

TWSTFT Activities 2011 in NMIJ, AIST

***National Metrology Institute of Japan
(NMIJ)***

Tomonari SUZUYAMA

Members of our section

Time and Frequency Division

F. HONG, Head of Time and Frequency Division

K. SETA, Deputy Director of NMIJ

S. OHSHIMA, Deputy Director of NMIJ

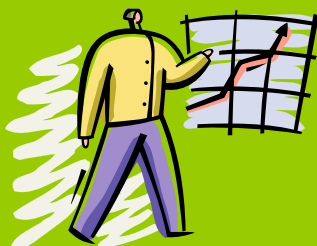
Frequency Measurement Systems Section



M. AMEMIYA
Chief, Frequency Measurement Systems Section



M. IMAE
Senior Research Scientist



K. WATABE
Senior Research Scientist



T. SUZUYAMA
Research Scientist



Y. FUJII
Technical Staff



A. OKUDA
Technical Staff



D. MIYAMOTO
Technical Staff



T. SAKUARAI
Technical Staff



S. Shashika
Student



A. NISHIDA
Student

Time Standards Section

Wavelength Standards Section

Bad News...

- **All UTC(NMIJ) system down (11 March, 2011)**
- **Suspension and squeeze of budget execution**
- **Start of electricity power limitation (until 9 September, 2011)**
- **TW systems are only checked their working**

Time keeping at NMIJ

- 3 Cs clocks are reported to BIPM.
(1 Cs is still under repair)
- Four Hydrogen Masers, two RH401A and one SD1T01A are made by Anritsu, another one is CH1-75A made by Kvarztz.
(1 Hydrogen Maser is still under adjusting)
- The source oscillator for the AOG is one of the Hydrogen Masers.



temperature controlled chamber for 5071A



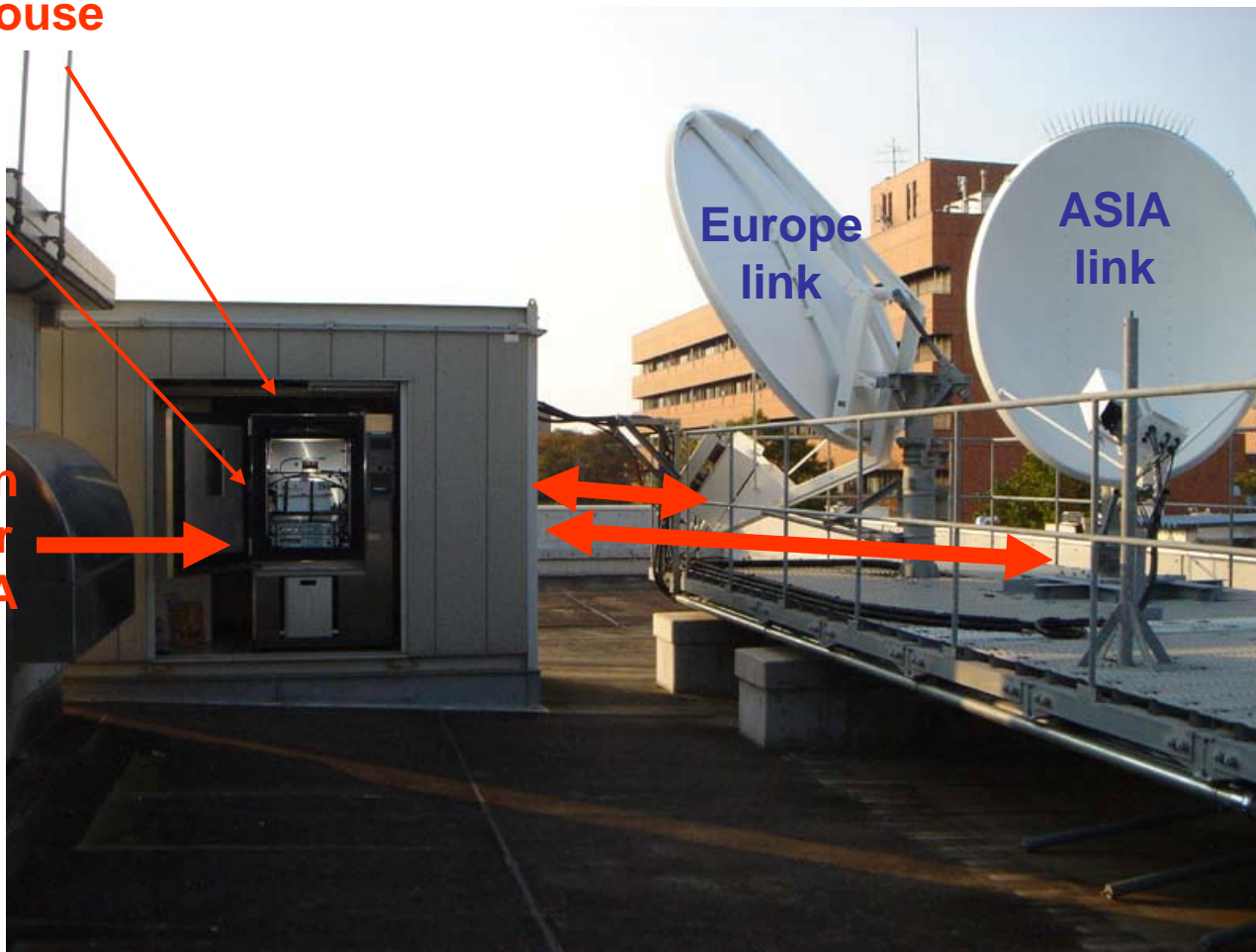
temperature controlled chamber for RH401A

