		
						-12			
			13					-34 	
			10						
-6		-11						9	
						-39			
-1	32								
									1
		-18							
21				-21	-8				
		-2			-33				-14
							3	3	25
		30		29		36			
-4									
			-20	25					
37		-39						14	
19			11				-1		
		16			0				
		16			33				
	-10	35					20		
			***		•••	-18		-31	
	-31								
-26									
-5 									28
	-13			-28		8			
	20			-26					
		-24	12			-26			
9		-19							
	27		15			23	35		
		33							
		34							
!							-14	-24	
-28									
 -28 		31							
-28		31	24			-10	10		
-28   7		-15	24 14		1	-10 	10 -15		7
-28 			24			-10	10		

ı	behhyou4-21 80	M behhyou4-22 80M	behhyou4-23 80M	behhyou4-24 80M	behhyou4-25 80M	behhyou4-26 80M	behhyou4-27 80M	behhyou4-28 80M	behhyou4-29 80M	behhyou4-30 80M
[								18		
ſ										11
ſ			25							
[								-13		-19
ſ			-30	15		-37		4		
ſ									2	-3
[	17		-35		-19				-6	33
ı									-1	

Table B-8 Attached Table 4 (Cont'd)

1 11 4 04 0014	1 1 4 00 0014		1 11 404 0014	4.05.0014	1 11 400 0014	L		1 11 1 100 0014	
-8	behhyou4-32 80M -25	bennyou4-33 80M	bennyou4-34 80M	bennyou4-35 80M	bennyou4-36 80M	bennyou4-37 80IVI	bennyou4-38 80M	bennyou4-39 80M	bennyou4-40 80i
		38			-33	-20			
							-15	-36	-10
					14				
				2					
			18						
		-20				1			
					-12				-35
4							-13	38	
					3				
						-11	19		4
			32	20	27				
	37			4				-26	
		-34						15	
				11				1	
	26			22					
			17	-29					
				-19					
		-33		-9					
		22							
***						24	-21	-27	
	5								
	36	-16							33
								30	
	-22		-36 					-30	
					21				
							-6 		
-39			29	30	13		8	32	-5
					10	-27		32	-40
							-32		
				-1					17
						-7			
									37
							23		
-32								-4	
		-29						11	
								-33	
		24		29	10				
9					10				-10
			37		18				-18
35								16	
	16								
21		20							
								8	
31	-26	0		33					
	-37								
	-15	-30				-22	-31		
				-30		9	16		
10									***
							36		
			39	31			-37		
				15	-5		7		
							40		-25
	12						-4		5
							-4		-13
							-10		
-23						-2		27	
					12				22
			-40			-14			
					-39				
			25		-8				
-2		40							
		-35			-26		-25	25	
-27									
-90		20							
-28		39	0					-28	7
		-7	-3					-28	
	23	-13	38						
	23	-13	38	34		-28		-38	31
	-38			34 		-26		-56	91
				26					
-21					-18				
			6	5					
				-16					12

behhyou4-31 8	0M behhyou4-32 80M	behhyou4-33 80M	behhyou4-34 80M	behhyou4-35 80M	behhyou4-36 80M	behhyou4-37 80M	behhyou4-38 80M	behhyou4-39 80M	behhyou4-40 80M
			32						
			-35				-34		
-11									
	-17								
-18				-38					
						-24			
-10			28						
				35	17	-17			

Table B-8 Attached Table 4 (Cont'd)

h-hh4 04 400M	h-hh4 00, 400M	h-hh4 00, 400M	L-LL4 04 400M	L-LL4 OF 4COM	h-hh4 00, 400M	h-bb4 07 400M	h-hh4 00, 400M	h-hh4 00 400M	h-hh4 40, 400M
behhyou4-01 160M	behhyou4-02 160M	behhyou4-03 160M 16	-19	-60 behhyou4-05	behhyou4-06 160M	behhyou4-07 160M	behhyou4-08 160M	75	behhyou4-10 160M -47
		9	-2	74	-35				41
17		-40					66		71
			-74		-30				
10					-17			-78	
	-49							-16	78
	-5								
			3				43	***	
24			75				72	-50	
	-37			39	-15	9			
			-43		-72				
18			40	-34	-44				
26	77			49					
30		-56		45		-42		55	
33		51					0	70	
29	-32		-68	35 		13 -1	-8 3	41	
		41	-31	63		-27	32	41	
						-73		-5	
1		-27							
		60							
73		78			-54				-52
	-35		-24	-12					
			-47	-20				-36	
25	-28					-13		-75	6
	53		-63			-61			30
-14					48		74	64	27
			7			80	-64		
		72	54		-69	-80		-20	-62
43	-57						18		
		-33	-58	70			-55		-70
-16							26		
		-00	-48	66	8	16	69		15
-7		-66	-10				-79 	46	
			20	-4	35	-26		46	40
34		79	-9	-4		-26		-59	40
		-67	-9		34			-21	57
		-29			11	77			63
65				50		47	-74	5	
6							56		
	-42	-44			-2	-4	2		12
	31		-17				-32		
		-21	-76	-73	22	-38		59	79
	-36		-72		-49				-53
	-80			12					-68
-23	5	61		68	25			-7	
							73		
	-3	-1		67					45
-13	22	-26	44				39		
			27		51		38	-45 	
11	8	-55			-65 -23	1			14
-45	80								38
37	47					-28			
			-38						
				58				4	-23
			-64		-58				-46
				-71					48
						54	-11	60	
						10		24	-5
-6			38				-39		
	19		-69				76	-34	
69							-46	-57	75
2		1.4		 -E 4	-22 -76			17	68
-41 		14		-54 	-76 	-33	19		-15 
					67		19	-3	
	32								
-15		-18				-31			-53
	-53				-24	42			-42
	-51								
					33	61	29		-65
	23	-65		-8	-56			36	
	52			4					-32
									***
				53	-10				
		0		-14	-18			-71	
				58		21	-29		20
		55							
	-75	-59				-51	-6		
	-11	-79	56						
-78	-11		13			65			
-52 -62					44	-37		-43	29
-62	48	36			31	-37 -67	-40	-63	62
76	59	3b 			31	-67	-40	62	
	-30						-77	62	-58
-39			-77			-12		37	
									0
		-25				28			24
		-			•				•

behhyou4-01	160M behhyou4-02 16	DM behhyou4-03 160N	behhyou4-04 160M	behhyou4-05 160M	behhyou4-06 160M	behhyou4-07 160M	behhyou4-08 160M	behhyou4-09 160M	behhyou4-10 160M
	-70		15	-19		-48			
***						7			
64		21		-60	50			***	
28			46						60
-22		-50			23	-9			
	-46	42	-61	49				-41	
			71			20		-66	
	57				68		52		
			62			-25			-63

Table B-8 Attached Table 4 (Cont'd)

		7	7			•	7		,	7
17										
14										
Column										
19										
The color										
Second										
1										
The color   The										
1988										
March   Marc										
Color										
Second   S										
1										
The color   The										
1										
					67			39		
The color of the										
The color of the										
Color		71			16					-54
1967   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970   1970			-74							
196   190   110   111   148   111   148   111   148   111   148   111   148   111   148   111   148   111   148   111   148   111   148   111   148   111   111   148   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111   111										
19										
15										
1										
14				-4						
14	-41	-31	-11			36	40		-21	10
1										
The color of the			47		-68					
46				-37		-28				
23	46									
1				-2						
10									-52	-8
1				53		-39				
1		-64						62		
1.55			6	-45		66			54	
173		-55								
10		27			68	56	69	58		32
10		73		-17	-25			-33		
1				-10			73	22		
	4		-57	-14			11	24	-34	-65
		-8			57	-64		-29		
16		37	54							-39
16										11
158				-51				-		-48
1	30	-79			-16		-75	ï		ï
199										
		64				-7	-80			
16		59							-17	
5          96										
70         46          554			-16			45	63	-74		
1										
10										
1										
43										
144										
80										
-6										
61          22										
1										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
1										
1										
11										
11										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
39            37         .62         78         4         61         .79										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
65										
1										
56 <td></td>										
35	56									
34 33										
3 38 35 17									18	
	3									
				12				-46	-10	

behhyou4-11	1 160M	behhyou4-12 160	M behhyou4-13 16	M behhyou4-14 160f	// behhyou4-15 160	M behhyou4-16 160N	behhyou4-17 160M	behhyou4-18 160M	behhyou4-19 160M	behhyou4-20 160M
					12			-49		
-34								79		-6
			-38						9	
-9		18	50			25			-8	-78
		25		-20			-20			
63						-36	13			
76		-30	-26	21				-30		
				77					48	
					77		-9		-67	27

Table B-8 Attached Table 4 (Cont'd)

	r <del> </del>	f	1			1	. (00		[	
Color										
1										
March   Marc										
Part										
Second Color				28						15
Main			53	68	-76	55				
100   146										
1										
The color of the										
The color of the										
150										
1962   1963	59							-66		-66
March   Marc		-63	-50			-24				
S					33					24
March   Marc										
10										
The color of the										
The column   The										
Color						-77				-47
March   Marc		-21					23			
1										-25
1										
19										
37										
133										
1										
10										
1										
10									40	
33     440		-32		40						75
12										
112										
1										
1										
1.										
18		-29	-34		-25		46			-48
198   198   198   198   198   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199   199										
10	-69		43						-63	54
16										
1.										
1										
16										
16										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
1			-68	-61		-52	-54			-26
31							5	-45		
18										
1-7										
1-33										
S										
10										
1										
-53           17          -46         -68         24         -60         78           26            19         -21          27						-41				-30
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				17				24		78
17	26									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-52	-13							
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				-76						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
-58										
18      0       17     41        77         47       8     3      16      18                     .31                                                                                           <										
-73										
-31										
76 54 76										
-18      -60      58      -73           79          35     -14               42										
79			-60							
-44         68										
	L	-44	I		-78					68

behhyou4-21	160M behhyou4-2	2 160M	behhyou4-23	160M	behhyou4-24	160M	behhyou4-25	160M	behhyou4-26 1	60M	behhyou4-27	160M	behhyou4-28	160M	behhyou4-29	160M	behhyou4-30	160M
-3			-46				-51				-12						-58	
5					22				64		-72							
	56				79								51					
			-22						6								-28	
20							38						16		-15			
									2									
	14		-14														-32	
	-37		1				-42				61							
			41		-33										31			

