ICOM

INL

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Vol.04

Icom News Letter

In this issue...

Icom Family Worldwide Gathered Together in Japan

Japan Incentive Tour 2008 (JIT2008) was held from October 19th till October 23rd, 2008 and 62 guests from Icom distributors and dealers who made remarkable sales achievement participated in it. It was a very big event for us receiving so many guests from around the world, but we were very pleased to see the guests enjoying the tour far more than we had expected.

On October 20th, Mr. Inoue (chairman and founder of Icom) welcomed the guests at the Icom headquarters and made his speech where he emphasized Icom's "Made in Japan" policy, which ensures the constant high level of quality in our radios. The guests visited also our factory and some people told us that they totally understood what our "Made in Japan" policy is all about by actually seeing the very organized and sophisticated factory.

Mr. Inoue's speech at the Icom head quarters

As for the sight seeing, the guests enjoyed visiting historical places, eating traditional Japanese foods, experiencing Japanese calligraphy, shopping at a large electrical store… etc. Icom staff also accompanied the tour and shared a great time with the guests.

▲Experience of Japanese calligraphy

▼The guests on the way to dinner cruise in Kobe

As time flies by, JIT2008 came to the end very soon! At the last night of the tour, we threw the farewell party at the 35th floor sky banquet room of the hotel. The president Mr. Fukui, some key managements and staff from the export sales department also attended it. The participants shared friendly atmosphere one another, shaking hands and enjoying cheerful conversations here and there. By seeing that, we got the impression that this tour tightened the bonds among the participants of the Icom families worldwide!

Hopefully we do this event again in the future and help our distributors and dealers establish closer relationships. If you did not come this time, we hope you can make it next time.

▲Souvenir photo of all the guests

< Itinerary of JIT2008 >

Oct 19	Arrival
Oct 20	Welcome Reception at the Icom HQ & Factory Visit
Oct 21	Osaka City Tour & Dinner Cruise in Kobe
Oct 22	Kyoto City Tour & Farewell Party
Oct 23	Departure

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Cartagena City Chose IDAS 6.25KHz FDMA Digital System for Their Emergency and Public Safety Services. <Spain>

IDAS products
(IC-F3161 / F4161 / F5061 / F6061 / FR5000 / FR6000)

The tide of digitalization is happening in a lot of areas and the professional two-way radio market is no exception. The TETRA system, especially in Europe, is becoming one of the mainstream technologies for digital two-way radio systems in the public safety field due in some part to intensive promotion and lobbying activities. TETRA, however, may not necessarily be the best choice for all the local government agencies.

Icom Spain and their dealer network succeeded in implementing the IDAS system (combination of the IC-F3160 series, IC-F6060 series and IC-FR5100) to the public safety services of Cartagena City, located in southeast Spain. Cartagena City was considering migrating their current analog system to a new digital system and finally chose the step by step migration path to digital with Icom's 6.25kHz FDMA technology.

Why did they choose IDAS after a strict trial period? Keys to the success:

① **Digital migration at user's own pace:** The "Mixed mode" operation allows them to partially introduce IDAS radios, while using the existing analog radios in a system.

② **Excellent cost performance:** IDAS offers excellent cost performance as it costs much less than TETRA!

③ **FDMA proven technology:** FDMA technology maintains commonality with current analog FM circuitry to provide a decades proven platform for reliable operation.

④ **Reliability of the Icom brand:** Icom has won the confidence of Cartagena City from the past excellent performance of our analog radios that they have been using and excellent support provided by Icom Spain and their dealer network.

⑤ **Flexible application possibilities:** Being digital, integration and convergence with IP technology as well as multiple data applications will be possible in the future.

Cartagena City will take a gradual approach till they completely migrate to the digital system. In the first phase, they are planning to set up the IDAS system for handheld communication of the public safety services to cover 95% of the built-up area including the inside of important buildings in the city. Their further plans for the future are to implement IP-linked multi-site network solutions and also the data network systems such as AVL system for the fire brigade trucks.