Earth station configuration

air-conditioned
storehouse

chamber

Up&Down
converter
and SSPA



ASIA link station (1.8 m, 10 W)



We upgrade this antenna system(10W) and change the installation location. This one is installed the temperature controlled system.

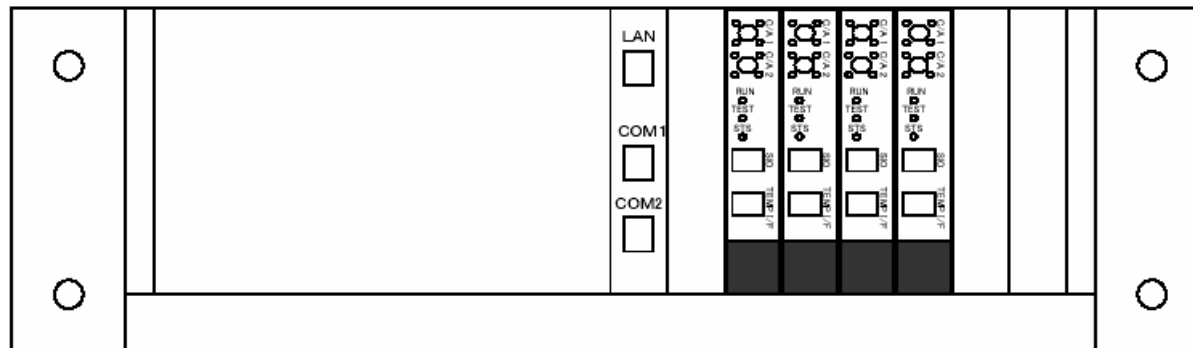
Europe link station (2.4 m, 10 W)



We need to change this system to AM-2 or AM-4?.
Down-converter (assembled by ourselves), Radio license.

TWSTFT Carrier Phase

- But it is under developing now...
- We are upgrading our TWFTFT CP system's firmware and down-converter, PLL, filters.



Good News !

- **This meeting**
- **Electricity power limitation was finished
(from today at NMIJ)**
- **Get budget for TW systems**
Satellite fee
Upgrade cost for satellite changing