HF contesten

Introductie &
OT6M setup

Frank, ON9CC

VERON & VRZA Zuid-Limburg

Schimmert, 9 mei 2018

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Introductie / Historie

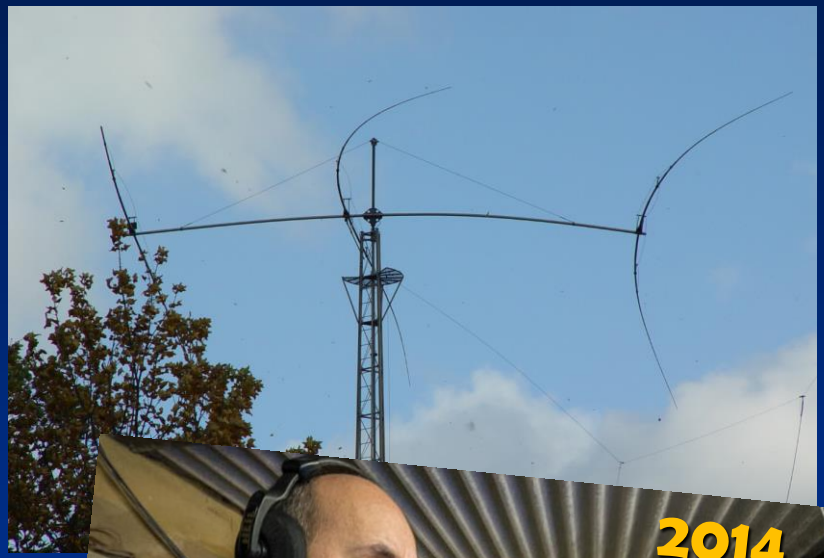
- *Licentie 1990*
- *Interesse in VHF en 6m*
- *1e VHF contest 1991 bij DL1KGR*
  - *14 el. Parabeam, TS711, D200 … voicekeyer?*

Introductie / Historie

- *HF contest bij PI4TUE (1991-2014)*

Introductie / Historie

- *1992> - OTxA - CQWW / WPX SSB*



Introductie / Historie

- *2008 - DR1A - CQWW SSB*
- *2013 - NR4M – WPX CW (1st NA MM cat.)*

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Beginnen met contesten

- ***Contest kalender: WA7BNM***
  - *CQ WW, WPX, 160m*
  - *ARRL DX, 10m, 160m*
  - *WAE*
  - *PACC (24h)*
  - *Russian DX (24h)*
  - *Stew Perry TBDC (160m)*
- ***Klasse***
  - *Single (SO) of Multi Operator (MS/M2/MM)*
  - *Single (SB) of All band (AB)*
  - *SSB, CW, RTTY*
  - *QRP, LP, HP*

Voorbereiding

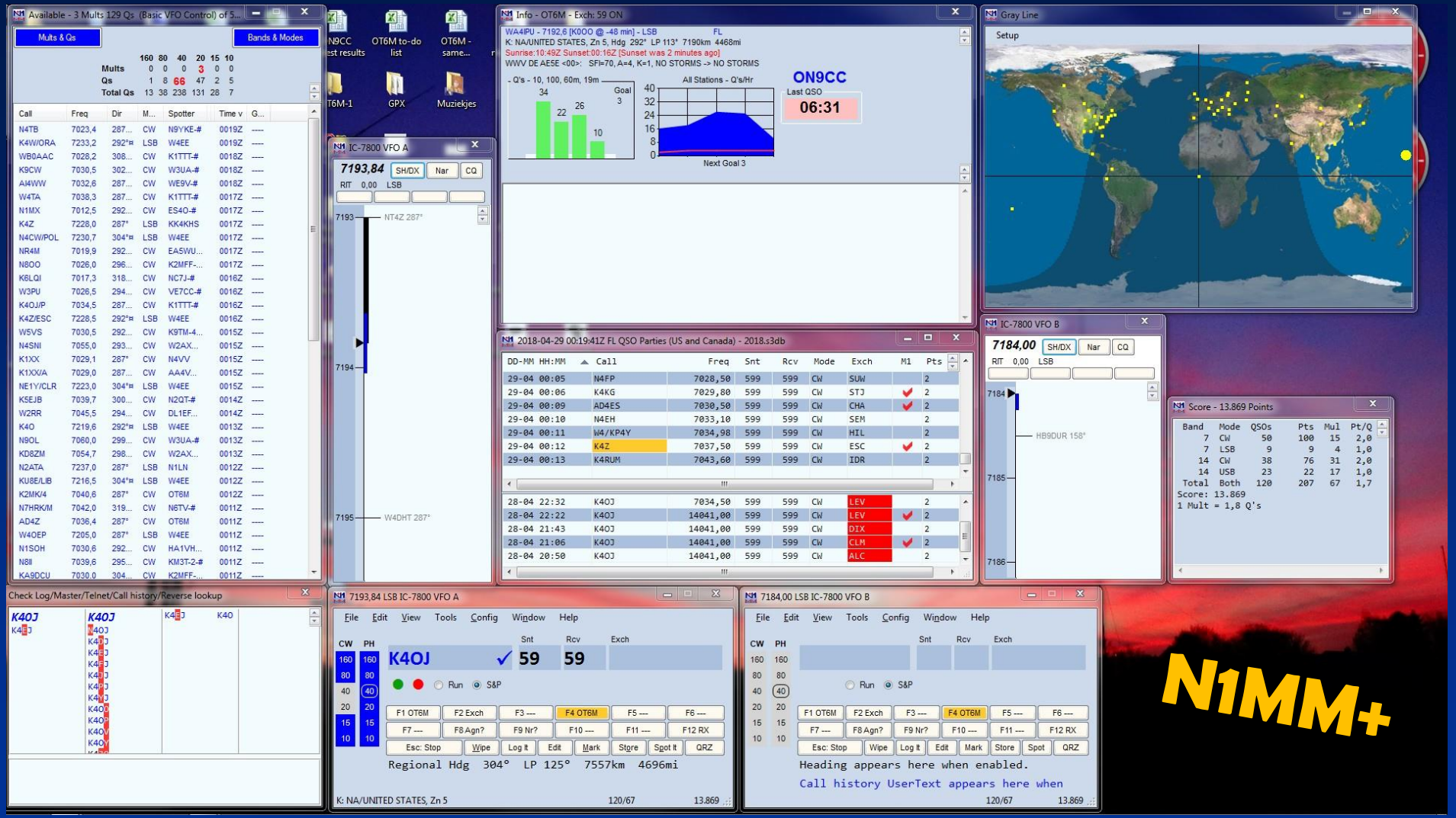
- ***Strategie***
  - ***Beschikbare tijd***
  - ***Propagatie***
  - ***Categorie: op´s, mode, power, band(en)***
- ***Contest regels***
  - ***Rapport***
  - ***Puntentelling***
- ***Bandplan***
  - ***Japan 160m < 1.825***
  - ***USA novice > 7.200***
  - ***Aanpassen antenne SSB/CW?***

Lees het reglement !