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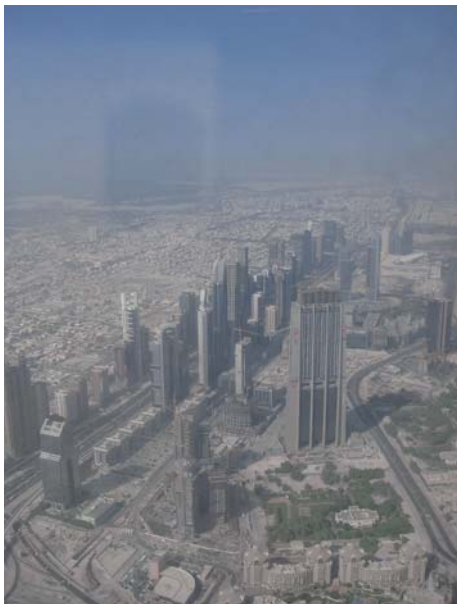
Icom the "Tallest" Company in the World!? <UAE>

The 800m Burj Dubai Tower under construction in the emirate of Dubai in the UAE.

By now, most people should know about the 800m Burj Dubai Tower under construction in the emirate of Dubai in the UAE. Recently some Icom Home Company employees visited Dubai and our Distributor of 25 years there, Lambda Electronics. Lambda has been successful in providing the radio communication system to the lead construction company building the tower.

We had the very rare pleasure and distinction of being some of the first people in the world to go up in the Burg Tower and see the view from the 153rd floor! The buildings on the main street of Dubai are in their own right, 50-60 storey or more skyscrapers, but as you will see in the photos, they look decidedly small from almost 700m above ground. We should also add that we saw the Icom radios working perfectly firsthand in communcations between the 2nd floor main office and the 153rd floor.
Plans are afoot to construct even bigger skyscrapers, and now that Lambda have some IDAS products, we may be able to report the use of IDAS from the some of the worlds highest structures in the near future.



The world seen from the 153rd floor

Icom Guarded the Olympic Torch! <China>

IC-36FI (Chinese version only)
A 350MHz radio based on IC-F43GT

Icom radios played an important role in the Beijing 2008 Olympic Games. The IC-36FI guarded the Olympic Torch on the routes it took in China.

IC-36FI is an IC-F43GT based 350MHz – MPT1327/CPS (China Police System) radio for the Chinese police. Although TETRA was the major radio communication system for security in the Olympic venues, analog systems also played important roles during the Olympic Games. Having a high level of quality, a compact body, long life Li-ion battery and reasonable price, IC-36FI has been taking market share from Motorola that used to be strong in the market.
The next big event in China is the Shanghai World Expo in 2010. The Chinese market continues to be an important market with a lot of opportunities still to be taken.

IC-F3162T
Advanced Future-Proof Radio

- IDAS 6.25kHz digital with optional UT-126H
- 512 memory channels and rotary channel knob
- Full dot-matrix display (2 lines / 24 characters)
- BTL amplifier for loud and clear sound
- IP55 compliant
- BIIS 1200 compatible
- Lone worker function

iDAS
ICOM DIGITAL ADVANCED SYSTEM

Securitas Chose IC-F3162T for UEFA EURO 2008 <Switzerland>

Another success of Icom radios in the sports scene reported from Icom Europe. A security company called Securitas in Switzerland chose the IDAS compatible IC-F3162T and used it in their own network for UEFA EURO 2008 held in Switzerland and Austria in June 2008.

Securitas was using an obsolete analog system and was in need of an alternative new system. It was good timing that IDAS was introduced. Future scalability of the IDAS system (e.g. IP-linked network, etc) was also one of the key factors that made Securitas choose the IC-F3162T.

The photograph is an image only.

IC-F3162T was used in analog mode only in UEFA EURO 2008 as the digital network was not yet ready, but Icom Europe is currently working with their local dealer to build the digital network for them.

Icom Japan Became an Official Supplier of Local Professional Soccer Club

Icom Japan signed an official supplier contract with Cerezo Osaka, one of the clubs of the Japan professional soccer league (J league). In their home stadium in Osaka, our UHF professional transceivers are used for event management. An Icom signboard is put up in the ground, as you see in the picture!

Cerezo Osaka Website http://www.cerezo.co.jp/english/index.html

Good Design Award for IC-RX7 and IC-F9011T

On October 8, 2008 the IC-RX7 and IC-F9011T were granted “Good Design Award 2008” by Japan Industrial Design Promotion Organization (JIDPO). This award is Japan’s only comprehensive design evaluation and commendation system which has over 50 years of history.

