
GLOBAL ELECTRONICS INFORMATION NEWSLETTER

Issue No. 9

April, 1981

EL SALVADOR

Though conflict-torn El Salvador is still primarily a coffee export economy, it boasts the only export manufacturing sector in Central America (as distinguished from Mexico and the Caribbean.) Beckman Instruments closed its Salvadoran plant in January, 1980, following the kidnap of two company executives, and Bourns soon followed suit. But Texas Instruments and Dataram continue production. Dataram assembles memory cores, while TI assembles integrated circuits.

Remaining companies report relatively few problems from the civil war. One U.S. electronics executive claimed, "We missed less production in El Salvador because of that country's problems than we did in our plant in South Carolina because of snow." (**Business Week**, April 13, 1981).

The Pacific Studies Center, in our tradition of responding to crises and shifts in U.S. foreign policy, has published a four-page pamphlet on El Salvador, called "Reagan's First Stand." Individual copies are available at no charge from PSC, and they may be ordered in bulk at \$4.00 per hundred plus shipping.

MALAYSIA'S RACE WITH RACE

Though Western business interests consider Malaysia an economic success story, they are concerned about ethnic divisions between its Malay Moslem majority and Chinese and Indian minorities. **Business Week** (April 13, 1981) reports, "[pro-Malay] policies, and the tensions they reflect, have prompted one U.S. electronics executive to advise his parent company that further expansion in Malaysia would be unwise, even though the company is happy with its present profitable operations."

UNION VICTORY

Electrical workers' unions have thus far been generally unable to win representation elections in the western U.S. The Communications Workers, however, won a 294-to-245 victory in January at Japanese-owned Sanyo's refrigerator and stereo plant in San Diego. Meanwhile, the International Association of Machinists has petitioned for a May 1 election at General Instrument Corp.'s Chandler, Arizona Microelectronics division facility. (**Electronics**, April 7, 1981)

PHILIPS

Philips, the Dutch-based multinational electronics giant, is tightening its belt and attempting to centralize its operations. Its peculiar structure, however, is making it difficult for the the parent firm to exert control over its North American subsidiaries. In 1939, the company formed the U.S. Philips Trust to protect its North American assets from Nazi takeover. The Trust, managed by Hartford National Bank & Trust "for the benefit of the individual shareholders of Dutch Philips," holds 62% of North American Philips (NAP) and perhaps all of the U.S. Philips Corp. NAP, in turn owns Magnavox and the Sylvania and Philco television manufacturing operations formerly owned by GT&E. U.S. Philips owns Silicon Valley semiconductor producer Signetics.

Only one representative of Dutch Philips sits on the NAP board, and he is not permitted to vote. Thus, while the parent firm exercises some influence over the North American operations, there are frequent conflicts and even outright competition. (See **Business Week**, March 30, 1981)

Meanwhile, Signetics is building a new, \$40 million research lab in Silicon Valley to bring together 50 Signetics scientists and 20 researchers from the parent firm. (**Electronics News**, January 26, 1981)

STANFORD I.C. CENTER

Stanford University's new Center for Integrated Systems, initially funded by the Defense Department's Advanced Research Projects Agency, has raised \$7.5 million from ten electronics companies. Ironically, only two of the firms are headquartered in Silicon Valley, and only two are merchant semiconductor houses. The companies are: Fairchild (Schlumberger), General Electric, Hewlett-Packard, Honeywell, IBM, Northrop, Tektronix, Texas Instruments, TRW, and Xerox. (**Electronics**, March 24, 1981)

NEW YORK

New York state is recruiting electronics manufacturers. The state Department of Commerce has published a brochure comparing production costs, including labor, electric power, construction, and taxes, with other U.S. sites. The Department argues that New York productivity is tops and workforce stability high. It boasts of a large pool of electrical engineers and electronics technicians.

The following table is based on the Department of Commerce brochure, which cites an independent study conducted by Cooper Associates, but does not provide methodology or sources. This data, as well as promotional information from other localities, must be treated skeptically. Composite cost comparisons can easily be manipulated by altering the weight of the various items.

	1977	
	labor costs	composite costs
Albany Co., NY	6,782	8,332
Houston, TX	7,031	8,564
Boulder, CO	7,144	8,793
San Jose, CA	7,144	9,026
Joliet, IL	7,181	9,698

MORE ON SOVIET CIRCUITS

Another evaluation of Soviet semiconductor technology, conducted by Canadian-based Mosaid, concludes that the Russians trail behind the U.S. in design capability, but that Soviet fabrication techniques equal American firms'. (**Electronics**, January 27, 1981.)