Table B-8 Attached Table 4 (Cont'd)

hehhvou4-31 160M	hehhvou4-32 160M	hehhvou4-33 160M	hehhvou4-34 160M	hehhvou4-35 160M	hehbyou4-36 160M	hehbyou4-37 160M		behhyou4-39 160M	hehhvor4-40 160N
			TOOW			TOOW			-37
72		19			-70	31			43
						19			
				-52	54	23			
		-53			4	-12			
		64	-19				51	55	
	32	-10				-68 	42 -77	-47	
	43	-18	50			15	-56	0	14
	67				-33	25			
				-48			-26	-8	-78
-13		71					78	28	-52
			-78		-21				45
***	47	-33	-34	***	***	8			
	0		23			-16	-62	37	
37	-56	-38			-50				
	-2		-52				32	70	29
	-44		-11 	-64 	29		-23	-76	41
			-79	22	35		-55	26	41
8		-27	61		62	-67			
							36		36
35				65		-69			
	20	-77							-49
6	-9			-5		24			
			-16	72	16				-14
		9					-76 	-75	
-21	58		63	-49				-75 	
-21			-46	-17		-15		-69	
	-61		-46	-17		40			
-8					3		-79		
					-14	34	-42	-2	
-45		13		-29	-53				
48		-80							
		7		26					-64
11			39	73				-68	
	-70 						77	16	-3
			-60 	46	75		-65 		
	-71	-3			12	2			79
65			-11					-18	13
				52			-8		
-37		-65							21
***						74	61		19
66	-35	49			-3				-58
							-24		-40
-24	-76 					-79	-63 	-11	
52		17	13	-78		-73 	49	77	-35 
55						-27			-44
53		-42					56	15	65
	-75				37		-37	-33	11
				-39		0			
					-41			-10	
	45					17			
		26							
	10		68	53			-6	-34	
21	51 69			44	-36 		60		34
	-23		11	44		-20			42
-36	-20					-20			42
39						-10			
				-74	5		-25		
		14	-34	48		58			
			-57		-51				62
			-71		-45			-5	
2									
	38	-29			10		38	49	-23 8
			20					49	
			-75	-38			-7		4
	34		7		67	-30	59		
-55									-4
			79	-31		-19			
					70				68
	80						-54	-46	
12	7.0			66	21	9			
-57 1	76 -6	-22		-72 -40	-46 27	33	-13		
1	-6 			-18	45		76		35
	44		14	-18	40	-9	-66		35 
-5		46			30		-59	50	12
-20		-67	6						
							50		
			-4	-32					20
		70	80	***					
		73	-28	28		-1	-61		
 5		73 	-28 	-44			-43		76
		73	-28						

behhyou4-31	160M	behhyou4-32	160M	behhyou4-33	160M	behhyou4-34	160M	behhyou4-35	160M	behhyou4-36 16	MO	behhyou4-37 160	M behhyou4-38	160M	behhyou4-39	160M	behhyou4-40	160M
				74														
				4		18						57			-39			
41		-68		59		64						43						
62						41						-80	71					
						-22				1					-56		-80	
-4		-17													-66		-57	
													-2				39	
-74		-1		79														
				-64														

Table B-9 Radar Type 0 Parameter

Pattern	Pulse Width	Repetition Period	Continuous Pulse
	(μs)	(μs)	Count
ShortPulse0	1	1428	18

Table B-10 Radar Type 1 Parameter

Pattern	Pulse Width (μs)	Repetition Period (μs)	Continuous Pulse Count
ShortPulse1A-01	1	518	102
ShortPulse1A-02	1	538	99
ShortPulse1A-03	1	558	95
ShortPulse1A-04	1	578	92
ShortPulse1A-05	1	598	89
ShortPulse1A-06	1	618	86
ShortPulse1A-07	1	638	83
ShortPulse1A-08	1	658	81
ShortPulse1A-09	1	678	78
ShortPulse1A-10	1	698	76
ShortPulse1A-11	1	718	74
ShortPulse1A-12	1	738	72
ShortPulse1A-13	1	758	70
ShortPulse1A-14	1	778	68
ShortPulse1A-15	1	798	67
ShortPulse1A-16	1	818	65
ShortPulse1A-17	1	838	63
ShortPulse1A-18	1	858	62
ShortPulse1A-19	1	878	61
ShortPulse1A-20	1	898	59
ShortPulse1A-21	1	918	58
ShortPulse1A-22	1	938	57
ShortPulse1A-23	1	3066	18

Table B-10 Radar Type 1 Parameter (Cont'd)

Pattern	Pulse Width (μs)	Repetition Period (μs)	Continuous Pulse Count
ShortPulse1B-01	1	519	102
ShortPulse1B-02	1	1991	27
ShortPulse1B-03	1	1985	27
ShortPulse1B-04	1	526	101
ShortPulse1B-05	1	2148	25
ShortPulse1B-06	1	993	54
ShortPulse1B-07	1	1592	24
ShortPulse1B-08	1	1602	33
ShortPulse1B-09	1	1914	28
ShortPulse1B-10	1	998	53
ShortPulse1B-11	1	2110	26
ShortPulse1B-12	1	2008	27
ShortPulse1B-13	1	1615	33
ShortPulse1B-14	1	2270	24
ShortPulse1B-15	1	3065	18

Table B-11 Radar Type 2 Parameter

	1			
Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count	
ShortPulse2-1	3	4504	29	
ShortPulse2-2	3	5235	25	
ShortPulse2-3	3	4739	24	
ShortPulse2-4	1	5714	29	
ShortPulse2-5	5	5102	28	
ShortPulse2-6	5	4587	27	
ShortPulse2-7	3	5291	25	
ShortPulse2-8	3	4784	25	
ShortPulse2-9	1	5747	23	
ShortPulse2-10	1	5235	29	
ShortPulse2-11	1	4716	27	
ShortPulse2-12	5	6329	27	
ShortPulse2-13	5	5847	25	
ShortPulse2-14	3	4566	24	
ShortPulse2-15	3	6329	23	
ShortPulse2-16	3	5813	29	
ShortPulse2-17	3	5319	28	
ShortPulse2-18	1	6289	26	
ShortPulse2-19	1	5780	25	
ShortPulse2-20	4	6329	24	
ShortPulse2-21	3	5847	29	
ShortPulse2-22	2	6451	26	
ShortPulse2-23	3	5405	24	
ShortPulse2-24	2	6369	29	
ShortPulse2-25	1	5882	28	
ShortPulse2-26	1	5376	27	
ShortPulse2-27	4	6172	25	
ShortPulse2-28	4	5681	24	
ShortPulse2-29	4	5181	23	
ShortPulse2-30	5	4975	28	
ShortPulse2-31	3	6172	28	
ShortPulse2-32	3	5154	26	
ShortPulse2-33	1	6134	24	
ShortPulse2-34	4	4424	23	

Table B-11 Radar Type 2 Parameter (Cont'd)

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
ShortPulse2-35	2	5405	28
ShortPulse2-36	5	6211	26
ShortPulse2-37	3	4950	25
ShortPulse2-38	3	4424	24
ShortPulse2-39	1	5128	29
ShortPulse2-40	3	5154	27

Table B-12 Radar Type 3 Parameter

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
ShortPulse3-1	9	2881	18
ShortPulse3-2	10	2849	16
ShortPulse3-3	10	2347	18
ShortPulse3-4	10	4672	17
ShortPulse3-5	8	3030	16
ShortPulse3-6	7	2538	16
ShortPulse3-7	10	3891	17
ShortPulse3-8	10	3412	17
ShortPulse3-9	10	2906	18
ShortPulse3-10	10	2421	18
ShortPulse3-11	8	3597	17
ShortPulse3-12	8	3105	16
ShortPulse3-13	7	2610	18
ShortPulse3-14	7	2100	17
ShortPulse3-15	7	4484	17
ShortPulse3-16	7	3984	18
ShortPulse3-17	7	3484	18
ShortPulse3-18	10	4587	16
ShortPulse3-19	8	3174	18
ShortPulse3-20	6	4366	17

Table B-12 Radar Type 3 Parameter (Cont'd)

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
ShortPulse3-21	9	2631	16
ShortPulse3-22	9	2132	18
ShortPulse3-23	9	4464	17
ShortPulse3-24	8	4000	16
ShortPulse3-25	8	3508	18
ShortPulse3-26	8	3012	18
ShortPulse3-27	8	2512	16
ShortPulse3-28	7	2008	16
ShortPulse3-29	7	7385	18
ShortPulse3-30	10	2666	17
ShortPulse3-31	10	2808	17
ShortPulse3-32	8	3039	16
ShortPulse3-33	6	2538	17
ShortPulse3-34	10	2012	17
ShortPulse3-35	8	2232	18
ShortPulse3-36	8	3649	18
ShortPulse3-37	8	3154	18
ShortPulse3-38	6	3378	16
ShortPulse3-39	6	2881	18
ShortPulse3-40	7	3076	17