JIDPO describes the purpose of this award as "improving the quality of lives and further advancing industrial activities." So the evaluation is done from the perspective of functionality as well as appearance. The following are the judges’ comments about our radios.

< IC-RX7 >

Wideband receivers tend to remind us of difficulty in setting bands and operation. The IC-RX7 is, however, free from such bias. Its GUIs are adopted in a user-friendly way and allows us smooth access to the necessary information. The freshness of this radio in its compact body and casual coloring also lends to its image of easy mobility.

< IC-F9011T >

We can easily grab this burly radio with one hand, thanks to its curved edges. The IC-F9011T, a MIL-STD 810F compliant radio is well built and succeeds in representing its proven reliability. The body is constructed very tough to endure heavy use in harsh environments, and at the same time we cannot help but adore its unique appearance.

More information is available in following web pages:
http://www.g-mark.org/search/Detail?id=34750&sheet=outline&lang=en and
http://www.g-mark.org/search/Detail?id=34837&sheet=outline&lang=en

IC-RX7
New Style, Slim & Smart Wideband Receiver for Casual Consumers

- ◆ Easy to look for what you want! (menu-driven user interface, easy-to see category icons, one-touch button for search/scan)
- ◆ 3-level memory management
- ◆ PC programming capability
- ◆ Tone control function & *audio filter

*AM/WFM mode only.

IC-F9011T
VHF P25 Conventional and Trunked Transceiver, a High-End Professional Model for Public Safety

- ◆ Ready for: P25 conventional, P25 trunking & analog conventional. All in one radio!
- ◆ 6 watts high output power
- ◆ NTIA compliance
- ◆ Optional AES/DES encryption
- ◆ *OTAR (over-the-air-rekeying) functions

*This function will be available in the future.

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TECH TALK

The Internet and the Two-Way Radios

The radio wave of two-way radios will reach within the areas of line-of-sight. Because of this fundamental characteristic, repeaters are built on tall buildings and mountain tops so that the radio wave can reach much farther.

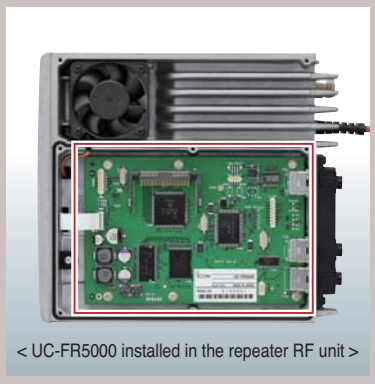
A communication network may have multiple repeaters to cover all of their business areas. In this type of situation, repeaters are naturally installed in geographically separated sites. A mobile terminal may be using any of a repeater in range. However, other than the very repeater which the mobile terminal is using, none of other repeaters will re-transmit the uplink voice because these repeaters are working alone. Most radio network operators simply interconnect all the repeaters to let single terminal transmission heard in every repeater area of the communication network.

Such repeater interconnection has been enabled either by leased lines or point to point RF (UHF radio) linking. Leased line is actually an expensive solution; it typically costs several hundred dollars per month for every pair of linked repeaters.

The RF linking may not be always possible because the line-of-sight restriction is inevitably applicable also for such a radio-wave site linking solution. Even when it is geographically possible, appropriate frequency licenses are required. Voice quality suffers when there is severe electromagnetic noise from illegal radio stations and faulty transformers of power line etc.

In the mid 90's, the Internet, which became cheaper and readily available for the industry, drastically changed the way to make repeater interconnections. Because of infrastructure sharing nature, the IP communications free repeater operators from heavy financial burdens of leased lines which exclusively occupy the telecom company's facilities and/or inflexible RF linking solutions. As an additional benefit, simply connecting to the Internet allows geographical restriction free multi-point to multi-point communications.

UC-FR5000



< UC-FR5000 installed in the repeater RF unit >

UC-FR5000 is an IDAS trunking controller board which enables single site IDAS trunking as well as limited IP remote control.