Voorbereiding

- ***Software***
  - ***N1MM+ (log)***
    - ***Update N1MM+***
    - ***Country file***
    - ***Call history file***
    - ***DX-cluster / skimmer*** ***(assisted klasse)***
    - ***Score reporting*** ***(cqcontest.net)***
    - ***Functie toetsen***
      - ***CW / voice keyer***
      - ***Sturing TRX, rotor, antenneswitch***
    - ***Layout scherm***
    - ***N1MM+ is zeer uitgebreid !***
  - ***QSOrder (QSO recording)***
  - ***Athena (target/actuals)***

Voorbereiding



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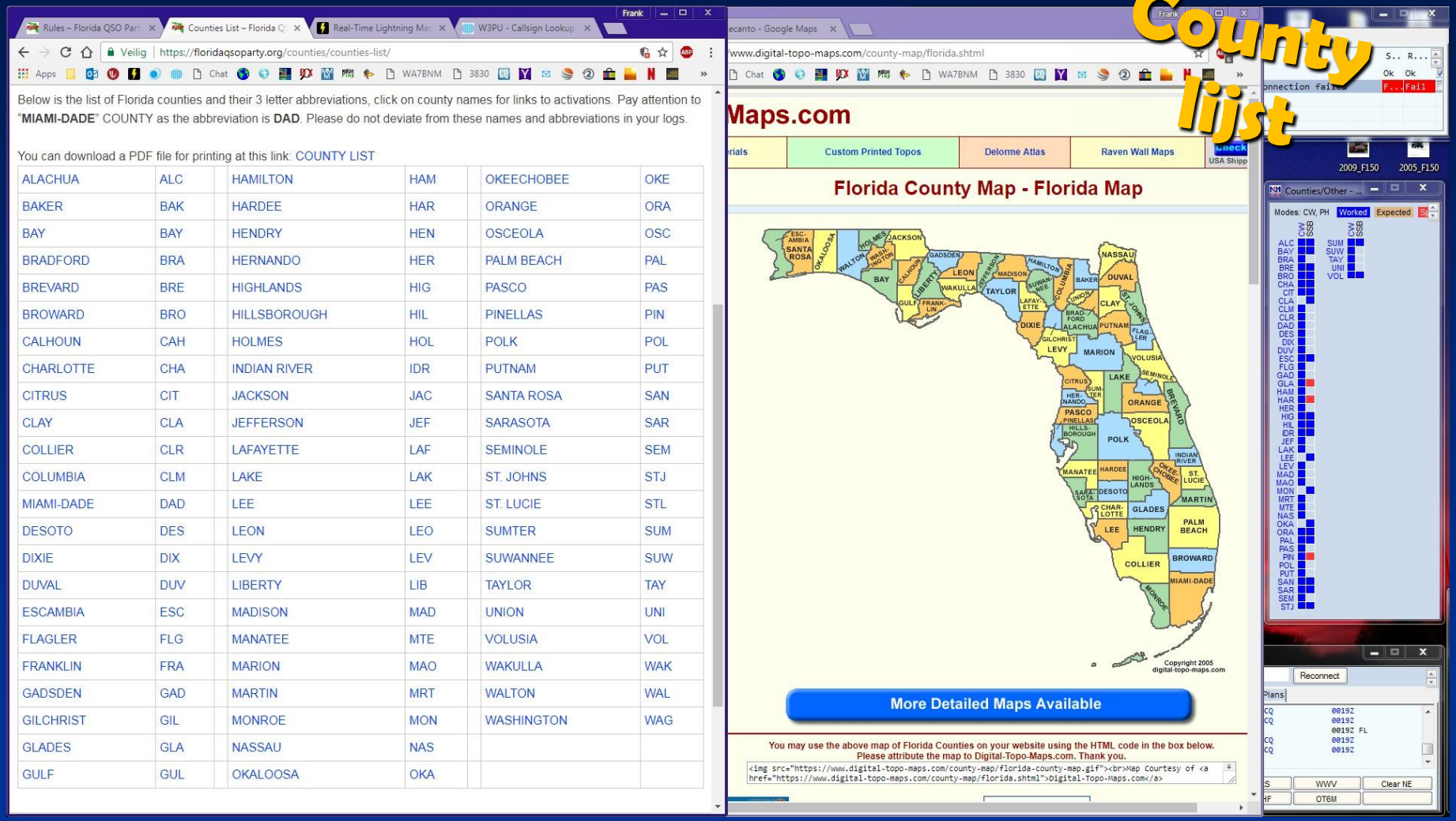
Voorbereiding



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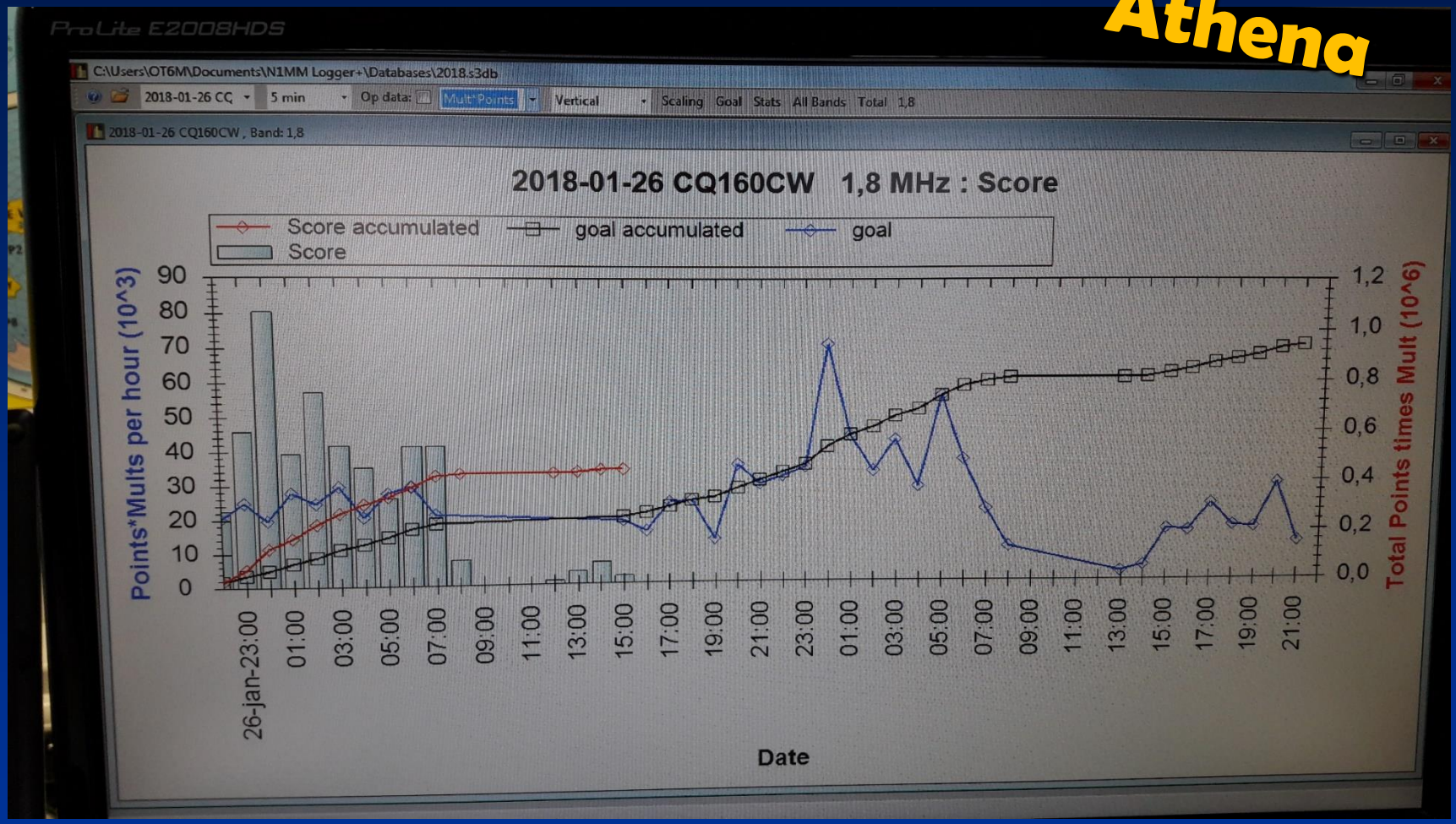
Voorbereiding



