



# International Amateur Radio Union Region 1 2011 Regional Conference – Sun City, South Africa 12 to 19 August 2011



Subject	Report about correction of the IARU 50 MHz Contest		
Society	UBA	Country:	Belgium
Committee:	C5	Paper number:	SC11_C5_21
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## Background

In Vienna, we agreed about the procedure for organizing the IARU R1 Contests. This year would be a test case for the IARU R1 VHF & up Contest robot (in this paper called contest robot).

The UBA was organizing in 2010 the IARU R1 50 MHz Contest.

According to the agreement (see point 10) and due that proposed Contest robot was not available in March; we preferred that all logs should be submitted to the UBA by the way of the national VHF managers.

In meanwhile the IARU R1 robot was online... this give us the opportunity to compare also the way of correction of the logs. This was also the conclusion of Vienna 2010 (Vienna\_2010-C5 meeting minutes point 10).

## Logs received:

- We received a total of 488 unique logs
- Not all logs received were in the supposed EDI format
- Some were sent directly to the UBA and to the national VHF manager, so we received several logs 2 times.
- Overview by format:
  - EDI 523
  - ADIF 4
  - CBR 5
  - TXT 12
  - Written by hand 1

Most of them could easily been transformed to the EDI format.

There were also several corrections to make in the EDI files, depending on the used software. These faults are especially found in the header:

- Psect: "A", "Single", "O", "01", "Mono", "SF", "SOP", "6S",... (all means Single OP)
- PBand: "6m", "50", "50 MHz", "50 Mc"
- Mope1 and 2: problem for multi op stations
- CQSOP and CtoSC:

The normal deadline for individual submission had to be July 5<sup>th</sup> and for the VHF managers July 13<sup>th</sup>. This was almost correct for the individual submission, but I had

to send a reminder mid-July because only 10 countries submitted their logs. I received the last submission on August 16<sup>th</sup>

## **Crosschecks**

We received 80 843 QSOs, we could crosscheck 35 760 QSOs or 44%. How more logs you receive, how better the rate will be to have more crosschecks. Therefore, crosschecks only will not find all the faults in the logs. We need also other ways to correct.

## **Correction of the Logs**

### **Algorithm**

1. All QSO are put in 1 table:
  - own call,
  - worked call
  - locator received
  - reference to table who contents the log (QSO, and call)
  - locator of the worked call, if found in the locator database with more than 65 000 known locators (just for visual control option)
2. This table is sorted by call the calls are counted. If all given locators are correct, the QSO is valid. If there is a difference in the locators, all the QSOs are shown on the screen to make a human decision.
3. The table is now sorted by locator, and for all given locators we look now at the call signs. Again, if all are the same the QSO is valid. Otherwise, it is shown on the screen for a human decision. Here it is possible that two or more stations are working in the same square (eg JO31MG).
4. In meanwhile, the locator is checked with the DXCC... So you can find faults like DL2XX in JN41 (has to be JO31 because JN41 is in TK).
5. Crosscheck 1: if there is a log from the worked call it is crosschecked on time, (10 min diff), RST rcvd, number rcvd. If all OK QSO is OK
6. Crosscheck 2: search in all other logs for the station: if there is no QSO found, then it could be that the station is not in the log, or that the other station made a mistake. This is shown on the screen using the serial number and the time. Again, there is a human action to make the final decision.

### **Remark:**

During the correction of this contest, I found that some stations made following mistakes (not foreseen in the algorithm):

- Make a fault in the header where they have to fill in the own details (wrong call sign and wrong locator).
- Systematically fill AA, XX or MM as fifth and sixth digit of the locator.

### **Conclusion**

- We have to discuss the algorithm of the contest corrections.
- The robot, as he is working now, seems to find not all faults in the logs
- The human interpretation is necessary to find faults or fraud.

**The UBA do not believe in a fully automatic correction of logs and will vote against all propositions that support this kind of correction. A human decision has to be the last jury.**

## Remarks

We made a test case in attachment to show the problem. This with the supposed winner of the single op category according to the IARU R1 contest robot. If you want more details, or other cases, I am ready to give them.

