



Frequently Activated Beacons 2009



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**Frequently Activated Beacons
2009**

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Frequently Activated Beacons 2009



❖ Review frequently activated beacons

- USA coded beacons in “30 Most Frequently Activated Beacons” paper reported by France in JC-23 paper
- USA Summary by activation count of 2009 activations
- Analysis of activations
- Impact of Frequently Activations
- Actions taken
- Possible Causes
- Actions planned

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Most Frequently Activated USA Coded Beacons Reported by France in JC-23 Paper

Beacon ID	Decoded Information	# of Activations	Average Duration	First Activation	Last Activation	Activated in 2009?	Activated in 2010?
2DC75BF884FFBFF	366/USA/AVI24b/ADFC42	169	10.83	2001-10-10	2009-03-19	Yes	Yes
2DD1FFFFBF81FE0	366/USA/AVInsn/262143	93	22.93	2001-06-22	2009-04-22	Yes	Yes
2DC600000FFBFF	366/USA/AVI24b/000000	67	5.71	2001-07-08	2009-03-25	Yes	Yes
2DCC058000FFBFF	366/USA/MARser/11/0	27	5.27	2001-09-02	2009-03-03	No	No
ADCD023C7D00801	366/USA/MARffr/36639	21	4.64	2001-02-22	2009-02-04	No	No
ADCE02115D42C01	366/USA/MARnff/33879	19	1.12	2007-11-17	2009-04-25	Yes	No
ADCE01698040C01	366/USA/MARnff/23136	18	4.55	2003-01-11	2009-01-11	Yes	No

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Activation Count (USMCC Data) by Number of Beacons (Page 1 of 2)

Activation Count	# of Beacons	Beacon ID	Country	First Activated	Last Activated	Owner	Manufacturer
52	1	9EE8D0DD40D34D1	Italian	15-Apr-09	12-Nov-09	NULL	
44	1	6090CB8E7C01BFC	772	17-Jan-09	21-Dec-09	NULL	
39	1	A608D40D04D04D1	Antigua	30-Aug-09	29-Dec-09	NULL	
36	1	CD28D29034D34D1	Cape Verde	02-Jan-09	23-Jun-09	NULL	
31	1	2DC75BF884FFBFF	USA	11-Jan-09	07-Dec-09		
28	1	DB465F972814101	Colombia	05-Jan-09	24-Dec-09	NULL	
26	1	A71AF42CACEA8D1	Belize	17-Feb-09	27-Mar-09	NULL	
22	1	E0E64D6F74C04D1	Venezuela	21-Feb-09	14-Dec-09	NULL	
22	1	9B68A0D034D34D1	Denmark	16-Feb-09	21-Oct-09	NULL	
21	1	C1AB5C8A31928D1	Indonesia	12-Aug-09	28-Dec-09	NULL	
21	1	2DC85506CCFFBFF	USA	13-Sep-09	22-Dec-09		
20	1	C069D0CA34D34D1	Cambodia	28-Jan-09	21-Aug-09	NULL	
362	12	Sub Total					

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Activation Count (USMCC Data) by Number of Beacons (Page 2 of 2)

Activation Count	# Beacons		Total Activations	False Alerts per Day
19	4		76	0.2
18	3		54	0.1
17	3		51	0.1
16	7		112	0.3
15	3		45	0.1
14	4		56	0.2
13	8		104	0.3
12	11		132	0.4
11	7		77	0.2
10	13		130	0.4
9	17		153	0.4
8	28		224	0.6
7	46		322	0.9
6	54		324	0.9
5	109		545	1.5
4	205		820	2.2
3	406		1218	3.3
2	1702		3404	9.3
7847	2630	Sub Total	7847	21.5
8209		Total	8209	22.5

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Beacons activated 2 or more times

2642 beacons were activated multiple times (All country codes)

944 USA Coded beacons were activated multiple times

- ❖ 944 of 2642 (36 %) activated beacons were USA coded
- ❖ 131 of 944 (14%) USA coded beacons have already activated in 2010
 - 399 of 2642 (15%) have already activated in 2010
- ❖ 324 of 944 (34%) USA coded beacons were activated more than twice
 - 940 of 2642 (36%) were activated more than twice
- ❖ 29 of 944 (3%) USA coded beacons were detected with a corrupt ID
 - 86 of 2642 (3%) were detected with a corrupt ID

- ❖ 7 of 30 (23%) of the frequently activated beacons reported by FMCC at JC-23 were USA Coded
 - 5 of 7 (71%) were activated again in 2009
 - 3 of 7 (43%) and 3 of 5 (60%) were activated in 2010
- ❖ 3 Default IDs were in top 30 from the FMCC paper

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Beacons activated more than 2 times

940 beacons were activated more than 2 times (All country codes)

325 USA Coded beacons were activated more than 2 times

- ❖ 325 of 944 USA (34%) Coded beacons were activated more than 2 times
 - 940 of 2642 (36%) were activated more than twice
- ❖ 131 of 944 (14%) USA Coded beacons have already been activated in 2010
 - 399 of 2642 (15%) have already been activated in 2010
- ❖ 29 of 944 (3%) USA Coded beacons were detected with a corrupt ID
 - 86 of 2642 (3%) were detected with a corrupt ID

- ❖ 7 of 30 (23%) of the frequently activated beacons reported by FMCC at JC-23 were USA Coded
 - 5 of 7 (71%) were activated in 2009
 - 3 of 7 (43%) or 3 of 5 (60%) were activated in 2010
- ❖ 3 Default IDs were in top 30 from the FMCC paper

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- ❖ In the Analysis above
 - Did not adjust for USMCC premature site closure
 - Did not adjust for Known rescues

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Impact of Frequently Activations

- ❖ Accounts for 8209 False Alerts (22.5 Alerts per day) from all Beacons
 - 2823 from False Alerts (7.7 Alerts per day) from USA coded beacons

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Actions Taken

- Contacted manufacturers about default IDs
- Larry Yarbrough
 - Beacon malfunctions
 - ❑ Magnet in bracket
 - ❑ Bracket strap deterioration
 - ❑ Bracket allows beacon to be inserted backwards
 - Followed up on USMCC reports of beacons with frequent activations
 - ❑ Tug Boabad
- Encouraged USA RCCs to aggressively pursue owners of frequently activated beacons

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Possible causes

- ❖ Bracket Failure
- ❖ Poor installation procedures
- ❖ Poor user instructions
- ❖ Use of Default Beacon IDs
- ❖ User carelessness
- ❖ Unauthorized testing
- ❖ Unauthorized Exercises

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Actions Planned

- ❖ Planned
 - Address Beacons with frequent activations first
 - Improve ways to detect beacons that frequently activate
 - Continue to work with
 - Manufacturers to eliminate false alerts from beacons with the default IDs.
 - Continue to encourage USA RCCs to aggressively pursue owners of frequently activated beacons

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Questions

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