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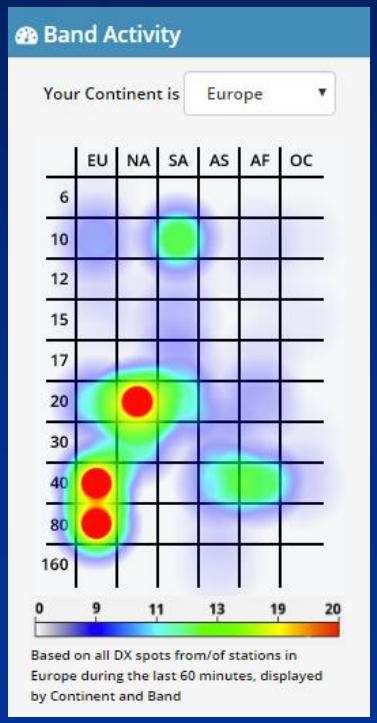
Tijdens contest

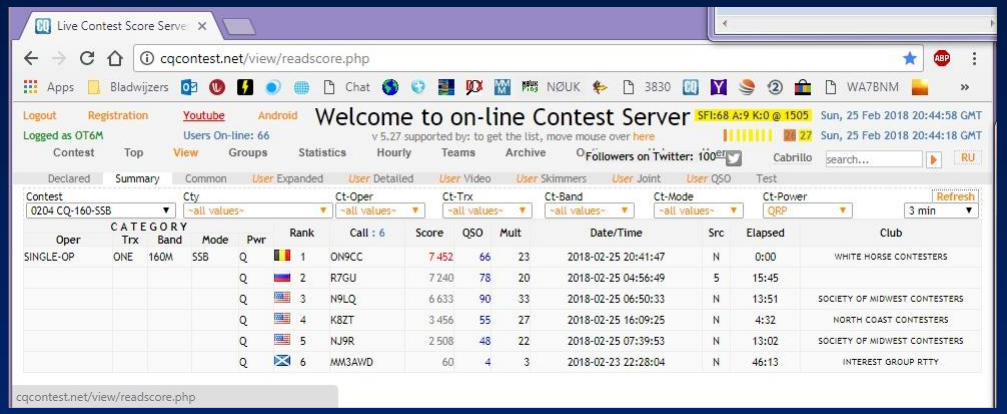
- *Ervaring opdoen*
  - *Luisteren hoe andere stations QSO's maken*
  - *K5ZD*
- *Algemene propagatie*
- *ARRL: band dicht 8h-11h = slapen*
- *160m trage QSB en greyline prop*
- *Hogere banden open?*
  - *DXHeat*
  - *cqcontest.net*

DXHeat.com



Tijdens contest

- *Run of S&P*
  - *Dual RX*
  - *RBN*
- *Multipliers*
  - *DX-cluster / skimmer / VFO knop*
- *QSO rate*
- *Wat doet 'de concurrentie'*
- *Notities bij twijfel (ctrl+N) / niet loggen*
- ***DUPES ALTIJD WERKEN !***



Na de contest

- *Controle log*
  - *Lees notities*
  - *Beluister opname*
- *Log tijdig opsturen/uploaden (Cabrillo)*
- *3830 claimed score & soapbox*
- *… … certificaat / plakaat*

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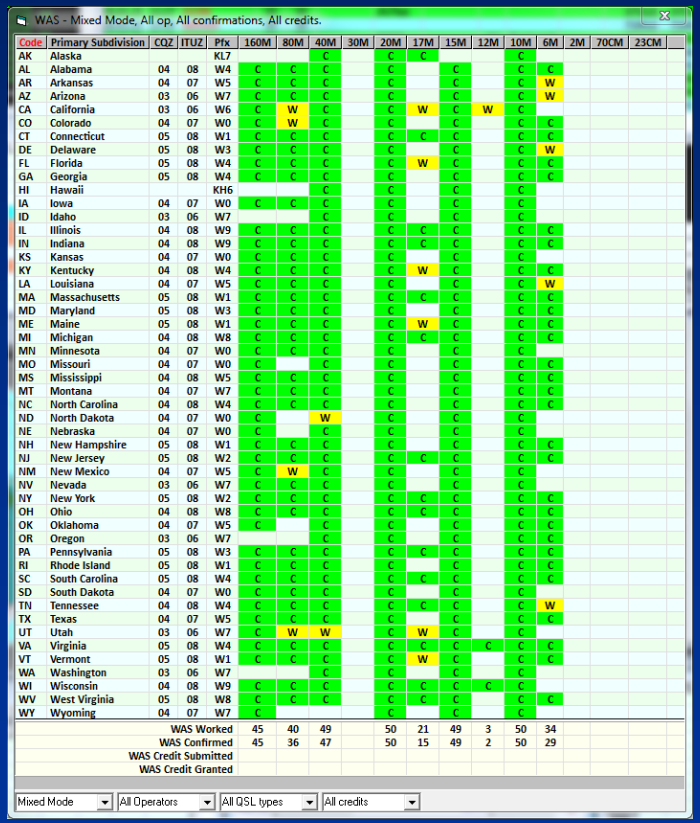
Na de contest

- *Importeer log in algemeen log (Logger32)*
- *Nieuwe DXCC / zones / staten ?*
- *Upload log naar LoTW / eQSL*
- *QSL kaarten*