Table B-13 Radar Type 4 Parameter

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
ShortPulse4-1	11	2036	15
ShortPulse4-2	17	3289	15
ShortPulse4-3	13	3521	16
ShortPulse4-4	16	4566	12
ShortPulse4-5	12	2070	12
ShortPulse4-6	15	3184	15
ShortPulse4-7	15	2222	16
ShortPulse4-8	11	2444	13
ShortPulse4-9	11	4739	12
ShortPulse4-10	14	3076	13
ShortPulse4-11	14	2590	14
ShortPulse4-12	17	3676	15
ShortPulse4-13	17	3205	16
ShortPulse4-14	20	4219	12
ShortPulse4-15	13	2958	13
ShortPulse4-16	13	2469	14
ShortPulse4-17	16	3558	15
ShortPulse4-18	16	3095	12
ShortPulse4-19	16	2617	16
ShortPulse4-20	12	2840	13

Table B-13 Radar Type 4 Parameter (Cont'd)

Pattern	Pulse Width (μs)	Repetition Frequency (Hz)	Continuous Pulse Count
ShortPulse4-21	15	3921	14
ShortPulse4-22	15	3448	15
ShortPulse4-23	18	4484	16
ShortPulse4-24	18	4032	12
ShortPulse4-25	17	3584	12
ShortPulse4-26	20	2183	15
ShortPulse4-27	20	4347	14
ShortPulse4-28	13	2873	15
ShortPulse4-29	13	2380	16
ShortPulse4-30	16	3484	12
ShortPulse4-31	11	2710	13
ShortPulse4-32	14	2188	13
ShortPulse4-33	17	2375	14
ShortPulse4-34	17	3717	16
ShortPulse4-35	16	3257	15
ShortPulse4-36	20	3412	13
ShortPulse4-37	19	2958	17
ShortPulse4-38	19	2487	14
ShortPulse4-39	19	2004	13
ShortPulse4-40	15	2222	15

Table B-14 Radar Type 5 Parameter

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
LongPulse-1	9	3	61	20	1551
					1102
					1386
		3	76	12	1180
					1981
					1267
		3	52	18	1426
					1115
					1194
		1	85	9	1930
		3	72	12	1478
					1922
					1763
		3	63	6	1530
					1029
					1129
		1	65	15	1512
		1	98	6	1859
		1	71	11	1345

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-2	18	1	97	6	1725
		3	64	19	1961
					1831
					1230
		3	51	8	1606
					1120
					1767
		1	52	18	1849
		1	76	12	1998
		2	56	19	1230
					1544
		3	91	16	1987
					1359
					1126
		1	100	8	1166
		3	78	19	1072
					1619
					1453
		1	55	5	1447
		3	98	6	1702
					1528
					1867
		2	82	17	1465
					1568
		2	90	13	1136
					1584
		3	64	19	1067
					1093
					1825
		1	77	10	1628
		3	53	16	1733
					1592
					1696
		1	84	10	1626
		1	100	8	1899

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
LongPulse-3	19	1	56	19	1428
		3	60	11	1619
					1680
					1713
		2	100	8	1634
					1577
		2	93	15	1233
					1199
		2	58	10	1964
					1355
		1	97	6	1548
		3	59	11	1126
					1971
					1143
		3	86	8	1046
					1176
					1933
		3	68	11	1324
					1011
					1293
		1	63	6	1271
		3	73	16	1680
					1321
					1260
		1	71	11	1244
		1	61	20	1507
		3	86	8	1622
					1040
					1539
		1	100	8	1495
		1	86	8	1581
		1	70	17	1782
		1	53	16	1455
		2	91	16	1832
					1301

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-4	18	2	99	11	1426
					1244
		1	87	9	1765
		1	76	12	1286
		1	73	16	1525
		3	65	15	1834
					1043
					1378
		3	66	6	1285
					1128
					1419
		3	99	11	1490
					1364
					1586
		2	61	20	1530
					1952
		2	78	19	1113
					1620
		2	60	11	1414
					1415
		1	63	6	1533
		1	82	17	1269
		3	87	9	1433
					1432
					1207
		1	51	8	1657
		3	51	8	1255
					1809
					1314
		2	99	11	1496
					1817
		3	92	7	1777
				[	1782
					1381
		1	81	15	1434

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-5		2	57	5	1500
					1716
		2	66	6	1250
					1990
		3	50	20	1991
					1251
					1184
		2	56	19	1132
					1066
		3	97	6	1828
					1814
					1521
		1	61	20	1103
		3	64	19	1443
					1875
					1610
		3	66	6	1960
					1991
					1035
		3	91	16	1109
					1660
					1688
		2	54	18	1254
					1609
		3	53	16	1297
					1245
					1204
		3	84	10	1536
					1205
					1629
		2	71	11	1884
					1682
		1	53	16	1394
		1	74	14	1302
		1	100	8	1239

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-6	8	1	84	10	1911
		3	69	6	1999
					1815
					1124
		3	69	6	1389
					1515
					1710
		3	68	11	1936
					1928
					1799
		3	75	20	1314
					1396
					1618
		3	77	10	1581
					1950
					1491
		3	90	13	1384
					1949
					1918
		3	57	5	1882
					1323
					1354

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-7	15	1	88	11	1148
		1	68	11	1085
		1	65	15	1775
		2	80	18	1280
					1716
		3	91	16	1262
					1666
					1853
		3	83	14	1113
					1336
					1560
		3	52	18	1407
					1805
					1206
		1	99	11	1091
		2	2	67	18
					1094
		3	90	13	1765
					1349
					1268
		3	73	16	1250
					1931
					1400
		3	52	18	1122
					1234
					1207
		3	100	8	1739
					1926
					1776
		2	84	10	1598
					1582
		1	74	14	1314
		1	61	20	1821

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-8	15	1	80	18	1303
		1	53	16	1382
		3	97	6	1892
					1793
					1281
		1	83	14	1815
		1	63	6	1301
		1	65	15	1369
		1	73	16	1729
		1	80	18	1827
		3	75	20	1410
					1439
					1108
		3	86	8	1025
					1145
					1308
		1	91	16	1846
		1	68	11	1635
		3	71	11	1373
					1803
					1290
		1	71	11	1852

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)		
LongPulse-9	14	1	50	20	1290		
		3 76	76	12	1245		
					1889		
					1233		
		2	52	18	1075		
					1140		
		2	73	16	1500		
					1599		
		1	94	10	1479		
		3	75	20	1499		
					1501		
					1411		
		2	63	6	1668		
						1742	
		1	89	7	1960		
		1	82	17	1850		
		2	73	16	1023		
					1154		
		3	91	16	1192		
					1359		
					1113		
		2	57	5	1251		
							1656
		3	98	6	1911		
					1099		
				<u> </u>	1643		
		2	76	12	1921		
					1633		

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-10	15	2	76	12	1191
					1352
		3	69	6	1520
					1183
					1061
		1	52	18	1953
		2	88	11	1456
					1013
		2	92	7	1316
					1435
		3	80	18	1228
					1837
					1540
		2	75	20	1717
					1532
		1	85	9	1345
		2	90	13	1393
					1304
		2	77	10	1612
					1056
		3	81	15	1278
					1735
					1055
		1	83	14	1940
		2	71	11	1170
					1470
		3	96	19	1511
					1437
					1157
		1	51	8	1639

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)			
LongPulse-11	19	3	79	12	1477			
					1772			
					1905			
		3	55	5	1365			
					1806			
					1289			
		2	98	6	1119			
					1347			
		2	54	18	1089			
					1317			
		3	86	8	1590			
					1260			
					1155			
		2	75	20	1352			
				6	1064			
		2	63		1892			
					1303			
		3	85	9	1341			
					1473			
				1116				
		2	79	12	1187			
					1528			
		3	94	10	1102			
					1836			
					1867			
		2	65	15	1359			
					1173			
		3	98	6	1669			
					1027			
					1550			
		2	66	6	1731			
	1 1				1891			
		1	85	9	1892			
				80	18	1611		
		1	60	11	1172			
					1	52	18	1136
		1	85	9	1800			
		2	56	19	1579			
					1965			

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)	
LongPulse-12	20	1	77	10	1897	
		2	90	13	1267	
					1970	
		3	60	11	1607	
					1131	
					1761	
		1	51	8	1279	
		2	79	12	1937	
					1214	
		1	95	18	1114	
		2	73	16	1641	
					1104	
		1	96	19	1492	
		3	64	19	1816	
					1568	
					1815	
		3	77	10	1485	
					1002	
					1142	
		3	58	10	1564	
					1648	
					1088	
		3	53	16	1097	
					1635	
					1410	
		1	100	8	1655	
		2	96	19	1630	
						1003
		3	71	11	1965	
					1023	
					1152	
		3	64	19	1295	
					1245	
					1731	

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)	
LongPulse-12	20	3	93	15	1903	
					1617	
					1384	
		3	3	74	14	1888
					1519	
					1083	
		3	70	17	1557	
					1271	
					1663	
		3	65	15	1352	
					1969	
					1115	

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)	
LongPulse-13	13	2	51	8	1838	
					1048	
		1	91	16	1189	
		1	84	10	1314	
		3	82	17	1084	
					1134	
					1118	
		2	50	20	1477	
					1576	
		1	77	10	1230	
		2	56	19	1104	
					1357	
		2	90	13	1268	
					1142	
		2	76	12	1627	
					1654	
		1	60	11	1490	
				2	81	15
					1185	
		1	56	19	1578	
		3	59	11	1722	
					1268	
					1275	