## Test case UT7QF

	UBA		Contest robot	
QSO nr	call	Comment	call	Comment
	Claimed score	1655260	claimed	1655260
	ODX (after correction)	W5OZI - EM00CL - 10207Km	ODX (claimed)	W5OZI 10 207 km
	Final score	1209545	Final score	<b>1569558</b>
10	YR2U	Wrong loc	YR2U	Wrong loc
17	S56Y	NO FAULT, is in log (14:08)	S56Y	No partner found
22	YO2UU	Wrong loc	YO2UU	Wrong loc
23	DJ9FG	Wrong loc	DJ9FG	Wrong loc
31	OK1AJY	Wrong loc	OK1AJY	Wrong loc
39	I3RKE	Wrong loc	I3RKE	Wrong loc
49	OE5D	NO FAULT, is in log(14:33)	OE5D	No partner found
56	9A1DL	Wrong loc	9A1DL	Wrong loc
66	OK1IEI	Wrong loc	OK1IEI	Wrong loc
70	YO2MBG	Wrong serial (noted 1, has to be 11)	YO2MBG	Fault not found
71	IK3PQG	Wrong serial (noted 3 has to be 15)	IK3PQG	Fault not found
75	YU7AU	Wrong loc	YU7AU	Wrong loc
91	DJ7UD	Loc not in DL	DJ7UD	Wrong Loc
116	9A1CMS	Wrong Loc	9A1CMS	Wrong Loc
120	S53M	Wrong Loc	S53M	Wrong Loc
124	OK1ABV	Wrong Loc	OK1ABV	Wrong Loc
142	HA1ZH	Wrong Loc	HA1ZH	Wrong Loc
162	OK2USM	Wrong Loc	OK2USM	Wrong Loc
176	PA5WT	Wrong Loc	PA5WT	Wrong Loc
179	DL1ET	Wrong Loc	DL1ET	Wrong Loc
181	K0GU	Wrong Loc	K0GU	Fault not found

	UBA		Contest robot	
192	EA1HUZ	Wrong CALL – EA1HUS	EA1HUS	Fault not found
200	OM3ED	Wrong Loc	OM3ED	Wrong Loc
209	K4PI	Wrong Loc	K4PI	Wrong Loc
217	DK9NM	Wrong Loc	DK9NM	Wrong Loc
220	JA6WJL	Wrong Loc (WW)	JA6WJL	Fault not found
224	G4DDL	Wrong Loc	G4DDL	Wrong Loc
230	DF4ZL	Wrong Loc	DF4ZL	Wrong Loc
238	GW3LNR	Wrong CALL	G3LNR	Fault not found
240	WP2B	Wrong Loc	WP2B	Fault not found
244	G3HTA	Wrong Loc	G3HTA	Wrong Loc
247	G8T	Wrong Loc	G8T	Wrong Loc
252	EA7BYM	Wrong Loc	EA7BYM	Wrong Loc
260	S53N	MARKED AS FAULT	S53N	CORRECT
269	IK3NWX	Wrong Loc	IK3NWX	Fault not found
282	E7DX	Wrong serial nr	E7DX	Fault not found
300	DL4CF	Wrong serial nr	DL4CF	Fault not found
302	S53A	Wrong serial nr	S53A	Fault not found
311	OK1ZJH	Wrong CALL – OK1ZYH	OK1ZYH	Fault not found
314	HA1DCQ	Wrong CALL – 9A1DCQ	9A1DCQ	Fault not found
327	HA6NF	Wrong Loc	HA6NF	Wrong Loc
360	IK4WTU	Wrong Loc	IK4WTU	Wrong Loc
372	HB9FMN/P	Wrong Loc + wrong serial	HB9FMN/P	Wrong Loc + wrong serial
378	G0KYS	IO85 IS IN GM	G0KYS	Fault not found
381	SM3M	JN65 IS IN I	SM3M	Fault not found
382	OZ8MW	Wrong Loc	OZ8MW	Wrong Loc
399	HB9BA	Wrong Loc	HB9BA	Locators are not the same
420	G4VHF/P	Wrong serial nr	G4VHF/P	Fault not found
421	G4Z	Wrong RST	G4Z	Fault not found
436	JE6OKI	Wrong Loc (AA)	JE6OKI	Fault not found
440	JH4VDP	Wrong Loc (XX)	JH4VDP	Fault not found
441	JA6QGG	Wrong Loc (XX)	JA6QGG	Fault not found
442	JA6SBW	Wrong Loc (AA)	JA6SBW	Fault not found
443	JK6MXY	Valid QSO	JK6MXY	0 points Why?
444	JH0RNN	Wrong Loc (AA)	JH0RNN	Fault not found
446	JR1IJV	Wrong Loc (AA)	JR1IJV	Fault not found
447	JR2UKF	Valid QSO	JR2UKF	0 points Why?
448	JI4UEN	Wrong Loc (AA)	JI4UEN	Fault not found
449	JR5JAQ	Wrong Loc (AA)	JR5JAQ	Fault not found

