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(ITU) للاتصالات الدولي الاتحاد في والمحفوظات المكتبة قسم أجراء الضوئي بالمسح تصوير نتاج (PDF) الإلكترونية النسخة هذه  
والمحفوظات المكتبة قسم في المتوفرة الوثائق ضمن أصلية ورقية وثيقة من نقلأً.

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line configuration. The bit lines are segmented into sub-bit lines so that the parasitic capacity is reduced. The signal voltage from the memory cell on the sub-bit line is transmitted via a switch to the main bit line, which has a lower parasitic capacity. The voltage is then transferred to the I/O circuit. The design reduces the equivalent parasitic capacity of the bit lines by one-fourth of the previous capacity.

The following fabrication technologies are used for the experimental 16 Mbit DRAMs:

- 0.7 µm CMOS with a polysilicon gate and double-layered aluminium line;

- joint lithography using direct electron-beam exposures and optical exposures;
- memory cell: a trench-type isolation-merged vertical capacitor (IVEC) cell which can function as both a cell-separator and a data storage. To facilitate connection in a minute are between the memory cell and bit line, the cell's area is reduced by one-half, through self-alignment technology.

Specifications for test devices are as follows:

- organization: 2 megawords × 8 bits

- access/cycle time: 80/180 ns\*
- power consumption: 500 mW
- memory cell size:  $1.5 \times 3.25 \mu\text{m}$
- chip size:  $8.9 \times 16.6 \text{ mm}$
- memory cell/error-correcting cell: 16/2 Mbits.
- NTT.

\* A 180-ns cycle time means the chip requires only 0.4 s to read or write 64 newspaper pages.

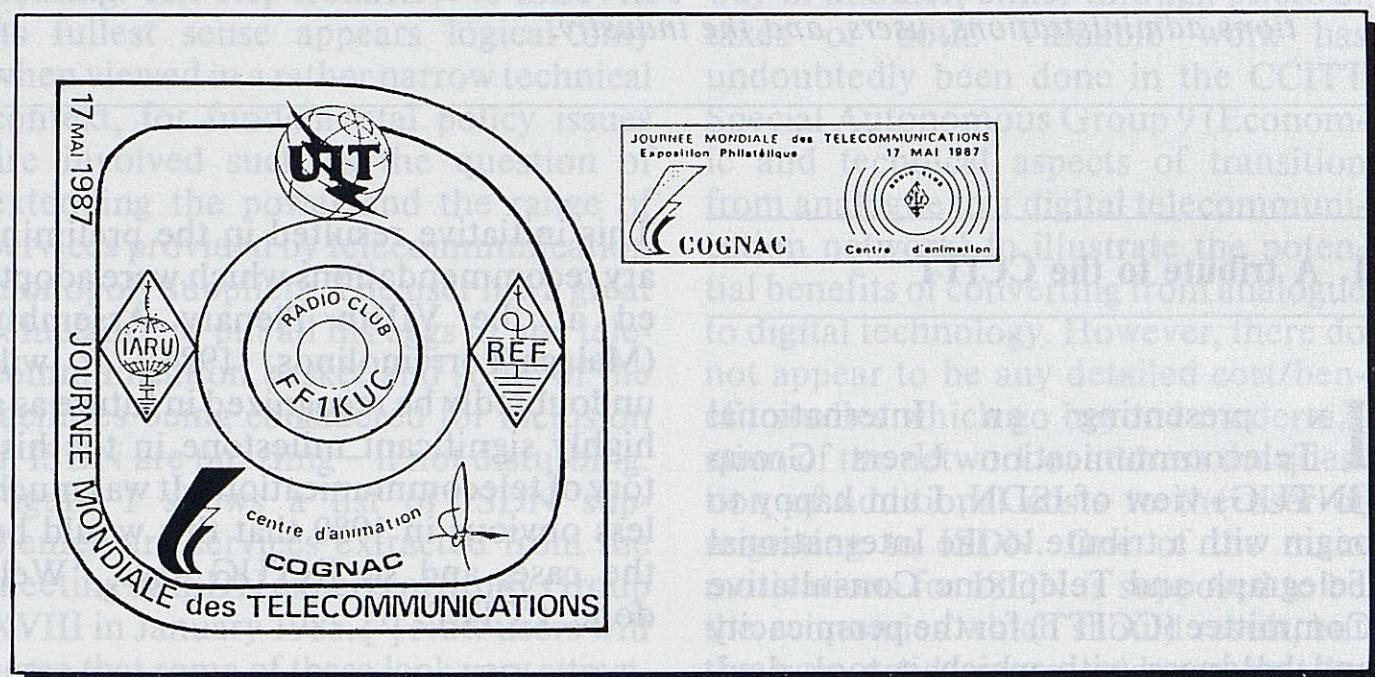
## Radio Amateurs

### France: an event to mark World Telecommunication Day 1987

On 17 May 1987, the Amateur Radio Club of Cognac (Charente, France) and the Réseau des émetteurs français (REF) will be exhibiting and demonstrating amateur radio and television facilities at the Cognac Community Centre to mark World Telecommunication Day.

The event is to be accompanied by a stamp exhibition illustrating the following themes:

- The ITU and World Telecommunication Days
- World Communications Year 1983
- Amateur radio, broadcasting and television
- Radio-relay and satellite telecommunication
- Telecommunication inventors and users
- The telephone.



*Proposed envelope and PTT slogan*

A four-colour commemorative envelope will be issued bearing the PTT's special temporary slogan designed for the occasion. Price: 10 French francs (+ postage) or 6 international reply coupons—IRC

(postage included) to: "M. Raymond Aupetit, 14, Résidence Bois-Boutin, F-16340 L'Isle-d'Espagnac (France)". — REF.