I.M.I. PHILIPPINES

A new Filipino assembly subcontractor, Integrated Microelectronics (IMI), has begun operations in Manila. IMI utilizes state-of-the-art automated equipment to assemble 24- to 40-lead plastic IC packages. The company has the capability to monitor the operation of every machine and employee every twenty minutes. It lists among its customers AMI (which is building its own assembly facility in the Philippines), Electronic Arrays (the Silicon Valley subsidiary of Nippon Electric), Harris, Zilog (Exxon), and Nitron.

IMI spokesman Arturo Carlos compares the Philippines with other assembly locations. "Politics in Korea are causing some companies to move from that country. The Philippines, however, is still a good labor market at an average US\$.60/hour." Carlos cites hourly assembly labor costs of \$1.50 in Taiwan, \$1.75 in Korea, and \$6.75 in the U.S. (**Semiconductor International**, March, 1981)

CAPTIVE PRODUCTION DATA

The Semiconductor Industry Association has released estimates which include 1980 figures on captive (in-house) semiconductor production in the U.S. SIA reports that \$1.8 billion of the \$10.2 billion total U.S. semiconductor production was captive. Total domestic consumption reached \$7.3 billion. ("The International Microelectronic Challenge," SIA, March, 1981, p. 27)

S.G.S.-ATES

SGS-Ates, an Italian-based semiconductor firm, is moving its American headquarters from Waltham, Massachusetts, to Scottsdale, Arizona. The company has hired former Motorola executives to establish a design center there. (**Electronics News**, December 15, 1980)

DYNACRAFT BONDING

Dynacraft, a subsidiary of National Semiconductor, has developed an experimental process to hermetically seal integrated circuits to tape carriers. The method, should it become commercially available, will reduce assembly costs and allow denser lead configurations. Dynacraft's research has been funded by the Naval Ocean Systems Center.

H-P IN SOUTH AFRICA

Hewlett-Packard management turned back a Church-led challenge to its South Africa sales policy at its February annual meeting. Representatives of the National Council of Churches and the United Presbyterian Church presented a shareholder resolution designed to stop all H-P business with the South African government. The company, which presently does not do business with South African military or police agencies, claims that its South African sales help improve the condition of the non-white population there. The proxy resolution failed, as expected, 47.7 million shares to 1.6 million shares, with 700,000 abstaining.

JAPAN-U.S. COOPERATION

Despite the growing competition between U.S. and Japanese integrated circuits firms for leadership of the world market, those same firms are dependent upon equipment imports to keep their production lines moving. According to **Semiconductor International** (October, 1980), "Most of the major Japanese semiconductor manufacturers still depend on the U.S. for 60 to 70% of their equipment." Major Japanese trading companies, such as C. Itoh & Co., represent U.S. equipment-makers in Japan. Meanwhile, U.S. semiconductor firms buy a significant, though smaller portion of their equipment, such as wafer-dicing machinery, from Japanese producers.

O.P.I.C. INSURES

Among the many 1980 clients of the U.S. government's Overseas Private Investment Corporation are two semiconductor companies. OPIC, which insures U.S. overseas investments against war, revolution, and currency inconvertibility, backed Honeywell-Synertek's integrated circuit assembly plant in Thailand and Motorola's liquid crystal display factory in Taiwan. The "largest single maximum coverage" for Honeywell was US\$6.75 million and US\$2,952,000 for Motorola. The "total insured investment this investor" was US\$7.5 million and US\$1.8 million respectively. (OPIC 1980 Annual Report)

INTEL IN FRANCE

After long, difficult negotiations with the French government, Intel and Matra-Harris have agreed to a joint venture to design advanced integrated circuits in France. Intel, the industry leader in microprocessor design technology, will own 49%, while Matra-Harris will hold 51%. The latter is in turn a joint venture between Harris, a diversified U.S. electronics firm, and Matra, a growing French aerospace company. In exchange for its technology, Intel essentially gains access to French government contracts for weapons and more important, telecommunications. (San Jose Mercury, April 3, 1981; Electronics, March 10, 1981; Business Week, March 2, 1981)

NEW SUBSCRIPTION RATES

The new rate schedule for the **Global Electronics Information Newsletter**, for one year, is:

United States---\$5.00

Canada & Mexico---US\$6.25

Overseas---US\$10.00

When possible, the newsletter is published monthly. Occasional delays, however, cause the publication of double issues.



**Pacific
Studies
Center**

867 West Dana St. #204
Mountain View, CA
94041

address correction requested

BULK RATE
NON-PROFIT ORGANIZATION
U. S. POSTAGE
PAID
PERMIT NO. 155
MOUNTAIN VIEW, CA.