	UBA		Contest robot	
450	JE1CKA	Wrong Loc (AA)	JE1CKA	Fault not found
452	JM1IGJ	Wrong Loc (AA)	JM1IGJ	Fault not found
454	JA6JPS	Wrong Loc (AA)	JA6JPS	Fault not found
455	JR0BQX	Wrong Loc (AA)	JR0BQX	Fault not found
456	JF3KON	Wrong Loc (AA)	JF3KON	Fault not found
457	JA5SQH	Wrong Loc (AA)	JA5SQH	Wrong Loc
459	JA6LPW	Wrong Loc (AA)	JA6LPW	Fault not found
460	JR2HCB	Wrong Loc (AA)	JR2HCB	Fault not found
461	JL1XMN	Wrong Loc (AA)	JL1XMN	Fault not found
462	JR6EXN	Wrong Loc	JR6EXN	Fault not found
464	JA3IW	Wrong Loc (AA)	JA3IW	Fault not found
465	JE6KEY	Wrong Loc (AA)	JE6KYA	Fault not found
466	JR3NZC	Wrong Loc (AA)	JR3NZC	Fault not found
467	JF6TAC	Wrong Loc	JF6TAC	Fault not found
470	JR1MLT	Wrong Loc (AA)	JR1MLT	Fault not found
473	JI3SST	Wrong Loc (AA)	JI3SST	Fault not found
474	JR6RRR/3	Wrong Loc (AA)	JS6RRR/3	Fault not found
475	JA0EOK	Wrong Loc (AA)	JA0EOK	Fault not found
475	JF1NZW	Wrong Loc (AA)	JF1NZW	Fault not found
476	JH1SJN	Wrong Loc (AA)	JH1SJN	Fault not found
482	JF2UEE	Wrong Loc (AA)	JF2UEE	Fault not found
483	JA4COF	Wrong Loc (AA)	JA4COF	Fault not found
484	JF2IWW	Wrong Loc (XX)	JF2IWW	Fault not found
485	JA1BOQ	Wrong Loc (AA)	JA1BOQ	Fault not found
487	JH1TWT	Wrong Loc (AA)	JH1TWT	Fault not found
488	JA4IQK	Wrong Loc (AA)	JA4IQK	Fault not found
489	JM1LRQ	Wrong Loc (AA)	JM1LRQ	Fault not found
490	JH5RXS	Wrong Loc	JH5RXS	Fault not found
491	JH4IFF	Wrong Loc (AA)	JH4IFF	Fault not found
492	YO2KDT	<b>MARKED AS FAULT</b>	YO2KDT	CORRECT
493	JH4CPC	Wrong Loc (AA)	JH4CPC	Fault not found
513	HB9GT	Wrong CALL – HB8GT	HB8GT	Fault not found
515	HB9ERV	Wrong Loc	HB9ERV	Wrong Loc
525	HB9AKU	Wrong Loc	HB9AKU	Wrong Loc
567	HB9DTX	QSO is correct	HB9DTX	No partner found
571	OE9ANJ	KN25 is in YO	OE9ANJ	Fault not found
584	SV1NK	Wrong Loc	SV1NK	Wrong Loc
591	DK3SR	Wrong Loc	DK3SR	Wrong Loc
609	SM/ON5RZ/M	LOCATOR IS CORRECT	SM/ON5RZ/ M	Wrong Loc
613	9A2BW	WAS A DUPE	9A2BW	0 points DUPE?
641	YO8RNF	Wrong Loc	YO8RNF	Wrong Loc

	<b>UBA</b>		<b>Contest robot</b>	
644	EA2US	Wrong Loc	EA2US	Fault not found
645	IZ5SSO	Wrong CALL – IZ5FSH	IZ5SFH	Fault not found
648	S59IVG	Wrong CALL – S55IVG	S55IVG	Fault not found
665	2E0ZIG	Wrong Loc	2E0ZIG	Fault not found
670	UT7Y	QSO IS CORRECT	UT7Y	No partner found
675	G4TIF	Wrong CALL – G4MIF	G4MIF	Fault not found
695	G4AFJ	Wrong serial NR	G4AFJ	Fault not found
697	IZ6FXP	Wrong Loc	IZ6FXP	Wrong Loc

P.S. Doing this exercise I discovered a software bug in my correction program when dupes are not registered in both logs.