Code	Primary Subdivision	CQZ	ITUZ	Pfx	160M	80M	40M	30M	20M	17M	15M	12M	10M	6M	2M	70CM	23CM
AK	Alaska			KL7			C		C	C			C				
AL	Alabama	04	08	W4	C	C	C		C		C		C	C			
AR	Arkansas	04	07	W5	C	C	C		C		C		C	W			
AZ	Arizona	03	06	W7	C	C	C		C		C		C	W			
CA	California	03	06	W6	C	W	C		C	W	C	W	C				
CO	Colorado	04	07	W0	C	W	C		C		C		C	C			
CT	Connecticut	05	08	W1	C	C	C		C	C	C		C	C			
DE	Delaware	05	08	W3	C	C	C		C		C		C	W			
FL	Florida	05	08	W4	C	C	C		C	W	C		C	C			
GA	Georgia	05	08	W4	C	C	C		C		C		C	C			
HI	Hawaii			KH6			C		C		C		C				
IA	Iowa	04	07	W0	C	C	C		C		C		C				
ID	Idaho	03	06	W7			C		C		C		C				
IL	Illinois	04	08	W9	C	C	C		C	C	C		C	C			
IN	Indiana	04	08	W9	C	C	C		C	C	C		C	C			
KS	Kansas	04	07	W0	C	C	C		C		C		C				
KY	Kentucky	04	08	W4	C	C	C		C	W	C		C	C			
LA	Louisiana	04	07	W5	C	C	C		C		C		C	W			
MA	Massachusetts	05	08	W1	C	C	C		C	C	C		C	C			
MD	Maryland	05	08	W3	C	C	C		C		C		C	C			
ME	Maine	05	08	W1	C	C	C		C	W	C		C	C			
MI	Michigan	04	08	W8	C	C	C		C	C	C		C	C			
MN	Minnesota	04	07	W0	C	C	C		C		C		C				
MO	Missouri	04	07	W0	C		C		C		C		C	C			
MS	Mississippi	04	08	W5	C	C	C		C		C		C	C			
MT	Montana	04	07	W7	C	C	C		C		C		C	C			
NC	North Carolina	04	08	W4	C	C	C		C		C		C	C			
ND	North Dakota	04	07	W0	C		W		C		C		C				
NE	Nebraska	04	07	W0	C		C		C		C		C				
NH	New Hampshire	05	08	W1	C	C	C		C		C		C	C			
NJ	New Jersey	05	08	W2	C	C	C		C	C	C		C	C			
NM	New Mexico	04	07	W5	C	W	C		C		C		C				
NV	Nevada	03	06	W7	C	C	C		C		C		C				
NY	New York	05	08	W2	C	C	C		C	C	C		C	C			
OH	Ohio	04	08	W8	C	C	C		C	C	C		C	C			
OK	Oklahoma	04	07	W5	C		C		C		C		C	C			
OR	Oregon	03	06	W7			C		C		C		C	C			
PA	Pennsylvania	05	08	W3	C	C	C		C	C	C		C	C			
RI	Rhode Island	05	08	W1	C	C	C		C		C		C	C			
SC	South Carolina	05	08	W4	C	C	C		C	C	C		C	C			
SD	South Dakota	04	07	W0	C	C	C		C		C		C				
TN	Tennessee	04	08	W4	C	C	C		C	C	C		C	W			
TX	Texas	04	07	W5	C	C	C		C		C		C	C			
UT	Utah	03	06	W7	C	W	W		C	W	C		C				
VA	Virginia	05	08	W4	C	C	C		C	C	C	C	C	C			
VT	Vermont	05	08	W1	C	C	C		C	W	C		C	C			
WA	Washington	03	06	W7			C		C		C		C				
WI	Wisconsin	04	08	W9	C	C	C		C	C	C	C	C				
WV	West Virginia	05	08	W8	C	C	C		C	C	C		C	C			
WY	Wyoming	04	07	W7	C				C		C		C				
				WAS Worked	45	40	49		50	21	49	3	50	34			
				WAS Confirmed	45	36	47		50	15	49	2	50	29			
				WAS Credit Submitted													
				WAS Credit Granted													

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OT6M
White Horse Contesters

Station setup – antennes algemeen

- ***Afhankelijk van klasse deelname***
  - ***Single Band -> 1 antenne***
  - ***All band -> meestal meerdere antennes***

- ***Type antennes***
  - ***160m, 80m – dipool, vertical, RX antenne***
  - ***40m – beam, (phased) vertical(s)***
  - ***20m,15m,10m – beam(s), vertical***
  - ***WARC banden: geen contesten!***