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)						
LongPulse-14	17	1	84	10	1376						
		3	91	16	1284						
					1207						
					1874						
		1	72	12	1004						
		1	55	5	1537						
		3	70	17	1801						
					1594						
					1642						
		2	95	18	1129						
					1265						
		1	61	20	1884						
		1	50	20	1585						
		1	91	16	1265						
			1	70	17	1148					
		3	73	16	1339						
					1365						
					1160						
		2	87	9	1657						
					1186						
		2	76	12	1236						
					1356						
								2	57	5	1813
									1932		
					1	90	13	1417			
		2	92	7	1093						
					1761						
		2	76	12	1428						
					1494						

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-15	9	2	82	17	1534
					1194
		2	80	18	1695
					1992
		1	78	19	1081
		1	100	8	1991
		2	54	18	1490
					1110
		3 8	87	9	1906
					1376
					1085
		2	73	16	1166
					1873
		3	66	6	1210
					1769
					1858
		2	64	19	1063
					1567

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-16	12	1	79	12	1909
		3	91	16	1682
					1015
					1682
		3	92	7	1467
					1698
					1290
		1	56	19	1377
		2	51	8	1154
					1232
		1	53	16	1198
		2	55	5	1184
					1931
		1	64	19	1082
		3	91	16	1975
					1199
					1550
		2	64	19	1891
					1580
		1	100	8	1498
		1	71	11	1588

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)				
LongPulse-17	17	2	65	15	1707				
					1348				
		1	64	19	1561				
		2	67	18	1085				
					1142				
		3	51	8	1779				
					1379				
					1167				
		1	81	15	1418				
		2	82	17	1488				
					1621				
		2	59	11	1307				
					1688				
		1	83	14	1891				
		2	70	17	1529				
					1087				
		3	57	5	1472				
					1187				
					1478				
		2	54	54 18	1127				
					1224				
		3	63	6	1423				
					1065				
					1445				
		2	64	19	1640				
					1353				
		2	81	15	1803				
					1902				
		2	83	14	1390				
								<u> </u>	1987
		3	77	10	1323				
					1588				
					1739				
		1	71	11	1776				

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)		
LongPulse-18	17	1	84	10	1820		
		1	72	12	1951		
		1	51	8	1860		
		1	99	11	1327		
		2	83	14	1406		
					1483		
		2	55	5	1149		
					1937		
		2	66	6	1945		
					1402		
		1	89	7	1898		
		1	81	15	1611		
		3	66	6	1729		
					1993		
					1500		
		1	62	12	1838		
		3	67	18	1111		
					1713		
					1884		
		2	80	18	1954		
					1624		
			1	82	17	1896	
						1	99
		2	93	15	1731		
					1189		
		3	61	20	1079		
					1202		
					1287		

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-19	12	1	51	8	1875
		1	88	11	1338
		1	88	11	1549
		2	58	10	1150
					1165
		3	54	18	1180
					1115
					1637
		1	56	19	1330
		1	73	16	1037
		1	64	19	1873
		1	66	6	1486
		2	87	9	1992
					1318
		3	81	15	1686
					1299
					1478
		1	85	9	1484

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)	
LongPulse-20	18	1	96	19	1097	
		2	74	14	1542	
					1376	
		2	96	19	1136	
					1286	
		3	62	12	1900	
					1215	
					1105	
		2	94	10	1494	
					1953	
		3	73	16	1257	
					1542	
					1769	
		3	55	5	1840	
					1637	
					1342	
		3	59	11	1348	
				1552		
					1771	
	1 90 1 84		1	90	13	1039
		84	10	1043		
		3	77	10	1017	
					1887	
					1788	
		3	67	18	1909	
					1180	
					1425	
		2	52	18	1183	
					1789	
		1	79	12	1001	
		3	96	19	1914	
					1250	
					1520	
		3	90	13	1778	
	1 87				1816	
						1825
		9	1025			
		1	96	19	1679	

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)				
LongPulse-21	14	1	62	12	1967				
		1	92	7	1157				
		3	95	18	1738				
					1052				
					1973				
		2	100	8	1231				
					1130				
		3	87	9	1823				
					1962				
					1380				
		2	84	10	1090				
					1877				
		3	53	16	1711				
					1339				
					1951				
		2	90	13	1061				
					1334				
							1	81	15
		2	51	8	1019				
					1212				
		1	65	15	1709				
					3	99	11	1604	
					1356				
								1950	
				2	87	9	1295		
					1361				
		1	67	18	1267				

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-22	9	1	70	17	1420
		3	89	7	1785
					1703
					1532
		3	76	12	1433
					1321
					1876
		2	87	9	1297
					1667
		1	78	19	1748
		3	67	18	1883
					1214
					1113
		1	82	17	1093
		1	66	6	1488
		2	52	18	1537
					1744

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)							
LongPulse-23	13	2	96	19	1234							
					1043							
		2	51	8	1422							
					1924							
		3	91	16	1406							
					1025							
					1915							
		2	72	12	1063							
					1991							
		2	83	14	1024							
					1504							
		3	99 11	11	1252							
					1823							
					1741							
				3	3	58	10	1191				
					1794							
					1433							
				1	88	11	1657					
		3	93	15	1549							
					1874							
					1431							
			2	52	18	1696						
												1618
							1	62	12	1317		
		2	87	9	1501							
					1614							
		2	92	7	1943							
					1860							

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)	
LongPulse-24	13	3	61	20	1508	
					1614	
					1503	
		3	81	15	1330	
					1714	
					1009	
		2	56	19	1817	
					1713	
		2	63	6	1092	
					1268	
		1	98	6	1201	
		3	86	8	1584	
					1161	
					1192	
		3	95	18	1175	
					1095	
					1697	
		1	53	16	1359	
		2	70	17	1866	
					1915	
		3	73	16	1423	
					1205	
						1328
		3	99	11	1504	
					1484	
					1461	
		1	100	8	1693	
		1	62	12	1156	

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)		
LongPulse-25	13	2	63	6	1126		
					1231		
		2	84	10	1007		
					1613		
		3	58	10	1867		
					1471		
					1912		
		3	90	13	1137		
					1821		
					1036		
		2	88	11	1368		
					1612		
		3 90	90	13	1162		
					1629		
					1154		
		2	77	10	1651		
					1798		
					1	74	14
		3	98	6	1344		
					1784		
					1105		
		2	92	7	1857		
					1842		
		1	63	6	1582		
		3	55	5	1329		
					1783		
					1310		
		1	57	5	1458		

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
LongPulse-26	10	2	66	6	1638
					1558
		2	88	11	1092
					1868
		1	88	11	1853
		1	55	5	1402
		3	86	8	1406
					1702
					1826
		2	95	18	1985
					1440
		3	73	16	1670
					1204
					1539
		3	63	6	1355
					1129
					1643
		1	67	18	1208
		3	73	16	1447
					1573
					1070

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)				
LongPulse-27	16	3	90	13	1556				
					1381				
					1073				
		3	61	20	1832				
					1426				
					1372				
		2	88	11	1695				
					1248				
		1	79	12	1945				
		2	81	15	1067				
					1997				
		2	86	8	1841				
					1694				
		3	81	15	1442				
					1249				
					1025				
			1	52	18	1959			
			3	87	9	1873			
					1470				
					1493				
		1	80	18	1470				
						1	68	11	1805
		3	95	18	1220				
					1701				
					1957				
		2	62	12	1596				
					1279				
		3	83	14	1072				
					1840				
				[	1706				
		2	94	10	1767				
				[	1393				
		2	99	11	1379				
				[	1665				

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-28	19	3	62	12	1358
					1912
					1678
		3	57	5	1405
					1409
					1208
		3	86	8	1283
					1830
					1592
		3	53	16	1101
					1928
					1422
		1	96	19	1648
		2	65	15	1418
					1019
		3	84	10	1118
					1854
					1565
		1	94	10	1524
		2	93	15	1964
					1595
		3	51	8	1891
					1206
					1366
		3	92	7	1854
					1982
					1962
		3	91	16	1263
					1376
					1188
		1	62	12	1604
		3	51	8	1250
		-			1059
					1020
		1	61	20	1494

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-28	19	3	56	19	1114
					1979
					1177
		1	94	10	1459
		1	58	10	1927
		1	58	10	1598

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)		
LongPulse-29	se-29 15	3	96	19	1442		
					1651		
					1370		
		3	70	17	1014		
					1837		
					1329		
		3	90	13	1200		
					1978		
					1278		
		1	87	9	1463		
		2	77	10	1847		
					1101		
		2	70	17	1208		
					1788		
		2	91	16	1609		
					1600		
		3	68	11	1798		
					1877		
					1008		
		1	86	8	1309		
				1	79	12	1311
		2	80	18	1423		
					1938		
		3	50	20	1603		
					1053		
					1406		
		1	70	17	1612		
		2	71	11	1599		
					1773		
		3	52	18	1347		
					1991		
				[	1629		

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)	
LongPulse-30	14	1	63	6	1753	
		2	65	15	1142	
					1339	
		2	99	11	1143	
					1869	
		1	91	16	1474	
		3	86	8	1144	
					1449	
					1903	
		2	79	12	1160	
					1577	
		2	83	14	1103	
				1053		
		2	99	11	1027	
					1071	
		3	87	9	1836	
					1178	
					1962	
		2	84	10	1723	
					1408	
			1	98	6	1782
		3	100	8	1580	
					1885	
					1129	
		1	98	6	1695	
		1	50	20	1148	

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)	
LongPulse-31	11	3	59	11	1825	
					1663	
					1090	
		1	97	6	1669	
		3	70	17	1486	
					1432	
					1001	
		1	77	10	1054	
		3	72	12	1230	
					1232	
					1830	
		3	99	11	1187	
						1339
					1043	
		3	59	11	1864	
					1264	
					1582	
		2	67	18	1153	
					1910	
		2	51	8	1365	
					1151	
		2	80	18	1212	
					1727	
		2	65	15	1368	
					1024	