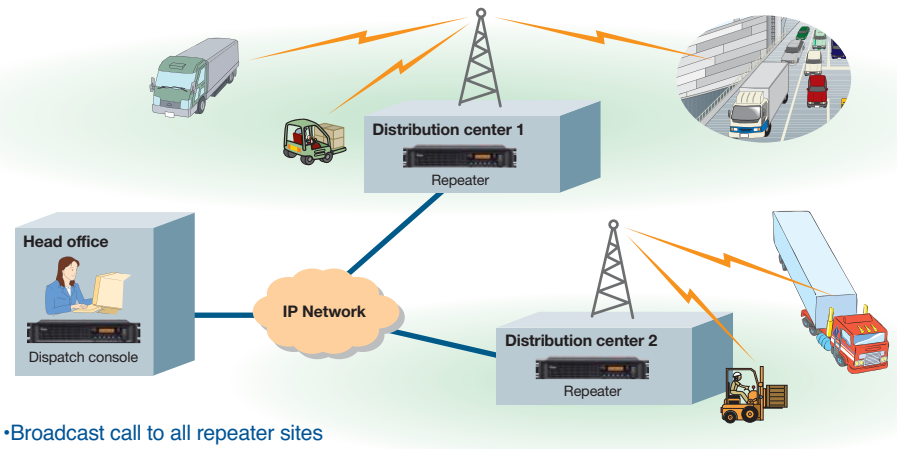
Single Site Trunking

- **Abundant Number of channels / Talkgroup ID / Unit ID:**
  <channels> Max. 30ch / site
  <talkgroup ID> 2,000 GID/Home CH
  <unit ID> 2,000 UID/Home CH
- **Effective Utilization of Control Channel:**
  Licensees can use all of the frequency allocations for traffic channels. IDAS does not waste a channel!
- **Secondary home CH :**
  The smooth automatic switchover when the other channel goes disabled.
- **Easy setting of Repeater ID :**
  The repeater ID can be set in a web setting screen by software. You do not need to change hardware setting.
- **Various call types:**
  Individual call, emergency call etc. are all possible in the trunking versions.
- **IP Connectivity**

Note of Caution)
- Not compatible with Kenwood's Nexedge™ trunking system.
- No connection to a telephone system & air time logging at this stage.

iDAS
ICOM DIGITAL ADVANCED SYSTEM

Wide area conventional IP network Solution – "Delivery"



- Broadcast call to all repeater sites
- Individual Call, Talkgroup Call or All Call is possible to other sites

Do you want to be on Icom New Letter?

If you would like your success story to be published in the Icom News Letter, please feel free to contact your sales representative who will give you an application form. After a careful evaluation by the Program Committee, the selected stories will be introduced in the INL! You also may be awarded a certificate or plaque for an outstanding success story. We are looking forward to hearing from you.

Being completely "digital" in IP, there must be analog/digital conversion devices in each repeater site for FM based systems. However, IP's low monthly cost and reasonably priced readily available Ethernet/IP equipment will lower the total cost of operation.

In digital systems like IDAS, radios actually are data radios integrated with analog/digital voice conversion circuitry. All of the data in the communication path is digital, which is better suited for the fundamentally digital Internet infrastructure. Being completely digital, unlike analog FM systems, any other external analog/digital conversion equipment is not necessary for interlinking repeater sites. Other beneficial applications such as connecting remote dispatch consoles, remote facility maintenance, monitoring repeater sites with surveillance cameras and other IP-enabled equipment installations are easily possible with single Internet connection.

The recently launched Trunking / IP connection PC board, UC-FR5000, enables single-site IDAS digital trunking and IP remote control and monitoring at this stage. But IDAS will not remain as it is. The forthcoming IDAS future function updates will bring IP-based repeater site interlinking, multi-site connectivity and remote dispatch capability, which exactly match advantages of the Internet.

Icom vs Motorola: And the Winner is...

A few days before the dealine for content of this newsletter, we were informed by Icom UK and Icom FLO that a TV program in the UK made a very good comparison test of the Icom IC-F4029SDR digital dPMR446 radio, and a competing Motorola analog PMR446 radio.

The link to the website where this comparison is made is as follows. See for yourself the result of this comparison.....

http://fwd.five.tv/videos/wild-challenge-part-1

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