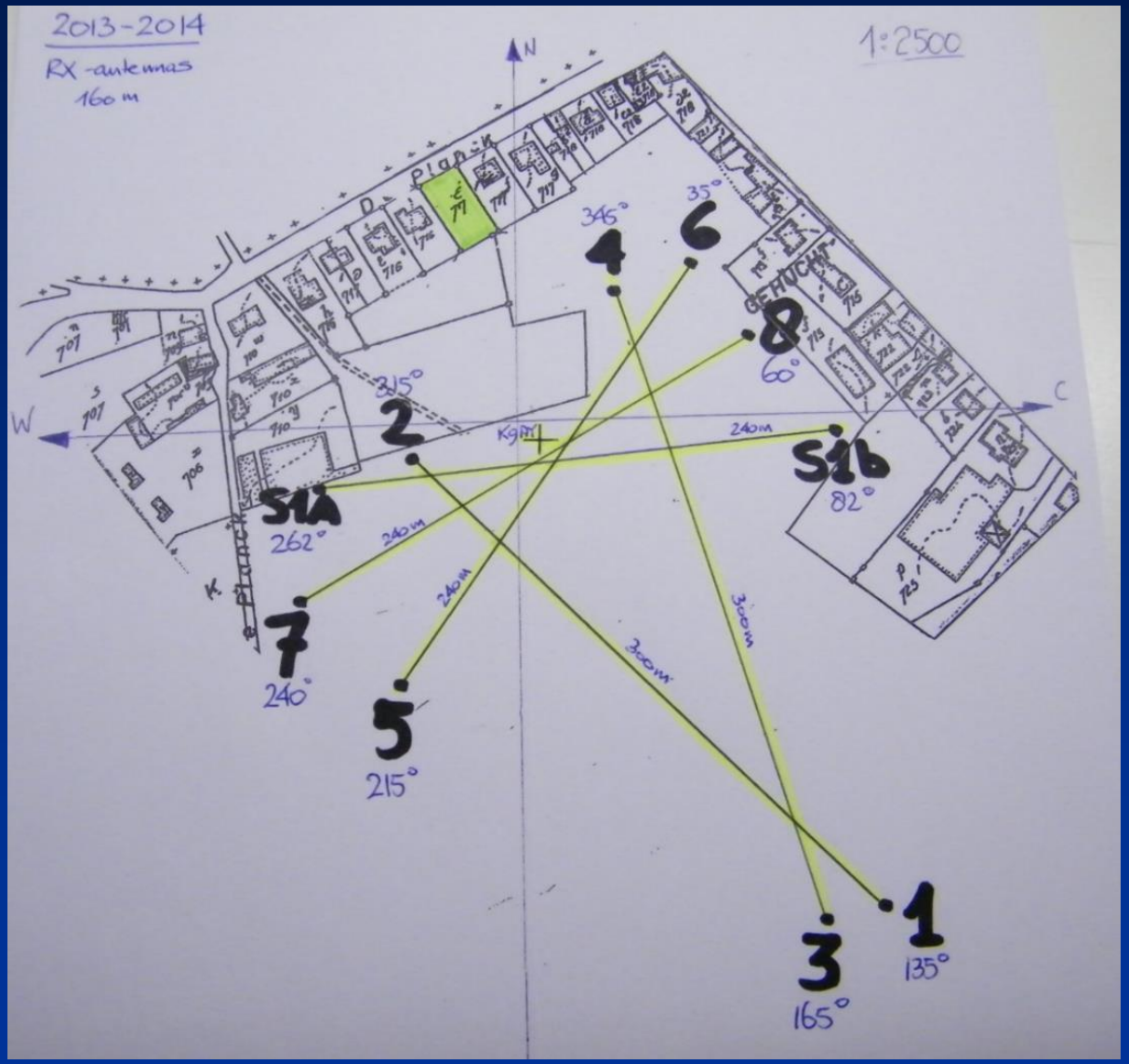
Station setup – antennes OT6M

Station setup – antennes OT6M

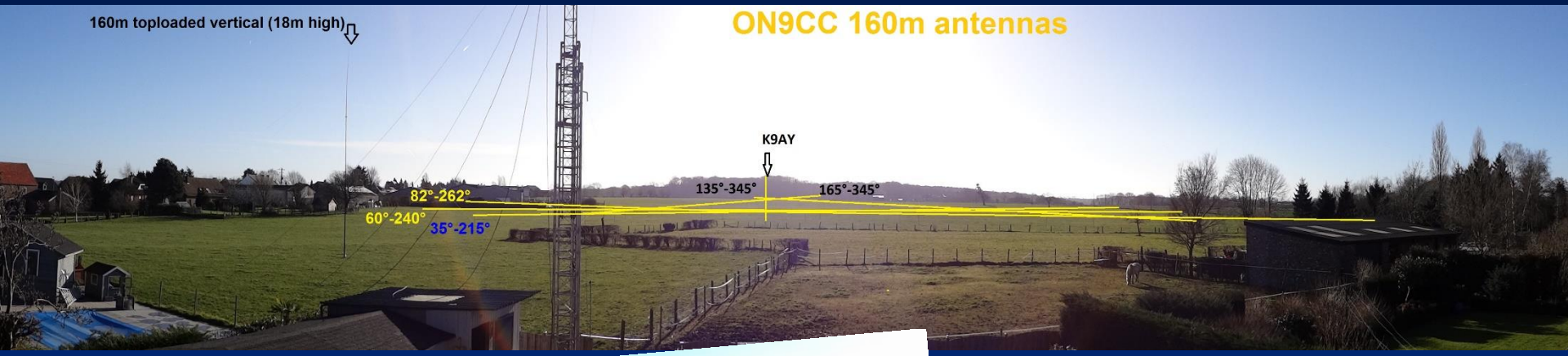
- *160m*
  - *TX*
    - *Inverted L (26m vertical) met 16 radialen (20~40m lang)*
    - *Dipool*
  - *RX*
    - *8 circle (Hi-Z)*
    - *2x 300m reversible beverage USA (QTF 315°/135° en 345°/165°)*
    - *240m reversible beverage Japan (QTF 35°/215°)*
    - *240m reversible beverage Australie/Zuid-Amerika (QTF 60°/240°)*
    - *K9AY*
    - *NVIS*
- *80m*
  - *TX*
    - *Full size vertical met 16 radialen (15~20m lang)*
    - *80m dipool*
  - *RX*
    - *Zie 160m*

Station setup – antennes OT6M

Beverages layout



Station setup – antennes OT6M



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Station setup – antennes OT6M

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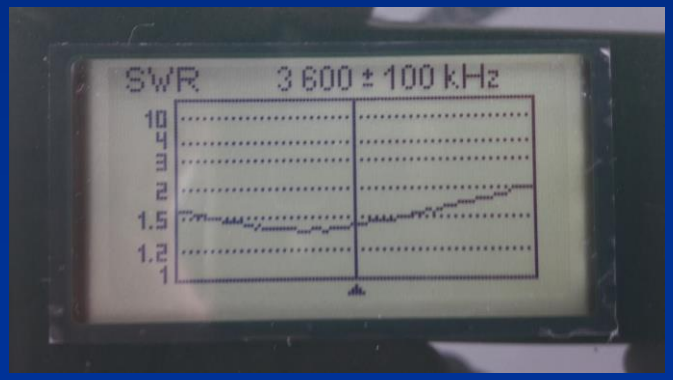
Station setup – antennes OT6M

Station setup – antennes OT6M



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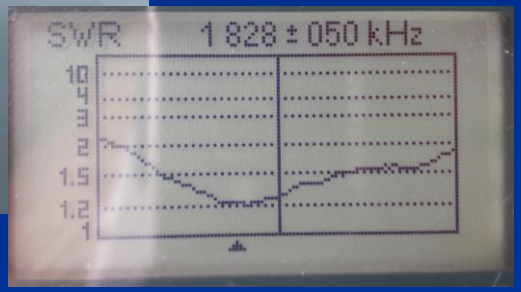
Station setup – antennes OT6M

160m vertical



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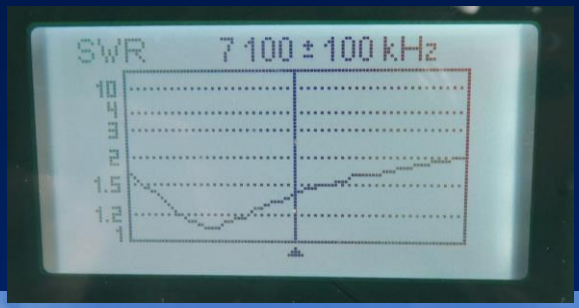
Station setup – antennes OT6M

- *40m*
  - *Optibeam OB2-40*
- *20m,15m,10m*
  - *Optibeam OB11-3*
  - *Stepp-IR*
    - *Gekoppeld via StackMatch*