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-32	10	2	81	15	1425
					1783
		1	90	13	1217
		3	93	15	1603
					1500
					1767
		2	94	10	1938
					1823
		3 66	6	1631	
					1296
					1019
		2	75	20	1196
					1448
		1	99	11	1859
		1	74	14	1549
		3	80	18	1481
					1705
					1030
		2	54	18	1322
					1313

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)		
LongPulse-33	12	3	57	5	1329		
					1397		
					1308		
		1	66	6	1000		
		1	71	11	1412		
		3	95	18	1561		
					1269		
					1791		
		3	76	12	1522		
					1438		
					1163		
		1	65	15	1062		
		1	66	6	1079		
		1	74	14	1817		
		2	76	12	1536		
					1516		
				2	77	10	1671
					1452		
		1	89	7	1843		
		2	67	18	1935		
					1134		

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)				
LongPulse-34	9	2	91	16	1593				
					1619				
		1	76	12	1552				
		1	70	17	1990				
		3	77	10	1299				
					1397				
					1407				
		1	67	18	1857				
		1	52	18	1416				
						1	89	7	1399
		1	99	11	1304				
		2	67	18	1323				
					1604				

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
LongPulse-35	15	1	50	20	1056
		2	93	15	1058
					1137
		1	84	10	1856
		3	95	18	1210
					1209
					1606
		1	56	19	1776
		1	98	6	1720
		1	68	11	1251
		3	95	18	1195
					1503
					1309
		2	57	5	1562
					1915
		2	92	7	1972
					1719
		3	51	8	1866
					1381
					1648
		2	64	19	1331
					1065
		3	86	8	1899
					1454
					1859
		3	77	10	1023
					1588
				<u>                                     </u>	1650
		3	77	10	1720
				[	1112
				Ī	1365

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-36	8	1	83	14	1547
		3	64	19	1346
					1124
					1150
		3	98	6	1513
					1364
					1451
		3	98	6	1028
					1336
					1370
		1	78	19	1502
		1	94	10	1554
		3	50	20	1103
					1263
					1901
		2	94	10	1898
					1493

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (µs)
LongPulse-37	18	3	94	10	1802
					1425
					1217
		3	97	6	1327
					1573
					1223
		1	70	17	1991
		1	79	12	1868
		2	75	20	1921
					1407
		3	58	10	1738
					1000
					1901
		2	92	7	1012
					1353
		1	92	7	1338
		2	58	10	1246
					1356
		2	79	12	1659
					1568
		2	96	19	1067
					1192
		1	62	12	1941
		2	71	11	1764
					1670
		2	52	18	1508
					1101
		1	78	19	1956
		2	62	12	1830
				<u> </u>	1291
		3	78	19	1789
					1450
					1717
		1	85	9	1953

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)			
LongPulse-38	14	1	72	12	1233			
		1	93	15	1304			
		1	53	16	1505			
		3	75	20	1598			
					1817			
					1812			
		3	68	11	1260			
					1734			
					1545			
		1	96	19	1718			
		2	71	11	1760			
					1919			
		1	60	11	1482			
		3	89	7	1305			
					1284			
					1476			
		3	51	8	1563			
					1651			
					1200			
					1	66	6	1068
		3	68	11	1561			
					1948			
					1119			
		1	53	16	1988			
		1	52	18	1715			

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)
LongPulse-39	16	3	84	10	1554
					1339
					1330
		1	93	15	1773
		1	67	18	1087
		3	90	13	107
					1257
					1402
		3	73	16	1590
					1120
					1559
		1	95	18	1948
		3	56	19	1081
					1117
					1947
		3	68	11	1682
					1979
					1917
		3	80	18	1150
					1788
					1040
		2	56	19	1593
					1365
		2	92	7	1910
					1663
		2	74	14	1105
					1416
		1	87	9	1995
		2	96	19	1881
					1151
		2	79	12	1134
					1938
		3	83	14	1538
		-	_		1779
					1324

Table B-14 Radar Type 5 Parameter (Cont'd)

Pattern	Burst Count	Continuous Pulse Count	Pulse Width (μs)	Chirp Width (Hz)	Repetition Frequency (μs)	
LongPulse-40	18	1	68	11	1739	
		1	76	12	1065	
		1	74	14	1849	
		1	57	5	1047	
		1	76	12	1073	
		2	93	15	1764	
					1807	
		3	69	6	1411	
					1802	
					1149	
		1	74	14	1325	
		1	72	12	1068	
		1	51	8	1890	
		1	86	8	1001	
			2	87	9	1878
					1132	
		1	82	17	1246	
		2	77	10	1123	
					1452	
		3	89	7	1021	
					1271	
					1052	
			2	61	20	1536
					1983	
		3	59	11	1726	
					1092	
					1266	
		2	88	11	1503	
					1201	

Table B-15 Radar Type 6 Parameter

					itauai iyp				
Hopping_20M-01	Hopping_20M-02	Hopping_20M-03	Hopping_20M-04	Hopping_20M-05	Hopping_20M-06	Hopping_20M-07	Hopping_20M-08	Hopping_20M-09	Hopping_20M-10
-4									
			-10						
	-9								
								10	
				-6					
			-2					2	
								-3	
			9						
							9		
					-1				
					3				
2			-3						
						4			
		4							
	-1								
					0			-9	
								-6	
				6					
				0			-7		
7									
								-2	-7
						5			
1		5							
1						-4 		1	
						-8			
			8		-10				
-8	-7					8	7		

Hopping_20M-01	Hopping_20M-02	Hopping_20M-03	Hopping_20M-04	Hopping_20M-05	Hopping_20M-06	Hopping_20M-07	Hopping_20M-08	Hopping_20M-09	Hopping_20M-10
	-5	3							
						-5		6	
		10							

Table B-15 Radar Type 6 Parameter (Cont'd)

			· abio ·	<b>5</b> 10 1144	u ypo o	alameter	(Joint a)		
Hopping_20M-11	Hopping_20M-12	Hopping_20M-13	Hopping_20M-14	Hopping_20M-15	Hopping_20M-16	Hopping_20M-17	Hopping_20M-18	Hopping_20M-19	Hopping_20M-20
6	1								
-2									
			-3 						
				8				-5	-3
			2						
				-8					
						1			
-9					5				
-9					Đ				
				-6					
								9	
-6									
				-10					
			7						
			4						-7
								3	
							7		
				-3	-2				
			0						
-4 			-5 			10			
		10							
								-8	
							6		
							-4		
		9							
					_			_	
								 9	
								 9 	
				   -1				 9	
				   -1			   2	 -9 	
							    2	 -9 	
		5 					2 	 -9  	
							2 	-9  	
		5 					2 	 -9  	

Hopping_20M-11	Hopping_20M-12	Hopping_20M-13	Hopping_20M-14	Hopping_20M-15	Hopping_20M-16	Hopping_20M-17	Hopping_20M-18	Hopping_20M-19	Hopping_20M-20
			-1						
							0		
					8				
3		-10					4		
					-7				

Table B-15 Radar Type 6 Parameter (Cont'd)

H	11i 20M 22	11i 20M 02	H 2014 04	Hi 20M 05	11i 00M 00	Hi 00M 07		11i 20M 20	Hi 20M 20
Hopping_20M-21	Hopping_20M-22	Hopping_20M-23	Hopping_20M-24	Hopping_20M-25	Hopping_20M-26	Hopping_20M-27	Hopping_20M-28	Hopping_20M-29	Hopping_20M-30
				-1					
		8			10				
								8	
								7	
	-6								
	-9								
								6	-2
			9						
								-3	
-4									
							***		
		1							
							-8 	0	
									-1
									-8
				-7			***		
			7						
	6							10	
-1	2							-10 	
					2				
	-5			1					
	-2				3			-6 	
		4							
					1				
			10	-					
-8					9				
								-7	
								-7 	
						-5			
							4		
						-9			
	3								
							***		
		5							
		Ð							
			5						
							-4		
							***	9	
	0								

Hopping_20M-21	Hopping_20M-22	Hopping_20M-23	Hopping_20M-24	Hopping_20M-25	Hopping_20M-26	Hopping_20M-27	Hopping_20M-28	Hopping_20M-29	Hopping_20M-30
						-2			
	-10								7

Table B-15 Radar Type 6 Parameter (Cont'd)

Hanning 20M 21	Hanning 20M 22	Hanning 20M 22	Hanning 20M 24	Hanning 20M 25	Hanning 20M 26	Hanning 20M 27	Hanning 20M 20	Hanning 20M 20	Hanning 20M 40
Hopping_ZUNI-31	Hopping_20ivi-32	Hopping_20W-33	-3	Hopping_20ivi-35	Hopping_20ivi-36	Hopping_20M-37	4	Hopping_20W-39	Hopping_20ivi-40
				10					
-5 						0			
								-3	
			-10						
			5						
								-6 	
		-6	10						
		-6							
							-		
						3			
					-7				
					-7 				
0									
								-7	
						-3			
-4 									
8									
							***		
					5				
							-9		
3 				-1 	 -6				
							2		
						-2			
	2		7						
				-8					-9
									5
									1
							8	7	1
						-10	8		
									3
									4
						-5			
						6		9	
						6			
	4	6							
					-4				
								-5 	
								-4	
		-9							
				1					

Hopping_20M-31	Hopping_20M-32	Hopping_20M-33	Hopping_20M-34	Hopping_20M-35	Hopping_20M-36	Hopping_20M-37	Hopping_20M-38	Hopping_20M-39	Hopping_20M-40
1									-2
				9					

Table B-15 Radar Type 6 Parameter (Cont'd)

