



MINISTERIO
DE DEFENSA

REAL INSTITUTO Y OBSERVATORIO DE LA ARMADA



ROA Report

Francisco Javier Galindo
BIPM, Sèvres, France

Sep 2012

20th Meeting of the CCTF WG on TWSTFT
6, 7 September 2012, Sevres, BIPM



Updating / modifications

- A new Satre modem, and a SATSIM were acquired in December 2010.
- Feeding of Anacom Ku-band transceiver by external reference of frequency (Apr 11).
- New antenna, 2.4 m of diameter, for ROA TW station “1” (Jun 2011).
- Improving of control TW stations software.
- Developing of new monitoring and notice / alert tools (examples)



Updating / modifications

- Fig 1: Summary of session in the Intranet.



Sep 2012

20th Meeting of the CCTF WG on TWSTFT
6, 7 September 2012, Sevres, BIPM



Updating / modifications

- Fig 2: Summary of TW links, for days, in the Intranet.

Sesiones desde el djm 56161 hasta 56174														
Control	56161	56162	56163	56164	56165	56166	56167	56168	56169	56170	56171	56172	56173	56174
Ultimos Residuos	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
Ultimo Fichero ITU	10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22
Resumen sesiones	20 22													
Resumen TW														
SR-520 - Hora20														
Temperatura Salas														
Temperatura TRx														
Graficos del Maser														
Graficos Clean Carrier														
Eurosa														
USA														
Graficos Doble Via														
UTC(BOA) - UTC(ROA) - UTC(R)														
66-39														
33-87														
ROA-IT														
ROA-CH														
ROA-OCA														
ROA-IPQ														
ROA-PTB														
ROA-AOS														
ROA-SP														
ROA-TUG														
ROA-VSL														
ROA-NFL														
ROA-USN														
ROA-OP														
ROA-NIST														
UTC(BOA) - UTC(BOA) - UTC(R)														
66-39														
33-87														
ITU														
PTF2														
PTF1														
USNO														
00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22
20 22														
OP														
00 12 14 16 18	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
20 22														
CH														
00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22
20 22														
IPQ														
00 12 14 16 18	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
20 22														
AOS														
00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22
20 22														
TUG														
PTF2														
PTF1														
USNO														
00 12 14 16 18	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
20 22														
NIST														
00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10	00 02 04 06 08 10
10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	10 12 14 16 18	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22	12 14 16 18 20 22
20 22														

Sep 2012

20th Meeting of the CCTF WG on TWSTFT
6, 7 September 2012, Sevres, BIPM

4



Changes on TW implementation

- Transition from Intelsat IS-3R to Telstar TS 11N (Jul 2009).
- New schedule (Oct 2009).
- Change of frequencies and BW (Jul - Aug 2011).
- Frequency offset (Dec 2011)
- Stopping of CC EU-EU TX (Apr 2012).

Sep 2012

20th Meeting of the CCTF WG on TWSTFT
6, 7 September 2012, Sevres, BIPM



MINISTERIO
DE DEFENSA

REAL INSTITUTO Y OBSERVATORIO DE LA ARMADA



Main ROA collaborations

- RT data transfer, with SP (Sweden), since March 2010.
- ESA Tas F TVF Project, since March 2011.

Sep 2012

20th Meeting of the CCTF WG on TWSTFT
6, 7 September 2012, Sevres, BIPM



Strong points

- Both VSAT station in operation.
 - ROA02 is now used as spare and for other experiments.
- Continuous participation of ROA in TW: long serie of data.
- Controling SW is now more robust to strange effect.
- Monitoring software report issues every session.



MINISTERIO
DE DEFENSA

- Thanks for your attention.

Sep 2012

REAL INSTITUTO Y OBSERVATORIO DE LA ARMADA



20th Meeting of the CCTF WG on TWSTFT
6, 7 September 2012, Sevres, BIPM