Station setup – antennes OT6M

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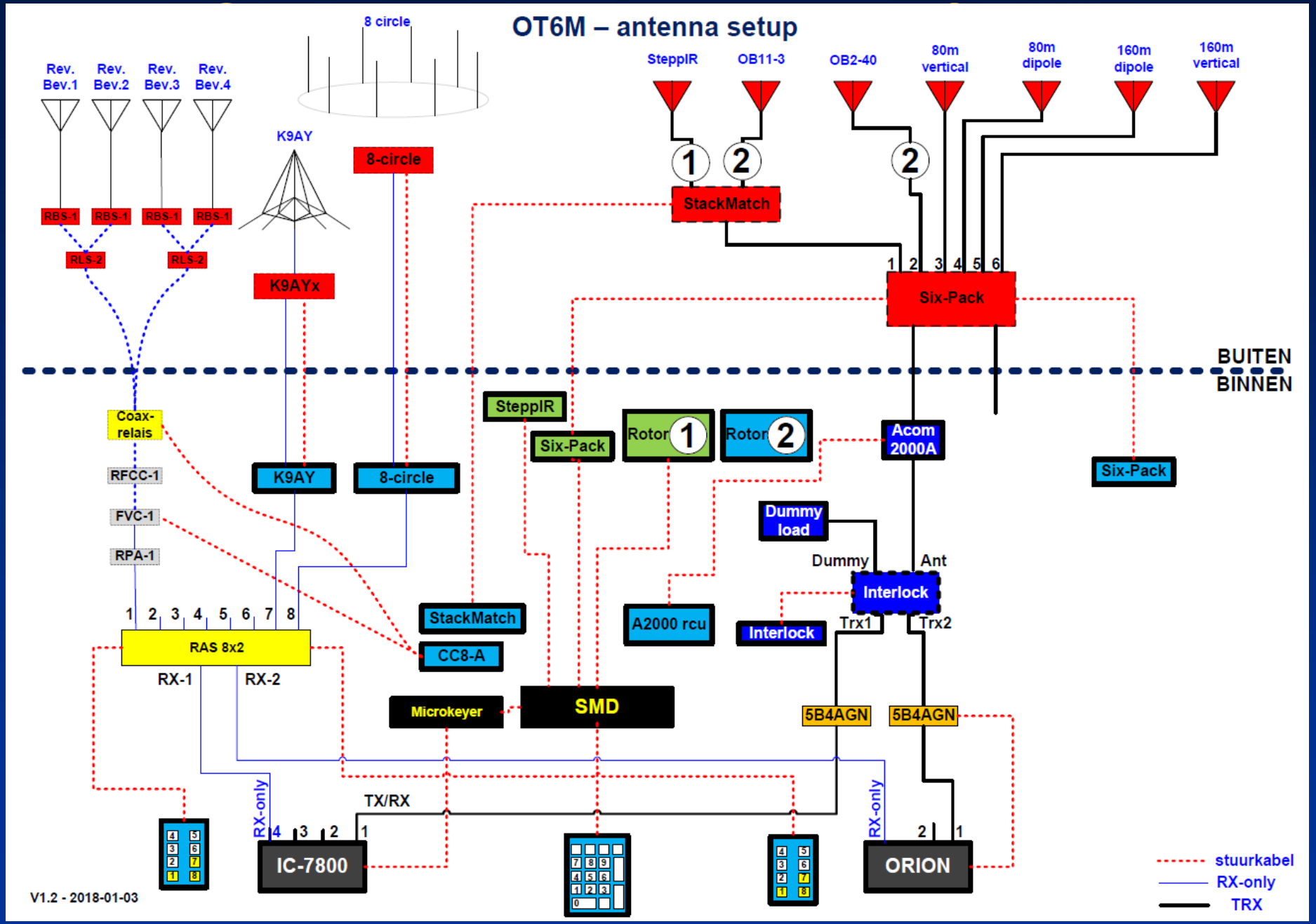
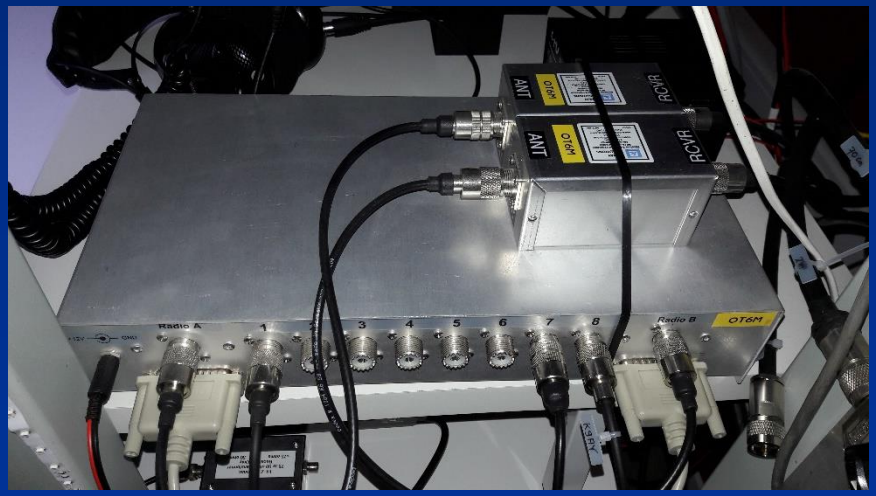

OT6M – antenna setup
8 circle
Rev. Bev.1
Rev. Bev.2
Rev. Bev.3
Rev. Bev.4
RBS-1
RBS-1
RBS-1
RBS-1
RLS-2
RLS-2
K9AY
K9AYx
8-circle
SteppIR
OB11-3
OB2-40
80m vertical
80m dipole
160m dipole
160m vertical
1
2
2
StackMatch
1 2 3 4 5 6
Six-Pack
BUITEN
BINNEN
Coax-relais
RFCC-1
FVC-1
RPA-1
K9AY
8-circle
SteppIR
Six-Pack
Rotor 1
Rotor 2
Acom 2000A
Six-Pack
Dummy load
Dummy
Ant
Interlock
1 2 3 4 5 6 7 8
RAS 8x2
RX-1
RX-2
StackMatch
CC8-A
A2000 rcu
Interlock
Trx1
Trx2
Microkeyer
SMD
5B4AGN
5B4AGN
RX-only
TX/RX
RX-only
4 3 2 1
IC-7800
2 1
ORION
V1.2 - 2018-01-03
stuurkabel
RX-only
TRX

Station setup – antenna switching

Schakeling antennes

- ***SixPak***
- ***StackMatch***
- ***RAS 8x2 voor RX-antennes***
- ***Automatisering d.m.v.***
  Microham Station Master