Hopping_40M-01	Hopping_40M-02	Hopping_40M-03	Hopping_40M-04	Hopping_40M-05	Hopping_40M-06	Hopping_40M-07	Hopping_40M-08	Hopping_40M-09	Hopping_40M-10
	19		-5 		-14 				
		8							
				16					
						8			
		1							
-9									
	-8								
		1.4							
		14						7	
									16
				18					
		1							
		-18				-17			
				9					
			6						
		-20 10							
-2									
13				-6					
								-15	
	0							-15 	
									-11
					12	-12			18
				-1	4				14
								2	
									***
						-2			
				-10		-1			
					3	9			
					19				-13 
							-4		
		1					-8		
	-11				11				
15									
				-7					
	11						15		
		-4	-14	-12			15	-20	
	-3	-4	-14	-12			-9	-20	-3
				20					
									1
		-							
								-7	
									-9
	7						 K		
	7	4				17	5 -18		
	-15	4				17	-18		
		12				-19			
						20			
				-19					7
		ï					-5		
				10					
		-13							
							0		
			-16					-10	
			5					-10	
	***								
	17							-3 	

Hopping_40M-01	Hopping_40M-02	Hopping_40M-03	Hopping_40M-04	Hopping_40M-05	Hopping_40M-06	Hopping_40M-07	Hopping_40M-08	Hopping_40M-09	Hopping_40M-10
	3								
	-17								
								13	
				1				-6	
			2						
						-16	6		

Table B-15 Radar Type 6 Parameter (Cont'd)

Hopping 40M-11	Hopping 40M-12	Hopping 40M-13	Hopping 40M-14	Hopping 40M-15	Hopping 40M-16	Hopping_40M-17	Hopping 40M-18	Hopping 40M-19	Hopping 40M-20
	6		-13	11 5_					
11					-19				
-5					11	14			
	-7		15						
									11
					15				
						4			-16
									7
			0						
		9				8			
						-3 			
5 									
		3							
		19							
			-15						-5
			-19			1			19
						1			19
	-12								
	-14 								
									-2
					-10				4
-1									
		14					***		
							***		
			17		-8				
						•••			
					-4				
	***			13	•••	•••	***		
	***						***		
***	***	***	***	•••	•••	***	***		***
								-9	
4									
	***						***	20	
	***						***		
	8				16				
	***						12		
						-2			
		-20			2				
					-17				
						0			-10
	18		20						
-16									
				-11	5	18			
					17	-16			
							-18		
	***								
13	***						***		
						-5			
				-					
			10	-					
						-7		-20	
		-4							
		2							
									-7
	1			1		3	ł		
	1			1			ł		
	-11	-17			9				
								7	
						-14			
				6					
	12		-10	-1					
			-10	-1					
									i.

Hopping_40M-11	Hopping_40M-12	Hopping_40M-13	Hopping_40M-14	Hopping_40M-15	Hopping_40M-16	Hopping_40M-17	Hopping_40M-18	Hopping_40M-19	Hopping_40M-20
16			-18		-12				
						10			
	-6	-2						-13	
		-19	-8		-15				
						19		-6	

Table B-15 Radar Type 6 Parameter (Cont'd)

			· abio ·	o itaa	u. Typo o	alameter	(Joint a)		
Hopping_40M-21	Hopping_40M-22	Hopping_40M-23	Hopping_40M-24	Hopping_40M-25	Hopping_40M-26	Hopping_40M-27	Hopping_40M-28	Hopping_40M-29	Hopping_40M-30
				-13					
5		-3		5			20		
-13					9				-8
2						-9			
								18	
									11
							-6 		
						-5			
									1
-1							15		
	1.0								
	16							2	
						4			
				-19					
	0								
	1	15					10		
	-19	15					10		
	-19		-14						-18
							-17		
		-11							
				17		7		-14	-15 
		18					-11	6	
		8							
	-9			3	-4				
								-16	
		13							
						14			5 
	14							-15	
	14			0	-10				-10
				1					
	17								
		20							
					-12			-5 	
							12		
			10				-2		
	-18								12
				-1					
								-17	
			-15						
9				13					
		-8							
6									
						-8			
				-3				17	
							19		
12				8					
						-18			
			_	_					

Hopping_40M-21	Hopping_40M-22	Hopping_40M-23	Hopping_40M-24	Hopping_40M-25	Hopping_40M-26	Hopping_40M-27	Hopping_40M-28	Hopping_40M-29	Hopping_40M-30
	-20								
	-17								
		3			-20	-7			
			11						
	-4								
									19
				16					

Table B-15 Radar Type 6 Parameter (Cont'd)

				5-15 IXAU	)		( /		
Hopping_40M-31	Hopping_40M-32	Hopping_40M-33	Hopping_40M-34	Hopping_40M-35	Hopping_40M-36	Hopping_40M-37	Hopping_40M-38	Hopping_40M-39	Hopping_40M-40
							-14 		
			-3						
-7									
	9		4						-4
								0	
-11									
						-6 			
3									
								-10	1.0
							14	-16 	16
			14						-6
				17 -10			-5 		13
		-9		-10					-14
	16				-3				
		-20							
							0		
			5				8		
15					13				
				1.0					
2				-16					
						19	-19		
			-20	-4					
			10						
				-13					
20									
18				18					
						1			2
						-8			
				-17					
				0			7	-12	
				20					
									14
			15		-12				
		-14							
		-14		12					
					9				
								-8 	
		-6							
-13				-7			-1		
			2	11					
-1							-10		
-1 							-18 		
								7	
	8								
-12									
	-2						4		
							6		
		0							
								-13	
-16		-4							17
					-2				
	-19	7			-2				
13						-9	16		

Hopping_40M-31	Hopping_40M-32	Hopping_40M-33	Hopping_40M-34	Hopping_40M-35	Hopping_40M-36	Hopping_40M-37	Hopping_40M-38	Hopping_40M-39	Hopping_40M-40
		6							
				-11					
10									15
						-15	3		

Table B-15 Radar Type 6 Parameter (Cont'd)

The color of the							arameter			
Mart	Hopping 80M-01	Hopping 80M-02	Hopping 80M-03	Hopping 80M-04	Hopping 80M-05	Hopping 80M-06	Hopping 80M-07	Hopping 80M-08	Hopping 80M-09	Hopping 80M-10
1										
The color   The										9
										-27
The column   The										
						-39				
The color   The										
The color of the										
The color of the										
The column   The										
						23				
									12	
1	-5								24	
										***
13										-25
13										
10										
17										
114										
1										22
19										
1			-9		38					
19										-8
19										
1										
1										-19
1										-21
16										
11										
11										
11										28
115										
1		-15		22						
13								5		
				39	-31					
		13	-39		15					-13
										***
1										
14   35										
14										
19										-30
1										
1										34
16										
1.						-16			-33	
117										
1										***
1										
										-32
										-8
										25
12										-22
32						-12				
1	32									
1										8
18										1
4										-16
1										
			-33							-33
36										
20 00										
			-26	33			31			

Hopping 80M-01	Hopping 80M-02	Hopping 80M-03	Hopping 80M-04	Hopping 80M-05	Hopping 80M-06	Hopping 80M-07	Hopping 80M-08	Hopping 80M-09	Hopping 80M-10
						***			
							2		
		-7		0				-6	
				11			32		
									-29
40	12		-6				38		
			-34						3
25			-28		25		33	-4	

Table B-15 Radar Type 6 Parameter (Cont'd)

					<b>,</b>	alameter	` ,		
Hopping_80M-11	Hopping_80M-12	Hopping_80M-13	Hopping_80M-14	Hopping_80M-15	Hopping_80M-16	Hopping_80M-17	Hopping_80M-18	Hopping_80M-19	Hopping_80M-20
									17
-35 	40					28		8	13
	-38	-36						6	
		-7							-3
-20			11						-14
-20	-27	-6 					35	25	
	29	-10					16		
	6							19	36
	5				-8				
						-22			
					-17				
	7				-38				-7
	-30			-2				-19	
	-50			26					
			-26			12			
					-5			10	
	36			-19			-15		
			28					14	
			20 21	-5 					0
		9			20		-14		
				27	39				
		20	33					-39	
	32	38				2			6
								1	
							-13		
				-00			-34 		
			0	-28	7	22			
									1
							11		
-1						-12			
	-28						-05		
10						-32	-35 		
					31				
								-27	
-13	-31					-6			
				-11 					
	-34							-16	
			4			4			
			17					30	
	-4								
					-24		24 -9	-33	24
18	-14		22				38		
						-20	34		
***								-40	
						37			
				-3	-36 			-2 -1	
	-9	12	14					-1	
			39					-18	
	31			-4		0			-32
			24		-96		-97		
30					-26		-37		
	-40	16		26				36	
					32				
	-25			5					
				23		-25			
27		13		-7					
		2	-3 						
							-10		
			19		-23	-31			
			-21						
					9				
	-11						15		
	-11 35	-39						33	
			-37		-29				
15					18				

Hopping_80M-11	Hopping_80M-12	Hopping_80M-13	Hopping_80M-14	Hopping_80M-15	Hopping_80M-16	Hopping_80M-17	Hopping_80M-18	Hopping_80M-19	Hopping_80M-20
			23	40		-30			
		-12							
-24									
								-21	
-18									
	-15						29		
	37		-17					3	
			-23		:		21		

Table B-15 Radar Type 6 Parameter (Cont'd)

