

#### HAM RADIO 2009, Friedrichshafen

June 26 - 28, 2009



#### **Adam Farson VA70J**

### Arrival: June 27, 2009



■ Flew in on Ryanair from London-Stansted. The flight was comfortable and inexpensive, if on the basic side.



## Settling in



My Dutch friends picked me up, and we drove to Tettnang, a beautiful small town near Friedrichshafen. We settled in at our "Ferienwohnung" (vacation apartment) in nearby Gornhofen...



## Thursday Dinner



 ...and then joined Clemens DL4RAJ and his brother Rupert for a wonderful dinner at the "Krone" restaurant in Tettnang.



## Off to the Expo Centre



The following morning, Friday June 28, we drove to the Expo Centre and registered. Amenities include a number of exhibit halls, a huge indoor fleamarket (4 halls in all!) and an excellent cafeteria-style restaurant.



### Lobby exhibit:

#### Ham radio in Post-WW2 West Germany.



Some examples of radios and test instruments built by German hams in the early post-war years were on display in the Expo lobby.





### Friday: Der Flohmarkt!



- The huge covered flea-market filled 4 halls. An enormous selection of military and commercial radio equipment was on display, including rare German WW2 and Warsaw Pact Cold War gear (including "spy sets").
- There was sophisticated test equipment of all kinds, ranging from simple multimeters to signal generators, oscilloscopes and even network and spectrum analyzers.
- Prices were fairly reasonable, although German WW2 equipment bore very high price tags consistent with its rarity.
- Also on offer was an endless variety of Warsaw Pact surplus tubes and high-power RF components – a veritable amplifier-builder's Nirvana.
- There were also older tube-type amateur transceivers, receivers etc., but not much in the way of second-hand late-model ham radio gear.
- Some fine examples of modern European VHF/UHF amateur equipment were on display transverters, amplifiers, couplers etc.

#### Into the thick of it!

Like kids in a sweet-shop.

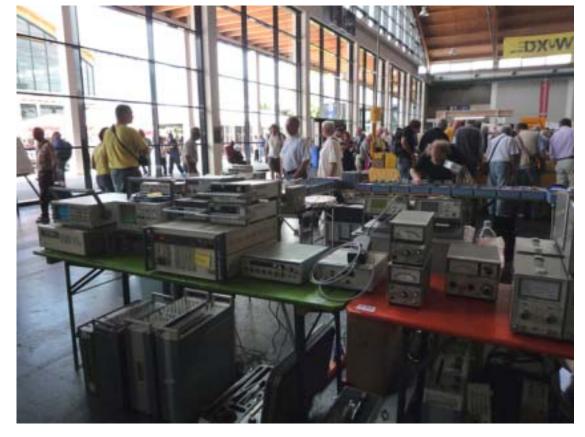




#### A tour of the flea-market



Overview of one of the halls, with test equipment in the foreground.



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# A modern German 23cm amplifier



■ 150W 1.2 GHz MOSFET stripline amplifier with output isolator. This group also builds transverters, LNA's and down-converters.



# Current-model test gear by HP/Agilent and Rohde & Schwarz.





### More test equipment





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### Yet more test equipment





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#### These two guys are just looking Note the "air-conditioning" in the rear of the hall!





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## Homebrewer's paradise

- parts of every description.





# For tube-amplifier builders



High-power RF components (rare nowadays).



# More amplifier & ATU parts





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### Need some big tubes?





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# More tubes (receiving & transmitting).





#### Still more tubes: CRT's, imaging, transmitting, microwave.



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# Some "big brute" HF amps





Homebrew 3 kW amp







**Broadband 1 kW amp** 

### The end of a perfect day



Happily tired after a full day, we returned to the apartment for supper, a good bottle and some HF operating.



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## The end of a perfect day Friday evening.



**■** Hans PA1HR operating our portable HF station on 40m (Kenwood TS-50, end-fed 40m  $\lambda$ /2 wire antenna). We worked stations all over Europe (including the UK).



# Saturday morning: Commercial displays.



■ The main Icom stand: IC-7700, IC-7600, IC-R9500, IC-7800.



## The Icom display



■ Clemens DL4RAJ and Rupert trying out the IC-7700.



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## The Swiss ADAT ADT-200A direct-sampling SDR transceiver.



The radio set and its internal DSP module are shown.



**ADT-200A DSP Module** 

16-Sep-2010

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# "OM Power" HF amplifiers from Slovakia.



■ Dick PA3DUV with a 1.5 kW amplifier.



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# "OM Power" HF amplifiers from Slovakia.



■ Detail of the 1.5 kW "OM Power" amp (note the resemblance to Alpha!)



# More commercial displays



■ The Optibeam stand.



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# More commercial displays



#### **Swiss SAMS** remote tuner









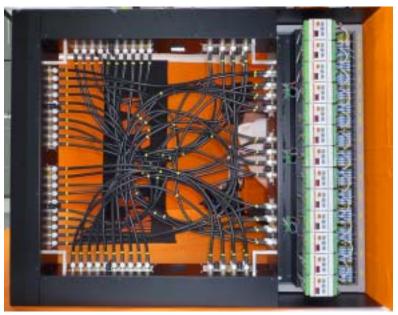
Small remote ladder-line tuner

# The "Array Solutions" stand



#### **The Matrix Antenna Switch**





**Detail of switch matrix** 

### "WiMo": a major German dealer





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## "UKW-Berichte" (VHF Reports): a well-known German ham magazine.





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## Saturday afternoon: military radios at the flea-market!



 Modular German WW2 Luftwaffe radios (FuG 10): receivers, transmitters, power supplies. These sets are fully-restored and working.



#### The German WW2 Fu.H.E.c HF intercept receiver, 3.5 – 26 MHz. Asking price: 3200 Euro (\$4100)!







**Typical spare tubes** 

# More German WW2 radios: restored and operational.



Torn.E.b HF TRF receiver (0.1 – 6.7 MHz)

**Coil turret and tube sockets** 





## R&S "Samos" receiver



■ 90 – 470 MHz, AM & FM. Used as a radar intercept receiver. Its post-war successor ESD was widely used as a monitor receiver in the broadcast industry.



### USSR R-311 HF Receiver



■ 1950's-era, 1-15 MHz, AM/CW, very rugged, 2.4V battery-filament tubes throughout.



### Collins KWM-1:

#### a fine example of this rare rig.



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### Sunday: Spy Sets, Crypto, Manpack



USSR HF spy transceiver with Morse burst encoder.



# More Spy Sets



■ USSR synthesized HF "suitcase" spy set with internal ATU and PSU.



# Czech VHF spy set



■ 30 – 55 MHz AM, 0.25W. Based on German WW2 "Dorette" (Kleinfunksprecher D).



# "Enigma" crypto machines





# USSR M-125 "Fialka" crypto machine & PSU



Used extensively in the Cold War; declassified in 2005.



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# Manpack set



■ East German RFT SEG 15 HF manpack: 1.6 – 12 MHz, 15W, AM/SSB/CW.



#### Departure: June 28, 2009 Sunday noon. Next stop: Switzerland.



All packed up for the ride to the ferry terminal. (No, that's not all my kit!)



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## Sailing from Friedrichshafen



■ The city waterfront, viewed from the ferry.



### Romanshorn



on the Swiss shore of the Bodensee.



# Thanks for watching!