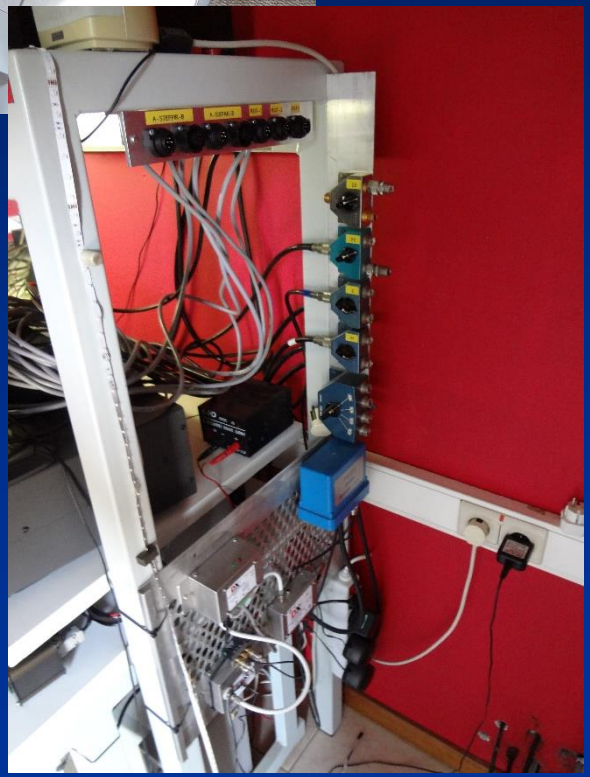


Station setup – antenna switching

2013

2018

Station setup – coax/cables



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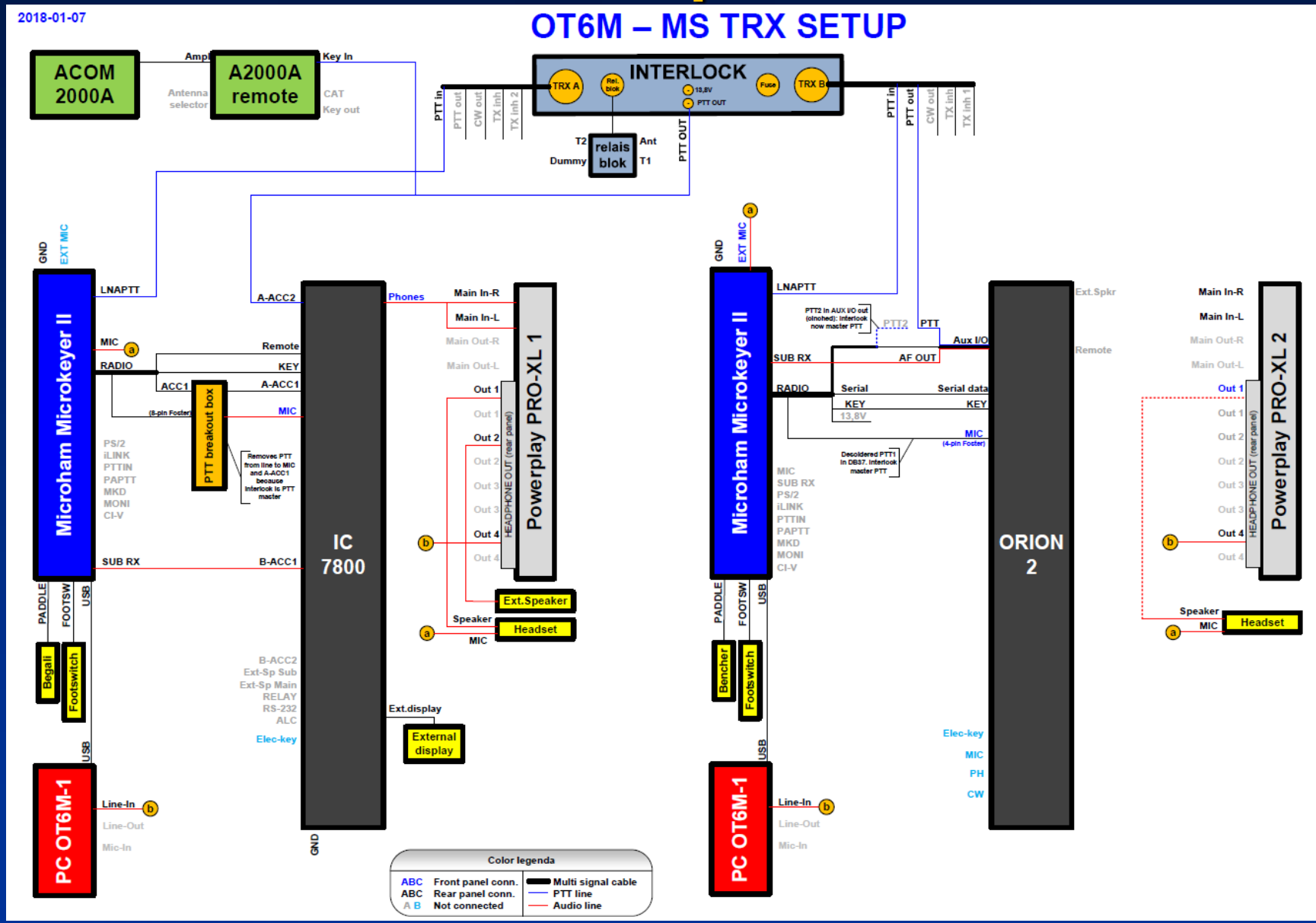
Station setup - shack

- *TRX*
  - *Dual-receive*
  - *Filtering*
- *PA*
- *Filtering*
- *PC & interface (Microkeyer)*
- *Headset + footswitch*
- *Ergonomie … 12 uur shifts …*
- *Antenne switch, rotor interface (SMD)*
- *Schema van setup*

Station setup – shack



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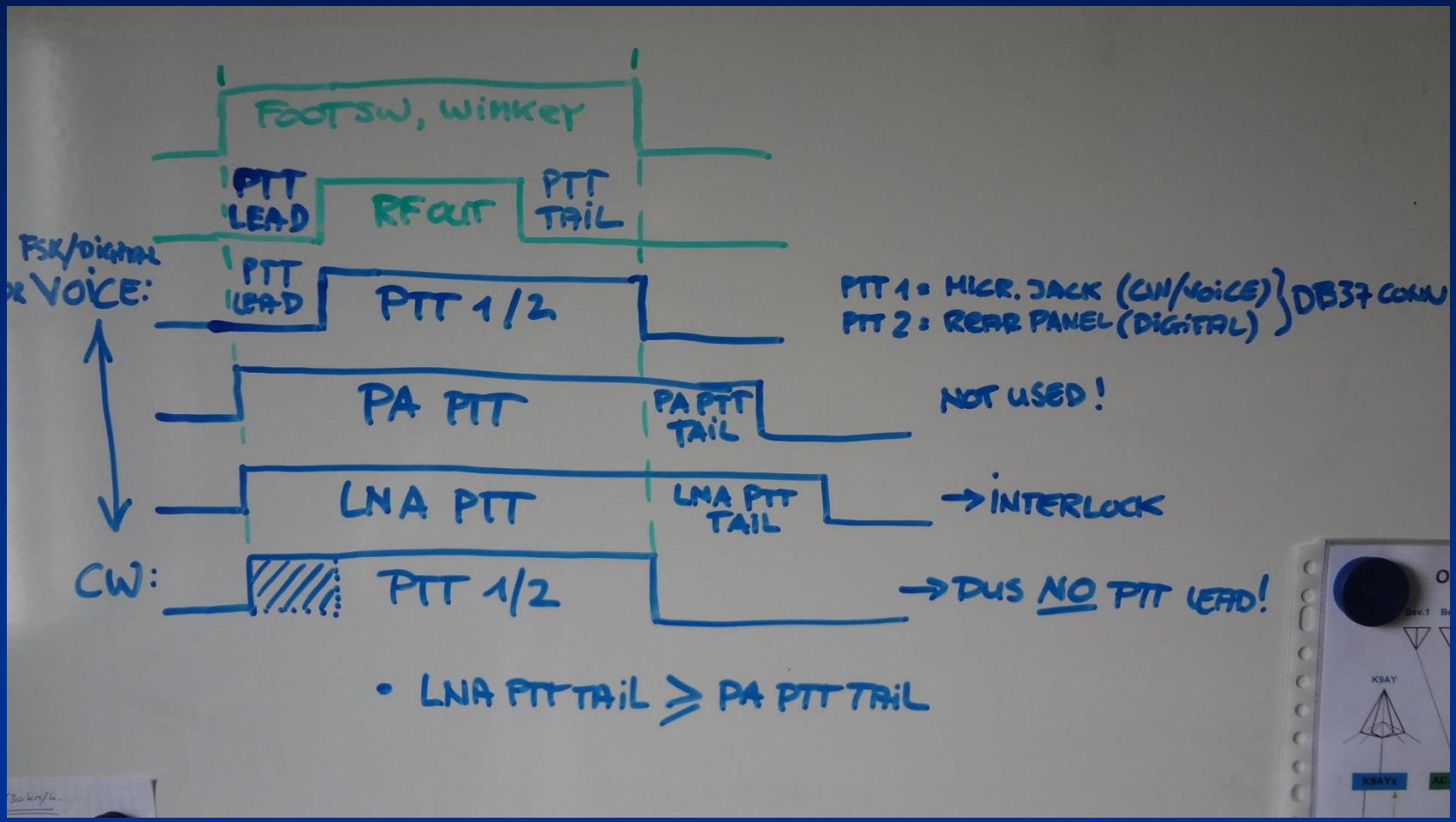
Station setup – shack