			· abio ·	<b>5</b> 10 1144	ai iype o i	aramotor	(Joint a)		
Hopping_80M-21	Hopping_80M-22	Hopping_80M-23	Hopping_80M-24	Hopping_80M-25	Hopping_80M-26	Hopping_80M-27	Hopping_80M-28	Hopping_80M-29	Hopping_80M-30
	40	4	38						
		-34	-23	17					
	-17	-22				-30			
				-5	-9 	11	-20		
									-9
-8	-36			32					
						-16			
			26	28				38	15
	39								13
	28	-40		12					-40
				-24	-31 				-40
									27
			22						
	5				7				
			8			-7			
							-4	-40	
				-29		19 27			
		-9							
		3							-12
					-38				
						-27			-4
-12			-25		34				
29							91		
						-22	31	-25	
			14	30	-6	-22		-3	
18								-23	34
	23		-21	-2					
	-29	-37				13			6
						21	37		
-38			-33				22		-5 
						5			
								26	
					-17		-11		
			2			-32			19
	10	-97		1.0			-90		
	10	-27		16	6		-36 -35		30
						-12			
								-34	
			13						
-6 		-11						9	
-1	32					-39 			
									1
		-18							
21				-21	-8				
		-2			-33 				-14
							3	3	25
-4		30		29		36			
			-20	25					
37		-39						14	
19			11				-1		
		10							
		16			0 33				
	-10	35					20		
						-18		-31	
	-31								
-26									
-5 									28
	-13			-28		8			
	20								
		-24	12			-26			
9		-19							
	27		15			23	35		
		33							
		34							
	***						-1.4		
  -28							-14	-24	
  -28 		31							
 28 		31 	24			-10	10		
 28 		31							

Hopping_80M-21	Hopping_80M-22	Hopping_80M-23	Hopping_80M-24	Hopping_80M-25	Hopping_80M-26	Hopping_80M-27	Hopping_80M-28	Hopping_80M-29	Hopping_80M-30
							18		
									11
		25							
							-13		-19
		-30	15		-37		4		
								2	-3
17		-35		-19				-6	33
								-1	

Table B-15 Radar Type 6 Parameter (Cont'd)

				J-13 IXAU			` ,		
Hopping_80M-31	Hopping_80M-32	Hopping_80M-33	Hopping 80M-34	Hopping_80M-35	Hopping 80M-36	Hopping_80M-37	Hopping 80M-38	Hopping_80M-39	Hopping 80M-40
-8	-25								
		38			-33	-20			
					14		-15 	-36 	-10
				2					
			18						
		-20				1	***		
					-12				-35
4					3		-13 	38	
						-11	19		4
			32	20	27				
				4					
	37							-26	
		-34						15	
				11				1	
	26			22					
			17	-29					
				-19					
		-33 		-9 					
		22							
						24	-21	-27	
	5								
	36	-16 							33
	-22		-36					30 -30	
					21				
							-6		
-39			29	30	13		8	32	-5
						-27			-40
				-1			-32 		17
				-1					17
						-7		-	
									37
-32							23	-4	
		-29						11	
								-33	
		24		29	10				
9									
			37		18				-18
35								16	
	16								
21		20							
								8	
31	-26	0		33					
	-37 -15	-30				-22	-31		
				-30		9	16		
10									
							36		
			39	31			-37		
				15	-5 		7 40		-25
							40		
	12						-4		5
							-10		-13
-23						-2	-10	27	
-20					12				22
			-40			-14			
					-39				
			25		-8				
-2		40							
		-35			-26		-25	25	
-27									
-28		39						-00	
		-7	-3					-28	7
	23	-13	38						
				34		-28		-38	31
	-38								
				26					
-21					-18				
			6	5					
				-16					12
	8						-23		

Hopping_80M-31	Hopping_80M-32	Hopping_80M-33	Hopping_80M-34	Hopping_80M-35	Hopping_80M-36	Hopping_80M-37	Hopping_80M-38	Hopping_80M-39	Hopping_80M-40
			32						
			-35				-34		
-11									
	-17								
-18				-38					
						-24			
-10			28						
				35	17	-17			

Table B-15 Radar Type 6 Parameter (Cont'd)

Hopping 160M-01	Hopping 160M-02	Hopping 160M-03	Hopping 160M-04	Hopping 160M-05	Hopping 160M-06	Hopping_160M-07	Honning 160M-08	Hopping 160M-09	Hopping 160M-10
		16	-19	-60				75	-47
		9	-2	74	-35				
17		-40 					66		71
			-74		-30				
10					-17			-78	
	-49							-16	78
	-5								
			3				43		
24			75				72	-50	
	-37			39	-15	9			
			-43		-72				
18			40	-34	-44				
			40						
26	77			49					
30		-56		45		-42		55	
33		51					0	70	
29	-32			35		13	-8		
***			-68			-1	3	41	
		41	-31	63		-27	32		
						-73		-5	
1		-27							
		60							
73		78		***	-54				-52
	-35		-24	-12					
			-47	-20				-36	
25	-28					-13		-75	6
	53		-63			-61			30
-14					48		74	64	27
			7		40	80	-64		
							-64		
		72	54		-69	-80		-20	-62
43	-57						18		
***		-33	-58	70			-55	***	-70
-16							26		
			-48	66	8	16	69		15
-7		-66	-10				-79		
								46	
			20	-4	35	-26		40	40
34		79	-9					-59	
		-67		***	34			-21	57
		-29			11	77			63
65				50		47	-74	5	
6							56		
	-42	-44			-2	-4	2		12
			-17						
	31						-32		
		-21	-76	-73	22	-38		59	79
	-36		-72		-49		***		-53
	-80			12					-68
-23	5	61		68	25			-7	
							73		
	-3	-1		67					45
	22						39		40
-13		-26	44						
			27		51		38	-45	
11					-65				14
	8	-55			-23	1			
-45	80								38
37	47					-28			
			-38						
				58				4	-23
			-64 		-58 				-46
				-71					48
						54	-11	60	
						10		24	-5
-6			38				-39	***	
	19		-69				76	-34	
69							-46	-57	75
2					-22			17	68
-41		14		-54	-76	-33			-15
							19		
					67			-3	
	32								
	32								
-15		-18				-31			-53
	-53				-24	42			-42
	-51								
					33	61	29		-65
	23	-65		-8	-56			36	
	52			4					-32
				53	-10				
		0		-14	-18			-71	
				58		21	-29		20
		55						***	
	-75	-59				-51	-6		
	10		56						
		-79				65			
		-79 	13						
  -78									29
  -78 -52	-11 -11		13					-43	29
  -78 -52 -62	-11 -11		13		44	 -37		-43 	62
  -78 -52 -62	 -11   48	  36	13  		44 31	 -37 -67	-40	-43  -63	62
  -78 -52 -62  76	 11   48 59	  36 	13  		44 31 	 -37 -67	-40 	-43  -63 62	62
 -78 -52 -62 	 -11   48 59 -30	  36 	13   		44 31 	 -37 -67 	 -40  -77	-43  -63 62 	62   -58
  -78 -52 -62  -76  -39	 -11    48  59  	36 	13     -77		44 31 	 -37 -67   -12	 -40  -77	-43  -63 62  37	62   -58 
	 -11   48 59 -30	  36 	13   		44 31 	 -37 -67 	 -40  -77	-43  -63 62 	62   -58

Hopping_160M-01	Hopping_160M-02	Hopping_160M-03	Hopping_160M-04	Hopping_160M-05	Hopping_160M-06	Hopping_160M-07	Hopping_160M-08	Hopping_160M-09	Hopping_160M-10
	-70		15	-19		-48			
						7			
64		21	:	-60	50				
28		***	46	***					60
-22		-50			23	-9			
	-46	42	-61	49				-41	
***			71			20		-66	
	57				68		52		
			62			-25			-63

Table B-15 Radar Type 6 Parameter (Cont'd)

			· abio ·	J-13 IXAU			(50 4)		
Hopping_160M-11	Hopping_160M-12	Hopping_160M-13	Hopping_160M-14	Hopping_160M-15	Hopping_160M-16	Hopping_160M-17	Hopping_160M-18	Hopping_160M-19	Hopping_160M-2
51					***		***		-61
	17			-49					
	41	74					46	-4	14
	61		-3	70	19	-50 		-65	
		8	-36 	72	-72		3	41 34	
-12			-69					-38	
									-30
-52			-59		-13			-43	
-77				-39	65	-66		60	
					-37	20		76	
13	49	-21						30	6
	28	-22			-78	49	-53		
			-73						-49
	31			-24					
	-35						-55		
					-70 				
	66	44	32						
				67			32	5	
	-40				-77		59		64
						-3			
	71			16					-54
	69	-74				-27			
-67					-23	21		-42	
-56	-29	-19		57	-71				
	19		-66					47	-56
15					-			-45	
			-4	7					
-41	-31	-11	-48		36	40		-21	10
14	-75		-28						
		47		-68					
		78	-37 		-28				
46 23	-70 		-2		6			-2 -26	19
23								-52	-8
			53		-39				
	-64						62		
		6	-45		66			54	
	-55				0				
	27			68	56	69	58		32
	73		-17	-25			-33		
			-10			73	22		
4		-57	-14			11	24	-34	-65
	-8			57	-64		-29		
	37	54							-39
									11
			-51 			71			-48
30	-79 58	36		-16 -15		-75 -5			-26
	64			-15	-7	-80			-26
	59			-40				-17	
					-31	-48	-79		
		-16			45	63	-74		
	5		26					52	
70	45		-54	-73		-57		53	66
-71	-43							8	
		79	-50		10	-47			
			7						
43	-60						64		
-44			1					55	-11
80	-47					-63 		-11	13
-6 -61								-51 79	
-61		22		-59	28	51	-41	72 31	69
			-62				70		
	9.			44				39	-5
					-22		-24		
	52					-32	-14	-44	
				67	-	-6		-58	
			-18				15		
	11	-1							
		-80	-33					75	
		-80 	-33 		-1		-35		
  39		-80 	-33 	 37	-1 -62	78	-35 4	61	 -79
39 -72		-80   -78	-33  	37 	-1 -62 	78 	-35 4 	61	 -79 
  39		-80   -78	-33   	37  80	-1 -62 	78  29	-35 4 	61	 -79  22
  39 -72 		-80   -78 	-33   	37  80	-1 -62   -54	78  29	-35 4 	61	 -79  22
39 -72		-80   -78 	-33   	37  80	-1 -62 	78  29	-35 4 	 61   -19 -76	 -79  22
39 -72 		-80   -78   -76	-33	37  80 	-1 -62  -54 -12	78  29 	-35 4 	 61    19 76 69	 -79  22 
  39 -72   -27		-80       	-33	37  80 	-1 -62   -54 -12	78  29 	-35 4    2	 61   -19 -76	 -79  22 
39 -72		-80  -78   -76 42 -25	-33 	37  80   74	-1 -62  -54 -12  50	78  29  	-35 4    2	 61  -19 -76 -69 27	 -79  22    72
39 -72    		-80       	-33	37  80   74	-1 -62  -54 -12  50	78  29 	-35 4 		79 22 72
39 -72		-80 -78 -78 -76 42 .25	-33	37  80   74	-1 -62  -54 -12  50	78 	-35 4   2  42		 -79  22    72 
39 -72		-80 -78 -76 42 -25 40	-33	80 80  74	-1 -62	29	-35 4 2 4260		
39 -72		-80 -78 -78 -76 -76 -725 -70	-33 	37  80  74  	-1 -62 -62 -62 -62 -63 -64 -12 -63 -64 -63 -64 -64 -64 -64 -64 -64 -64 -64 -64 -64	29	-35 4 2 42 16	 61   119 .76 .69 27  	79
  39 -72   -27  65    56 35	     	-80787876762500	-33	37  80  74    26	-1 -62	29	-35 4 2 42	61	
39 -72		-8078776 4225 40	-33	37  80  74   26  33	-1 -62	29	-35 4 2 42	61	
  39 -72   -27  65    56 35	     	-80787876762500	-33	37  80  74    26	-1 -62	29	-35 4 2 42	61	

Hopping_160M-11	Hopping_160M-12	Hopping_160M-13	Hopping_160M-14	Hopping_160M-15	Hopping_160M-16	Hopping_160M-17	Hopping_160M-18	Hopping_160M-19	Hopping_160M-20
				12			-49		
-34							79		-6
		-38						9	
-9	18	50			25			-8	-78
	25		-20			-20			
63					-36	13			
76	-30	-26	21				-30		
			77					48	
				77		-9		-67	27

Table B-15 Radar Type 6 Parameter (Cont'd)

	Hopping_160M-22								
-9		2	-27			-64			
	62			77			74	-79	-39
-80	-4	12				72		45	
21	-62	77	28	-70					15
		53	68	-76 	55				
38		-25 				53			
-35 67	-16			-22	-14 12				
-1	65		61		20				
-1					20				
	75		-70 				39	-10	29
				62				65	29
59			15				-66		-66
52	-63	-50	10		-24		29		-7
52				33					24
				69			-15		
	55				-43				
		-15	71		59	-26		27	
					-36				
					1		-1	78	3
	35			0					
							10	68	
					-77				-47
	-21					23			-40
57			3	-58				-40	-25
	44	24	48			-55	80	-31	-31
			78		-20		52	31	
		50		-53	-56	-50	-74		
-24		50		-99		-90	-74	37	
37	9		-43	-75				37	
	33		-43	-75	13	66		42	
		80				66			
	-41 	80	-59			70	-49	-3 	60
							-49		
	-32		70 40			-44		40	-50 75
			40						
-57	-10								40
39		-40	73		71				33
			25	15	-27		-57 		
	-12							-80	
					-70			7	
	-67							-38	
			-28		4		30		
	-29	-34		-25	73	46			-48
	60			-18	-61	-37			
-69		43						-63	54
		-38		-9					
		-2	-17	-2		21		-11	
-45		30				28			16
					49	8		67	
-23	-20	-75			44				
		-36					43		-51
16			-66	63	47		-60		
				-5					
		-68	-61		-52	-54			-26
						5	-45		
				-6			-65		
31	42	-74					-67		
				18	-28			36	
-7		-71		9	-7		-4	-73	
-33		63	4	-47		48	36		
	8	49					-39		
	34								
					-41				-30
-53			17		-46	-68	24	-60	78
26					19	-21		27	
	-19	74		11		50		-69	
		7					17	-63	
	29			-29				-59	
			58						
23	46				25				
				56	-62	-19	-48	22	
	-52	-13		14					-12
			-76						
									-41
	-51	-77				-13	-71	57	-72
	51		-72		32				
	-55	36							30
-58	-42	45			75			28	25
18		0		-17	41				77
-73		47		-8	3	-16		18	
				-32	34	57	-59		-49
-31		-64	54			-23			
	76	54	76				-35		
-18		-60		58		-73			
	79						35	-14	
								42	
			-30		60				
					-34	-69	26		

Hopping_160M-21	Hopping_160M-22	Hopping_160M-23	Hopping_160M-24	Hopping_160M-25	Hopping_160M-26	Hopping_160M-27	Hopping_160M-28	Hopping_160M-29	Hopping_160M-30
-3		-46		-51		-12			-58
5			22		64	-72			
	56		79				51		
		-22			6				-28
20				38			16	-15	
					2				
	14	-14							-32
	-37	1		-42		61			
		41	-33					31	

Table B-15 Radar Type 6 Parameter (Cont'd)

Hopping_160M-31		Hopping_160M-33			Hopping_160M-36	Hopping_160M-37			Hopping_160M-
									-37
72		19			-70	31			43
						19			
				-52	54	23			
		-53	-19		4	-12	51	 55	
	32	64	-19			-68	42		
		-18					-77	-47	
	43		50			15	-56	0	14
	67				-33	25			
				-48		20	-26	-8	-78
-13		71		40			78	28	-52
			-78		-21				45
	47	-33	-34			8			40
	0		23			-16	-62	37	
37	-56	-38			-50				
	-2		-52				32	70	29
			-11	-64			-23		
	-44				29			-76	41
			-79	22	35		-55	26	
8		-27	61		62	-67			
							36		36
35				65		-69			
	20	-77							-49
6	-9			-5		24			45
			-16	72	16				-14
		9					-76		
	58		63					-75	
-21				-49					
-21			-46	-17		-15		-69	
	-61		-46	-17		40			
-8	-61				3	40	-79		
-8					-14	34	-42	-2	
-45		13		-29	-14 -53	34 	-42	-2	
-45 48		-80		-29	-93				
48		-80 7		26					-64
									-04
11			39	73				-68	
	-70 						77	16	-3
			-60 	46			-65 		
					75				
	-71 	-3			12	2			79
65			-11					-18	13
				52			-8		
-37		-65							21
						74	61		19
66	-35	49			-3				-58
							-24		-40
-24	-76						-63	-11	
			13			-73			-35
52		17		-78			49	77	
55						-27			-44
53		-42					56	15	65
	-75				37		-37	-33	11
				-39		0			
					-41			-10	
	45					17			
		26							
	10		68	53			-6	-34	
21	51				-36				
	69			44			60		34
	-23		11			-20			42
-36									
39						-10			
				-74	5		-25		
		14	-34	48		58			
***									62
			-57		-51				02
			-71		-45			-5	
2			-71 		-45 			-5 	
	  38	  -29	-71 		-45 			-5  	  -23
	38	  -29	-71  		-45   10		  38	-5   49	  -23 8
	38	 -29 	-71   20		-45   10		38 	-5   49	 23 8
	38	  -29 	-71    20 -75		-45   10 		38 	-5   49 	 23 8  4
	38   34	 -29 	-71   20 -75 7		-45   10   67	       -30	38  -7 59	-5   49 	 -23 8  4
    -55	38    34	 29   	-71   20 -75 -7	-38	-45   10   67 		38  -7 59	-5   49  	 23 8 4 -4
    -55	38	 29   	-71 20 -75 7 79		-45 		38  -7 59	-5  49  	 23 8  4  -4
   -55 	38   34 	 29    	-71 20 -75 -7 79		-45  10   67  70		38  -7 59	-5  49  	
   -55 	38		71 20 75 77 79		-45 10 67 70		38  -7 59  -54	-5 	
       12	38	 -29  	71 20		-45		38 -7 59 	-5 	
   -55 	38		71 20 75 77 79		-45		38 -7 59 	-5 49    -46	
	38		-71 20 -75 -7		-45 10 67 70		38	-5 	
	38		-71 20		-45		38 -7 59 	-5 49    -46	
	38		71 20		-45		38 -7 59  -54 -13 76	-5 	
        12  	38	 -299     	-71 20 -75 -7	         	-45		38	-5 	23 8 8  4  4  68
	38		71		-45		38	-5 49    -46	
	38		71 20 75 79		-45		38	-5	
			-71 20 -75 -7		-45 10 67 70 21 45 30			-5 49    -46   50	
	38		71		-45 10 10 10 10 10 10 10 10 10 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11		38	-5	
	38		71		-45 10 10 170 170 170 146 27 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130 130		38	-5 49  -46  50	
			71		-45 10 67 70 21 46 27 30		38	-5	
	38		-71		-45 10 10 10 10 10 10 10 10 10 10 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11		38	-5	

Hopping_160M-31	Hopping_160M-32	Hopping_160M-33	Hopping_160M-34	Hopping_160M-35	Hopping_160M-36	Hopping_160M-37	Hopping_160M-38	Hopping_160M-39	Hopping_160M-40
		74							
		4	18			57		-39	
41	-68	59	64			43			
62			41			-80	71		
			-22		1			-56	-80
-4	-17							-66	-57
							-2		39
-74	-1	79							
		-64							