Microkeyer in/uitgang schakeltijden



NOOIT VOX GEBRUIKEN !

Station setup – shack

2013 – Single Op.

Station setup – shack

2014 – ergonomie verbetering

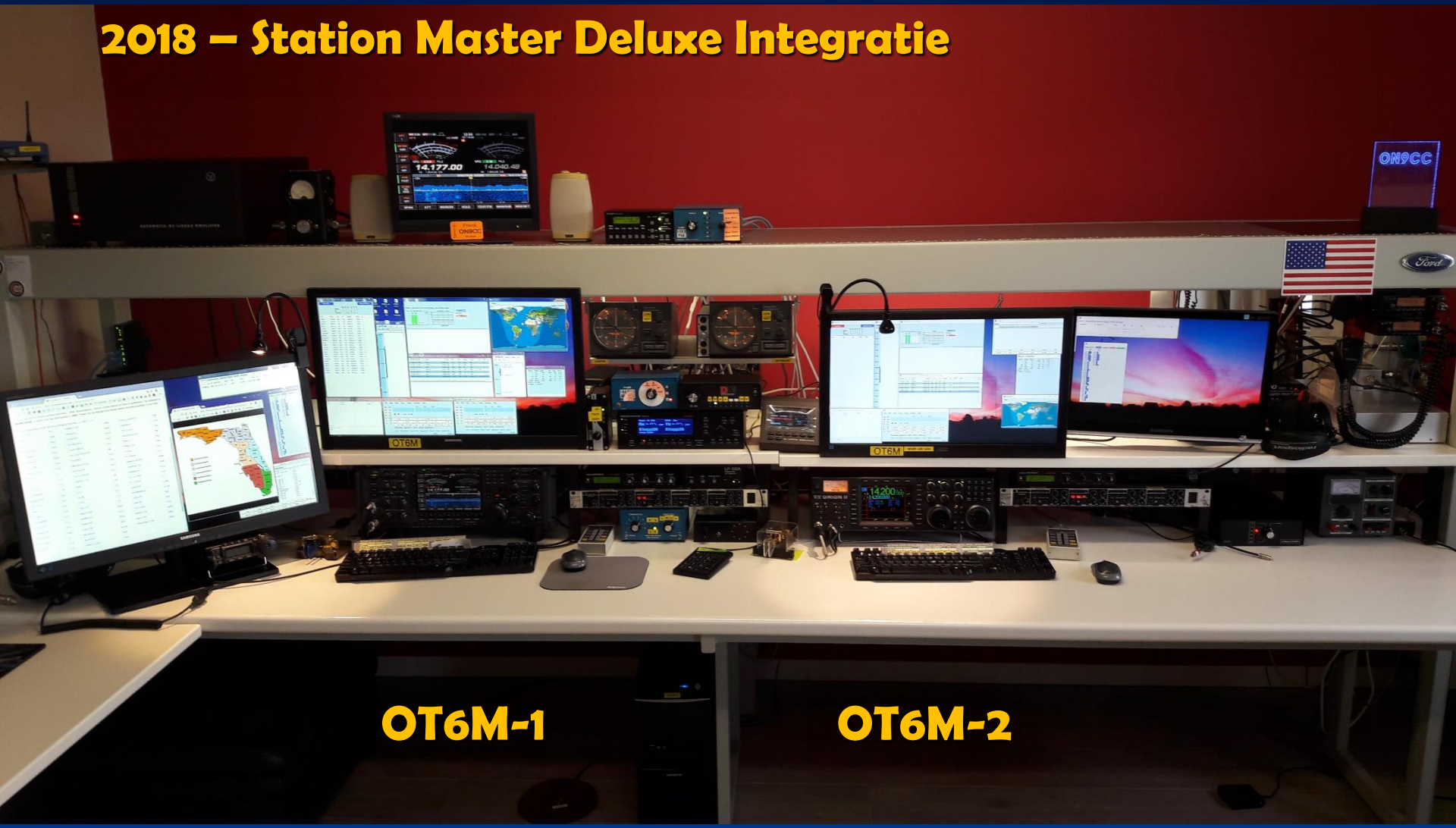
Station setup – shack

2015 – Multi-Single setup met interlock

Tip!

Station setup – shack

2018 – Station Master Deluxe Integratie



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Station setup – shack

2018 – Operating position 1

Station setup – shack

2018 – Operating position 2

Station setup – Station Master Deluxe

80m dipole

80m vertical

SteppIR

Beveiliging!

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Links

- ***Software***
  - ***N1MM+ - contest logprogramma***
    - ***N1MM+ Youtube door Jim ON5UM, Valerie NV9L***
  - ***QSOrder – audio recording***
  - ***VE7CC – DX-cluster en cluster software***
- ***Info***
  - ***WA7BNM - contest kalender***
  - ***AA5AU – RTTY contesting***
  - ***CQ-160 CQ-WPX CQ-WW – CQ contesten***
  - ***ARRL – ARRL contesten***
- ***Info***
  - ***3830 – contest scores***

Aurelio
PC5A

Frank
ON9CC